

ITUEvents

3rd ITU Inter-regional Workshop on WRC-23 Preparation

**27 - 29 September 2023
Geneva, Switzerland**

**www.itu.int/go/ITU-R/wrc-23-irwsp-23
#ITUWRC**

**Current APT preparation
for WRC-23**

Asia-Pacific Telecommunity



Current APT preparation for WRC-23

The 3rd Inter-regional Workshop(September 27 -29, 2023)

Dr. Kyu Jin WEE

Chair, APG23

APG-23: Structure and Management Team

The APT Conference Preparatory Group for WRC-23 (APG-23) was established at the 1st APG Meeting for WRC-23 (APG23-1), 24-25 September 2020

Management Team of APG-23

Chair: Dr. Kyu-Jin Wee (Republic of Korea)	
Vice-Chairs: Ms. Zhu Keer (P. R. of China) Mr. Muneo Abe (Japan)	
Chair of Editorial Committee: Mr. Christopher Hose (Australia)	
Special Senior Adviser: Mr. Kavouss Arasteh	

Structure of Working Parties of APG-23: Same as CPM-23 Chapters

WP1

- **Fixed, Mobile and Broadcasting Issues:** 1.1, 1.2, 1.3, 1.4, 1.5, 9.1(c) and RR21.5
- Co-Chairs: Dr. Hiroyuki Atarashi (Japan), Dr. Jae-Woo Lim (Rep. of Korea)

WP2

- **Aeronautical and Maritime Issues:** 1.6, 1.7, 1.8, 1.9, 1.10, 1.11 and Res. 427
- Chair: Mr. Bui Ha Long (Viet Nam)

WP3

- **Science Issues:** 1.12, 1.13, 1.14, 9.1 (a) & (d) and Res.655
- Chair: Dr. Wahyudi Hasbi (Indonesia)

WP4

- **Satellite Issues:** 1.15, 1.16, 1.17, 1.18, 1.19 and 7
- Co-Chairs: Ms. Fenhong Cheng (P. R. of China), Mr. Mrunmaya Pattanaik (India)

WP5

- **General Issues:** 2, 4, 8, 9.1 (b), 9.2 and 10
- Chair: Dr. Mohammad Taghi Shafiee (Islamic Rep. of Iran)

APT APG23 Preparation for WRC-23 and RA-23

- APG23 met 6 times for the preparation of WRC-23 and RA-23
- APT has developed APT View and Preliminary APT Common Proposals(PACP)
 - PACPs are under Members' consultation to become ACP
- While there are no PACP on 1.1, 1.3, 1.5, 1.6, 1.8, 1.10, 1.11 c), 1.12, 1.13, 7 topic E, F, H, J and 9.1 d), there are APT Views on those AIs
 - 1.6 and 1.8 : No PACP and No APT Views at this stage
- APT Views are also the basis to represent APT for WRC discussion
- APT will continue to coordinate among APT Members during WRC-23
- APT will submit a new ITU-R Resolution on Gender to RA23 and has developed APT View on Terms of Office of WP Chair and ITU-R Resolution 65

Links for APT results

- Link for PACP(Preliminary APT Common Proposals)

https://www.apt.int/sites/default/files/Upload-files/APG-23/Attachement_1_WRC-23_RA-23_PACP_Addenda.zip

- Link for APG23-6 Outputs(APT Views and further coordination)

https://www.apt.int/sites/default/files/Upload-files/APG-23/APG23-6_OUT.zip/

Preliminary APT Common Proposals for WRC-23 Agenda Items

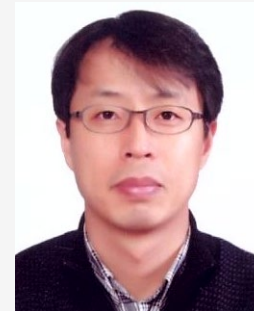
Working Party 1: Fixed, Mobile and Broadcasting Issues

**Agenda Items: 1.1, 1.2, 1.3. 1.4, 1.5, 9.1 Topic c and WRC-19
Doc. 550/RR No. 21.5**

Co-Chairs:

Dr. Hiroyuki Atarashi (Japan)

Dr. Jae Woo Lim (Rep. of Korea)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.1**

- **Preliminary APT Common Proposal (PACP):**

- None

- **Discussion in APT:**

- A detailed specific PACP was not developed at the last meeting of APG in August 2023.
- APT Members would consider potential consensus on the matter with a view to find a satisfactory solution mutually agreed by concerned Administrations, taking into account appropriate Method(s) and associated limit(s) contained in the CPM Report, which
 - Ensures the continued operation of AMS and MMS stations in the frequency band 4 800 – 4 990 MHz; and
 - Facilitates the use of the IMT in the frequency band 4 800 – 4 990 MHz.

DG Chair: Mr. Fierza Mutuahdi Pasaribu (Republic of Indonesia)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.2**

- **Preliminary APT Common Proposal (PACP):**

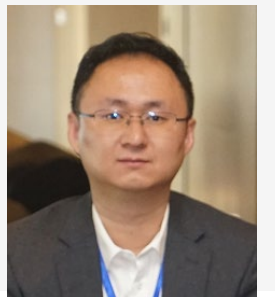
- **Frequency band 7 025-7 125 MHz (Band 5)**

- APT Members support identification of the frequency band 7 025-7 125 MHz for IMT globally through Method 5C together with a new WRC Resolution. APT Members are considering whether this proposed new WRC Resolution could be combined with a potential WRC Resolution for 6 425-7 125 MHz in Region 1, if agreed.

- **Discussion in APT:**

- No PACPs were developed for other frequency bands (Bands 1, 2, 3, 4 and 6) under agenda item 1.2. APT Members agreed to further discuss these frequency bands during WRC-23, as needed.
- APT Members are of the view that any possible IMT identification in these other frequency bands in other Region needs to protect the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3 so that these services need to in no way be adversely affected.

DG Chair Mr. Tan Wang (P. R. of China)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.3**

- **Preliminary APT Common Proposal (PACP):**

- None

- **Discussion in APT:**

- This agenda item is a Region 1 issue.
- A possible upgrade of the mobile, except aeronautical mobile, service to primary allocation in the frequency band 3 600-3 800 MHz in Region 1 shall protect existing and planned services to which the frequency band is allocated on a primary basis (and in adjacent bands, as appropriate) in Region 3.
- Any discussions on this agenda item shall not be mixed up on the discussions being followed / carried out under agenda item 1.2, i.e., no identification of the frequency band 3 600-3 800 MHz for IMT.



DG Chair: Dr. Azim Fard (Republic of Iran)

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.4**

• Preliminary APT Common Proposal (PACP):

DG Chair: Mr. Shiro Fukumoto (Japan)



- **Issue A (694-960 MHz):** None
- **Issues B and C (1 710-1 885 MHz, 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz):**
 - APT Members support the use of HIBS in the frequency bands 1 710-1 885 MHz, 1 885-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz, or portions thereof, globally through Methods B3 and C3 with the modification of Resolution 221 (Rev.WRC-23).
 - APT Members have the following views on Examples under the respective conditions in Resolution 221 (Rev.WRC-23) contained in the CPM Report.

Provisions		Supported Example
resolves 1.2 and 1.3	Protection measures for IMT in the frequency bands 1 710-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz	Example 1
resolves 1.5	Protection measures for the fixed service in the adjacent frequency band 2 010-2 100 MHz	Example 1
resolves 1.6	Protection measures for the fixed service in the frequency bands 1 710-1 980 MHz, 2 010-2 025 MHz and 2 110-2 170 MHz	Example 1
resolves 1.7 and 1.8	Protection measures for the aeronautical mobile service in the frequency band 1 780-1850 MHz	Example 3

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.4**

- **Preliminary APT Common Proposal (PACP) (Cont'd):**

- **Issue D (2 500-2 690 MHz):**

- APT Members support the use of HIBS in the frequency band 2 500-2 690 MHz, or portions thereof, globally through Method D3 with a new WRC Resolution.
- APT Members have the following views on Examples under the respective conditions in Resolution [B14-HIBS 2 500-2 690 MHz] (WRC 23) contained in the CPM Report.

Provisions		Supported Example
resolves 1.1 and 1.2	Protection measures for IMT in the frequency band 2 500-2690MHz	Example 1
resolves 1.3	Protection measures for the fixed service in the frequency band 2 500-2690MHz	Example 1
resolves 1.4	Protection measures for the broadcasting satellite service in the frequency band 2 520-2630 MHz	Example 2 with some modifications
resolves 1.6	Protection measures for the radiolocation service systems operating in accordance with No. 5.423, in the frequency band 2 700-2 900 MHz	Example 1
resolves 1.7 and 1.8	Protection measures for the radio astronomy service operating in the frequency band 2 690-2 700 MHz	Example 1
resolves 1.9	Protection measures for the radiodetermination satellite service (s-to-E) and the mobile satellite service (s-to-E) in the adjacent frequency band 2 483.5-2 500 MHz	Example 2

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.5**

- **Preliminary APT Common Proposal (PACP):**

- None

- **Discussion in APT:**

- This agenda item is a Region 1 issue.
- WRC-23 decisions shall in no way adversely affect Region 3 frequency allocations and existing and future use of the relevant frequency band.



DG Chair: Dr. Azim Fard (Republic of Iran)

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 9.1 c)**

- **Preliminary APT Common Proposal (PACP):**

- APT Members support no change to the Radio Regulations under agenda item 9.1 topic c), except for suppression of Resolution 175 (WRC-19).
- APT Members are of the view that there is no need to draft or develop a new or revised Resolution on this matter at WRC-23 under agenda item 9.1, topic c).

DG Chair: Dr. Yongseok SEO (Republic of Korea)



Preliminary APT Common Proposals: **WRC-19 Doc. 550/RR No. 21.5**

- **Preliminary APT Common Proposal (PACP):**

- None

- **Discussion in APT:**

- Possible and practical alternative approaches/solutions merit to be considered.
- Appropriate regulatory provisions/measures for the operation of terrestrial IMT and space services and their future development in a balanced and fair manner are necessary.
- Change to RR No. 21.5 may not be necessary at this stage to address the issues raised in Document 550 of WRC-19.

DG Chair: Mr. Dong Zhou (Peoples' of Republic of China)



APT Preliminary Views on WRC-23 Agenda Items

Working Party 2: Aeronautical and Maritime Issues

Agenda Items: 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, Res 427(WRC-19)

Chairman:

Mr. Bui Ha Long (Viet Nam) (Longbh@rfd.gov.vn)



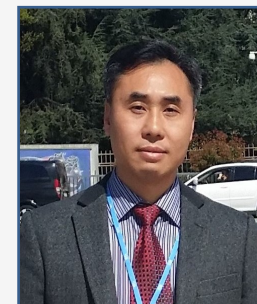


Agenda Items	DG Chairman
1.6	Mr. Wei Tan (People's Republic of China) tanwei@bittt.cn
1.7	Mr. Kok Pin Puah (Singapore) puah_kok_pin@caas.gov.sg
1.8	Mr. Nguyen Anh Tuan (Viet Nam) tuanna3@vnpt.vn
1.9	Mr. Glenn Odlum (Australia) glenn.odlum@novasystems.com
1.10	Dr. Jicheng Fang (People's Republic of China) jchfang@163.com
1.11	Issue A/resolve 1 – GMDSS modernization: Mr. Yoshio Miyadera (Japan) miyadera.yoshio@jrc.co.jp Issue B/resolve 2 – eNavigation: Dr. Byungok Kim (Republic of Korea) kimbo60@hanmail.net Issue C/resolve 3 – new satellite systems: Ms. Xia Ge (People's Republic of China) gexia@bsnc.com.cn
Res. 427 (WRC-19)	Mr. Bui Ha Long (Viet Nam) longbh@rfd.gov.vn

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.6**

- **Preliminary APT Common Proposals (PACP):**
 - None
- **Discussion in APT:**
 - APT Members support that sub-orbital vehicle needs to be defined or described. Whether it is defined or described in RR. Article 1 or/and Article 4 or in the new WRC Resolution is discussed.

DG Chairman: Mr. Wei Tan (P. R. of China)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.7**

- **Preliminary APT Common Proposals (PACP):**

- APT supports Method B to address this Agenda Item, with preference for Method B1 or B3. A generic PACP was agreed.

- **Discussion in APT:**

- There should be an enforceable mechanism in case of any problem raised during the new VHF AMS(R)S implementation, by any administration in particular occurrence and persistence of unacceptable interference.
- In the case unacceptable interference caused by new VHF AMS(R)S is reported, the notifying administration of new VHF AMS(R)S system shall immediately take the required action to eliminate or reduce interference to an acceptable level, taking into account ICAO standards.

DG Chairman: Mr. Kok Pin Puah (Singapore)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.8**

- **Preliminary APT Common Proposals (PACP):**

- None.

- **Discussion in APT:**

- There are preference to method to protect the incumbent service, however, it is to be emphasized that in this agenda item the problem of protection of incumbent service is not an issue.
- The difficulties ascribe to the lack of agreement on the responsibility, the availability of complete set of SARPS until 2026, and more importantly the total divergent views on application of RR 4.10.

DG Chairman: Mr. Nguyen Anh Tuan (Viet Nam)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.9**

- **Preliminary APT Common Proposals (PACP):**

- APT supports modifications to RR Appendix 27 to accommodate digital technologies for aeronautical wideband HF systems, while ensuring compliance with safety requirements and protection of other primary services in the same and adjacent bands, in particular, existing AM(R)S HF systems. PACP based on Method B was agreed.

- **Discussion in APT:**

- APT Members noted that there are differing Wideband HF technologies and are of the view that changes to the RR Appendix 27 should allow new digital wideband HF systems taking into account technology neutrality.
- It's required to clarify of what "100% modulation" means with respect to the measurement of the maximum power that is contained in Table 27/60 of the CPM text. It's invited to consider the explanatory note under the table.

DG Chairman: Mr. Glenn Odium (Australia)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.10**

- **Preliminary APT Common Proposals (PACP):**

- None.

- **Discussion in APT:**

- APT Members are of the view that the protection of existing primary services in the 15.4-15.7 GHz and 22-22.21 GHz frequency bands and, in adjacent frequency bands shall be ensured.
- APT Members also are of the view that any potential new allocations of AM(OR)S shall not cause unacceptable interference to, nor claim protection from services to which the bands are allocated together with a firm objective, actionable evidence, measurable and enforceable commitment at the time of submission to that agenda item to undertake compliance with non-interference and non-protection conditions.

DG Chairman: Mr. Jicheng Fang (P. R. of China)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.11**

- **Preliminary APT Common Proposals (PACP):**

Issue A (resolves 1): GMDSS Modernization

- APT Members support Method A to address this agenda item but not explicitly specify which Alternatives be supported among A1, A2 or A3 of the CPM Report with respect to the band 1 645.5-1 646.5 MHz (Earth-to-space). A generic PACP on issue A was agreed.

Issue B (resolves 2): E-navigation

- APT Members support Method B to address this agenda item. PACP on issue A was agreed.

Issue C (resolves 3): Introduction of additional satellite systems into the GMDSS

- None.

DG Chairs:



Resolve 1: Mr. Yoshio Miyadera (Japan) Resolve 2: Mr. Byungok Kim (Rep. of Korea) Resolve 3: Ms. Ge Xia (P. R. of China)

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.11**

- **Discussion in APT:**

Issue A (resolves 1): GMDSS Modernization

- APT Members noted the International Maritime Organization (IMO) position on WRC-23 agenda item 1.11 (Doc. WRC23/45), that supports “regulatory actions that assist in the modernization of GMDSS (e.g., continued use of the L-Band frequencies for maritime operations and GMDSS following removal of L-band EPIRBs)”.
- APT Members acknowledged that the band 1 645.5-1 646.5 MHz (Earth-to-space) is no longer used by L-band EPIRBs. Views are expressed that maintaining the current allocation arrangements for the band would continue to maintain the status quo, although with the GMDSS modernization output amending SOLAS Chapter IV coming into effect 1 January 2024, there would be a disconnect between the ITU and IMO regulation. Views are also expressed that no change to RR due to lack of sufficient studies at this stage could be beneficial as the possibility for this frequency band to satisfy future maritime needs is retained.
- There remains a question whether it is appropriate to remove satellite emergency position-indicating radio beacons (EPIRBs) in the frequency band 1 645.5-1 646.5 MHz (Earth-to-space) without a use of the band being identified, whether it be GMDSS, general radiocommunication or otherwise.

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 1.11**

- **Discussion in APT:**

- **Issue C (resolves 3): Introduction of additional satellite systems into the GMDSS**

- APT members noted the efforts already made on the frequency issues, and the GSO MSS system will continue to make utmost effort to resolve all the pending frequency issues before the commencement of GMDSS services.
 - APT members encourage all parties concerned to work cooperatively to ensure that the requirements of the ITU Radio Regulations, including Articles 9 and 15, are met in order to permit the introduction of a new GMDSS operator in our region.
 - There are some supports to the introduction of additional satellite systems into the GMDSS, provided that coordination and notification in accordance with the relevant and applicable provisions of Articles 9 and 11 together of the Radio Regulations and associated Rules of Procedure need to be completed in order to protect services to which the bands are currently allocated. Also any satellite network/ system (GSO/ Non- GSO) to provide GMDSS function needs to complete relevant coordination.

Preliminary APT Common Proposals on WRC-23 Issue on **Res. 427**

- **Preliminary APT Common Proposals (PACP):**

- APT Members are of the view that any proposed changes to the Radio Regulations shall not have any negative impact on current and planned aeronautical systems or applications. PACP was agreed.

DG Chairman: Mr. Bui Ha Long (Viet Nam)



APT Views and Preliminary APT Common Proposal on WRC-23 Agenda Items

Working Party 3: Science Issues

Agenda Items: 1.12, 1.13, 1.14, 9.1 a), 9.1 d) and Res.655 (WRC-15)

Chair:

Dr.-Ing. Wahyudi Hasbi (Indonesia)



APT Views on WRC-23 Agenda Items: **AI 1.12**

- **APT Views:**

- The APT has considered agenda item 1.12 but has not developed a Preliminary APT Common Proposal on the matter.
- At the APG23-6 meeting APT members were unable to reach full consensus on the best solution to satisfy this agenda item. Noting that ITU-R studies and methods are still to be finalised and that some conditions included in the methods have not yet been agreed in ITU-R. APT members noted that work will continue at the ITU-R on this agenda item at the October 2023 meeting of WP 7C.
- APT members are invited, should they deem appropriate, to provide their views/concerns to Administrations intending to add their country name (see above section 3.2) to the footnote 5.162A before the WRC-23 deadline for submission of contributions with a view to resolve any possible concerns before WRC-23 on the basis of mutual collaboration among APT members.

- **Issues during APG23**

- Most APT members support Methods that propose a secondary allocation to the EESS (active) for spaceborne radar sounders, operated only in desert and polar regions, including possible solutions such as operational limitations and pfd limits in order to ensure protection of incumbent primary and secondary services (in-band and adjacent band) to address this agenda item (noting that options within some methods are still to be finalised).
- Compatibility studies have not at this stage fully demonstrated that incumbent services can be protected from potential harmful interference from operation of spaceborne radar sounders in the frequency band 40 to 50 MHz, hence some APT members prefer No Change.



DG Chairman: Mr. Kevin Knights (Australia)

APT Views on WRC-23 Agenda Items: **AI 1.13**

- **APT Views:**

- The APT Members have considered agenda item 1.13 but have not developed a Preliminary APT Common Proposal on the matter. The APT Members have however formed the following view(s) on the agenda item:
- The fixed and mobile services are allocated on a primary basis in the 14.8-15.35 GHz band and the radio astronomy service is allocated on a primary basis in the 15.35-15.4 GHz band. The 14.8-15.35 GHz band is used extensively for fixed links in many countries including developing countries as well as for mobile links between aircrafts/helicopters and ground stations to transmit critical information including on public protection and disaster relief.
- According to Resolution 661 (WRC-19), possible upgrade of the space research service in the 14.8-15.35 GHz band shall ensure the appropriate protection of, and not impose additional constraints on the incumbent primary services in this band and the adjacent bands.
- APT Members believe that studies and relevant regulatory provisions must be finalised in ITU-R. If possible upgrade of the space research service in the 14.8-15.35 GHz band could not ensure enough protection of and/or impose additional constraints to/adversely affect the incumbent primary services in-band and adjacent band, APT Members would support no change to the Radio Regulations.

- **Issues during APG23**

- Different proposals were submitted by APT Members, and consensus could not be reached at the meeting, therefore no Preliminary APT Common Proposal is agreed.

DG Chairman: Mr. Rui Han (P. R. of China)



APT Views on WRC-23 Agenda Items: **AI 1.14**

- **APT Views:**

- APT Members support Method B (option-1) of the CPM report to WRC-23 to address this agenda item. APT members support the addition of new primary allocations to the EESS (passive) in the frequency bands 239.2-242.2 GHz and 244.2-247.2 GHz, swap the current FS and MS allocations in the frequency band 239.2-241 GHz to the frequency band 235-238 GHz and limitation of the EESS (passive) allocation in the 235-238 GHz to limb-sounding operations.

- **Preliminary APT Common Proposal (PACP)**

- APT Members support Method B (option-1) of the CPM report to WRC-23 to address this agenda item.

DG Chairman: Dr. Sohel Rana (Bangladesh)



APT Views on WRC-23 Agenda Items: **AI 9.1 a)**

- **APT Views:**

- The APT has considered agenda item 9.1, topic a) and drafted a Preliminary APT Common Proposal on the matter. In addition, the APT has formed the following view(s) on the issue.
- APT Members support the ITU-R studies so far carried out relating to the definition of space weather and appropriate radiocommunication service designations (MetAids) for operation of space weather sensors, as proposed in the CPM Report for inclusion in Articles 1 and 4 of the Radio Regulations.
- Should the agenda of WRC-27 include space weather sensors as an agenda item, it is necessary that the supporting Resolution for this new agenda item includes, inter alia, protection of services to which the band is allocated as well as services in adjacent bands.

- **Preliminary APT Common Proposal (PACP)**

DG Chairman: Mr. Takahiro Yokoyama (Japan)



APT Views on WRC-23 Agenda Items: **AI 9.1 d)**

- **APT Views:**

- The APT Members have considered Agenda item 9.1 Topic d, but has not developed a Preliminary APT Common Proposal on the matter. The APT Members have however formed the following view(s) on the Agenda item 9.1 Topic d.
 - APT Members support the results of ITU-R studies on the impact of unwanted emission from non-GSO FSS systems into EESS (passive) and the potential need for unwanted emission limits, or any other solutions, to non-GSO FSS systems.
 - APT Members support protection of EESS (passive) sensors operating in the frequency band 36-37 GHz, including cold-sky calibration, from non-GSO FSS systems operating in the frequency band 37.5-38 GHz.

- **Issues during APG23**

- APT Members supported the protection of EESS (passive) sensors operating in the frequency band 36-37 GHz, including cold-sky calibration, from non-GSO FSS systems operating in the frequency band 37.5-38 GHz. In addition, some APT Members supported the inclusion of -31 dBW/100 MHz as an unwanted emission power density limit for EESS (passive) protection.
- With this, some APT Members were of the view that it may be necessary to consider including the conditions identified in the ITU-R studies as regulatory provisions to protect EESS (passive) sensors in a new footnote of Article 5 of the Radio Regulations.
- However, one APT Member was of the view that depending on the study results of ITU-R meeting planned in October 2023, there may or may not be a need for an unwanted emission limit to be applied to non-GSO FSS systems.
- Therefore, the meeting could not find common view for PACP on this Agenda item 9.1 Topic d.



DG Chairman: Dr. Hwangjae Rhee (Rep. of Korea)

APT Views on WRC-23 Agenda Items: **Res. 655(WRC-15)**

- **APT Views:**

- The APT has considered Resolution 655 (WRC-15) and drafted a Preliminary APT Common Proposal on the matter. In addition, the APT has formed the following view(s) on the issue.
- APT Members support the ITU-R studies conducted under Resolution 655 (WRC-15), recognizing that the 27th General Conference on Weights and Measures (CGPM) in November 2022 adopted Resolution 4 and decided that the maximum value for the difference (UT1 – UTC) would be increased. APT Members are of the view that modification to Resolution 655 (WRC-15) is necessary to reflect the decision made by CGPM.
- APT Members also recognize the responsibility of the International Bureau of Weights and Measures (BIPM) for the maintenance of a global time scale and believes that the responsibility of the ITU-R includes the spectrum allocation for radiocommunication time signal dissemination and the associated ITU Recommendation(s) for their dissemination.
- APT Members support the continuation of the ITU-R studies to cooperate further with the BIPM, the International Committee of Weights and Measures (CIPM) and CGPM on the future of UTC.
- APT Members would like to end leap seconds.

- **Preliminary APT Common Proposal (PACP)**

DG Chairman: Mr. Takahiro Yokoyama (Japan)



APT Preliminary Views on WRC-23 Agenda Items

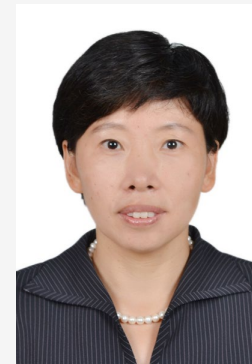
Working Party 4: Satellite Issues

Agenda Items: 1.15, 1.16, 1.17, 1.18, 1.19 and 7

Co-Chairs:

Ms. Fenhong CHENG (CHN)

Mr. Mr. Mrunmaya Pattanaik (IND)



DG Chairs of WP4



DGs	WRC-23 Agenda Items	DG Chair
DG1.15	AI 1.15 (ESIM 12.75-13.25 GHz)	Mr. Phung Nguyen Phuong (Viet Nam) Email: phuongpn@rfd.gov.vn
DG1.16	AI 1.16 (Ka-band non-GSO ESIM)	Mr. Yusuke Fukui (Japan) yu-fukui@kddi.com
DG1.17	AI 1.17 (Ku/Ka-band sat-sat links)	Ms. Bo ZHANG (China) Email: bo.zhang4969@gmail.com
DG1.18	AI 1.18 (Narrowband MSS allocation)	Dr. Daesub Oh (Republic of Korea) Email: trap@etri.re.kr
DG1.19	AI 1.19 (R2 FSS s-E 17.3-17.7 GHz)	Mr. Risdianto Yuli Hermansyah (Rep. of Indonesia) Email: risdianto@telkomsat.co.id
DG7A	AI 7 (Topics A, B, F, G, H)	Ms. Ting Ling Lee (Singapore) Email: tingling.lee@ses.com
DG7B	AI 7 (Topics C, D, E, I, J, K)	Ms. Geetha Remy Vincent (Malaysia) Email: geetha@measat.com

APT Views on WRC-23 Agenda Items: **AI 1.15**

◆ **APT Views:**

- In view of all problems, difficulties, inconsistencies, limitation of service area that according to the review by the BR of the service areas of the RR Appendix 30B assignments recorded in the Master International Frequency Register (MIFR) showed that generally the service areas of RR Appendix 30B networks applied Article 6 and recorded in the List or MIFR are non-contiguous and the number of countries in these service areas ranges from one to fifty countries. Additionally, § 6.16 of RR Appendix 30B provides that an administration may at any time exclude its territory from the service area of an AP30B assignment. Therefore, A-ESIM and M-ESIMs in the 12.75 13.25 GHz band subject to this agenda item need to have the capability to restrict operations in territories of those administrations the agreement of which under § 6.6 has been obtained and authorization for A-ESIM and M-ESIM operations has been granted. Also, distinctive and specific aspects of RR AP30B including but not limited to Reference situations for all Plan allotments and assignments in the List.
- APT members are considering to support Method A.
- APT members could consider to support Method B provided that the remaining elements and part of that method as referred to in attachment of Resolution relating to agenda item 1.15 need to be successfully resolved and agreed including but not limited to the following:

DG Chair: Mr. Phung
Nguyen Phuong
(VTN)



APT Views on WRC-23 Agenda Items: **AI 1.15**

◆ APT Views (cont'd):

- Interference management mechanism to deal with interference occurs from operation of ESIM to other administrations;
 - Switching facility allowing transmission over these territories of countries which agreed to be included in the service area and/or authorized operation of the service on the territory under jurisdiction and no transmission over these countries if they are not in the service areas or they have not given their authorization for operation of that ESIM;
 - Lack of contiguous service area on regional and/ or worldwide, except merely one satellite network having regional service area;
 - Submission of the a firm objective, enforceable and measurable with actionable commitment at the time of submission of Appendix 4 data element for planned ESIM(s);
 - Review by the RRB, as an enforceable mechanism in case of raising any problem during the implementation raised, by any administration in particular occurrence and persistence of unacceptable interference;
 - Deciding on responsibilities issues to be attributed to one single entity i.e. the notifying adm of the GSO satellite network if the ESIM is associated with that single GSO satellite network. In case that there are more than one satellite use for operation of ESIM and responsibility should be assigned or attributed to only notifying adm of these satellite;
 - Avoiding to impose any mandatory action(s) to the administration(s) authorizing the operation of ESIM in the territory under its jurisdiction to resolve the interferences occur;
 - Methodology to enable BR to verify compliance with PFD limit as contained in Annex 4.
- APT Members also have views which are similar as APG23-5.

APT Views on WRC-23 Agenda Items: **AI 1.15**

◆ Preliminary APT Common Proposal (PACP) :

- APT members are considering to support Methods A or B.
- However, when Method B is considered at WRC-23, APT common proposals for WRC-23 agenda item 1.15 are as shown below:

Provisions	Supported Options
recognizing m) and n)	Support option 2 and delete recognizing m) and n)
resolves 1.2.5-1.2.7	Support to keep option 2 and make some modifications for resolves 1.2.7
resolves 1.2.9	Modify resolves 1.2.9,
resolves 9.1	Support option 2
resolves 9.4	Delete option 2
resolves 11	Support option 2
resolves further <i>8bis</i>	Support option 1
Annex 4	Update Methodology with respect to the examination of compliance of A ESIM with pfd limits in Part II of Annex 2

APT Views on WRC-23 Agenda Items: **AI 1.16**

◆ **APT Views:**

- The APT has considered agenda item 1.16 and agreed a Preliminary APT Common Proposal on the matter. Moreover, the APT Members agreed the following view(s) on the agenda item 1.16.
- APT Members are considering Method A.
- APT Members are also considering Method B under the conditions that all the issues raised in the attached resolution are successfully resolved and agreed upon at the Conference.
- In addition, APT Members raised the question whether the aggregate interference effect from multi-AESIMs is necessary to be taken into account or not at the Conference.

DG Chair: Mr. Yusuke
FUKUI (Japan)



APT Views on WRC-23 Agenda Items: AI 1.16

◆ Preliminary APT Common Proposal (PACP) :

- It is noted that Method B can be acceptable if every and all problems, difficulties, inconsistencies, ambiguities and not yet addressed issues as well as those contained in the associated attached Resolution for this agenda item are dully and fully addressed and successfully resolved and agreed by consensus.
- The PACP is agreed by APT Members under the conditions that those sections (resolves 1.2.5/1.2.5.1/1.2.6/1.2.7/1.2.8/2/3/4/6/7, resolves further 6/7/8/9/10/11/12, instructs the Director of the Radiocommunication Bureau 1/2/3/4/5, invites administrations, instructs the Secretary-General, ANNEX 1, ANNEX 2, ANNEX 3, ANNEX 4) which were not discussed at CPM23-2 would be considered by the Conference resulting satisfactory resolutions to those items.

Provisions	Supported Options
Title of Resolution	Add a NOTE: The title of the Resolution 173 is in line with Option 1.
considering d)	Support option 1
considering further a)	Support option 3
recognizing h) and i)	Support option 2
resolves 1.1 <i>bis</i>	Support option 1
resolves 1.2.2 <i>bis</i>	New addition, align with AI 1.15
resolves 1.2.4	Delete option 1 and make modifications for original option 2 and 3
resolves 1.3.1	Support option 1
resolves 1.3.4	Support option 1
resolves 5	Support option 1
resolves 8	Support option 2
resolves further 1 and 4	Make editorial changes

APT Views on WRC-23 Agenda Items: AI 1.17

◆ Preliminary APT Common Proposal (PACP) :

- APT Members are considering Method A under agenda item 1.17.
- APT Members also agreed on a Preliminary APT Common Proposal on Method B under the condition that issues raised in the draft Resolutions attached to this PACP are successfully resolved and agreed by the Conference.

Provisions	Supported Options
No. 5. A117	Support to retain the original option 2 as well as delete option 1, 3 and 4
TABLE 21-4	Support to remove the pfd values for 27.5-29.5GHz
recognizing c)	New addition
resolves 2.3	Delete option 3
resolves 2.5	Delete option 2
resolves 3.4	Support option 2 and the pfd value -148 dB (W/(m ² · MHz)) could be further reviewed
resolves 7	Support modification of option 1
resolves 8	New addition
instructs the Director of the Radiocommunication Bureau 5	Support to delete it
Annex 1	Support to delete alternative GSO “expanded cone”
Annex 3: Protection of EESS services	Support option 1
Annex 4: Protection of non-GSO space stations	Support some specific values
Annex 5: Protection of GSO space stations	2bis): For options A and B, there is a slight preference for Option B

APT Views on WRC-23 Agenda Items: **AI 1.17**

◆ Issues for further discussion:

- Alternatives of allocation for the satellite-to-satellite operations.
- interference management system(s) and monitoring facilities (NCMC).
- the pfd mask(s) to protect terrestrial services included in Annex 2 of the new draft Resolution.
- the relevant e.i.r./pfd values included in the Annexes 4 and 5 to the draft Resolution to protect non-GSO and GSO systems, respectively.

DG Chair: Ms.
Bo ZHANG
(China)



APT Views on WRC-23 Agenda Items: AI 7 (Topic A)

◆ Preliminary APT Common Proposal (PACP) :

APT Members support Method A2 Option A of the CPM Report to address this topic. In addition:

- APT Members support the development of the definition of tolerances of non-GSO space stations in the FSS, BSS and MSS with frequency assignments subject to Resolution 35 (WRC-19). APT Members support the development of these tolerances in the context of ITU regulatory procedures such as bringing into use (BIU), bringing back into use (BBIU) and the milestone-based approach.
- APT Members are of the view that the development of the definition of tolerances of non-GSO space stations in the FSS, BSS and MSS, should be limited to the inclination of the orbital plane, the altitude of the apogee of the space station, the altitude of the perigee of the space station and the argument of the perigee of the orbital plane, to account for potential differences between the notified and deployed orbital characteristics.
- APT Members are also of the view that appropriate regulatory consequences/measures should be developed under Nos. 11.44C, 11.49.2 and 11.51, taking into account the operational aspects of the non-GSO space stations in the FSS, BSS and MSS with frequency assignments subject to Resolution 35 (WRC-19), if the operations are beyond the specified allowable tolerances. These regulatory measures should be implementable and not have any retroactive application. Moreover, necessary transitional measures for application of the decision of WRC-23 may need to be developed.
- APT Members do not support overregulation nor regulatory methods that are too stringent and inflexible, to allow the operation of existing and new satellites with the possibility to make adjustments, in order to comply with the established orbital tolerances.
- For frequency assignments of non-GSO systems in the FSS, BSS and MSS subject to Resolution 35 (WRC-19) notified prior to the entry into force of the Final Acts of WRC-23, APT Members support allowing an update to the notified orbital parameters within a reasonable range, based on the conditions of the new draft Resolution, in order to align with the actual deployed characteristics, without changing the date of receipt of the associated notice.

APT Views on WRC-23 Agenda Items: AI 7 (Topic A)

◆ Preliminary APT Common Proposal (PACP) :

- Method A2 Option A of CPM Report is supported but with some modifications as shown in table below
- In the Annex (on variation for the altitude and the inclination) to the draft New Resolution, under Option 1:
 - where X is a fixed value for allowed variation for altitude, there are Alternative 1: TBD e.g. 20/50 km Alternative 2: TBD.
 - where Z is a fixed value for allowed variation for inclination, Z is equal to TBD e.g. 2/3 deg

Provisions	Contents	Supported Options
resolves 1 of draft New Resolution	that, as of <i>the entry into force of the Final Acts of WRC-23</i> for space stations with an orbital eccentricity less than 0.5 notified as part of a NGSO FSS, BSS or MSS system subject to Resolution 35 (WRC-19) with an apogee altitude less than 15 000 km shall not exceed allowed variation for altitude and inclination in Annex	Option A2A4
resolves 2 of draft New Resolution	any space station deployed as part of a NGSO FSS, BSS or MSS system subject to Resolution 35 (WRC-19) that has received unfavourable finding under <i>resolve 1</i> , a) shall not cause unacceptable interference to and shall not claim protection from the other systems/networks, b) shall not be considered in the deployment information submitted under <i>Resolves 7 and 8</i> of Resolution 35 (WRC-19) except if the tolerances referred to in <i>resolves 1</i> is not exceeded for a max of 30 /45 consecutive days,	MOD by APT to the draft New Res in CPM Report
resolves 3 of draft New Resolution	for NGSO to which resolves 1 apply and for which the latest notification information was received prior to 16 December 2023, the notifying administration could communicate to BR no later than [1 July 2024] a new notification according to its operational parameters	ADD by APT to the draft New Res in CPM Report
resolves 4 of draft New Resolution	upon receipt of the mods to the characteristics of the NGSO system as referred to in resolves 3: a) BR shall promptly make this information available "as received" on the ITU website; b) BR shall conduct an examination for compliance with Nos. 11.43A/11.43B, as appropriate; c) BR, for the purpose of No. 11.43B, shall retain the original dates of entry of the frequency assignments in the Master Register if specific conditions are met d) BR shall publish the information provided and its findings in the BR IFIC	ADD by APT to the draft New Res in CPM Report

APT Views on WRC-23 Agenda Items: AI 7 (Topic A)

◆ Issues for further discussion:

- Some APT Members consider together with Method A2 Option A, implementable and practical orbital tolerance values of 10 to 50 km or using formula based approach for orbital altitude and 2 to 3 degrees for orbital inclination.
- Some APT Members support tolerance values of 70 km. Such value would allow enough flexibility to ensure co-existence of multiple collaborative or non-collaborative systems at similar orbital altitudes, as per studies submitted to the WP 4A of June/July 2023.
- Some APT Members consider the tolerance of orbital characteristics of space stations of non-GSO FSS, BSS or MSS systems shall be regulated that is as narrow as possible currently achievable by real system.
- Some APT Members support fixed percentage of orbit altitude tolerances, and to use a fixed value for orbits above a particular height and a fixed percentage for orbits below that height.

DG Chair: Ms. Ting
Ling Lee (SNG);
AI 7 (Topics A, B,
F, G, H)



APT Views on WRC-23 Agenda Items: AI 7 (Topic B)

◆ APT Views and Preliminary APT Common Proposal (PACP) :

APT Members support Method B2 with preference for Option B2b of the CPM Report (Add Alternative 5). In addition:

- APT Members support the development of the post-milestone procedures for non-GSO satellite systems in FSS, BSS and MSS subject to Resolution 35 (WRC-19).
- APT Members are of the view that the studies for developing final post-milestone procedures at WRC-23 need to take into account the reporting procedure defined in resolves 19 of Resolution 35 (WRC-19).
- APT Members support the adoption of a new Resolution to replace resolves 19 of Resolution 35 (WRC-19) at WRC-23, suppressing resolves 19 of Resolution 35 (WRC-19) and leaving the rest of the Resolution 35 (WRC-19) as is otherwise.
- APT Members are also of the view that when developing the post-milestone procedures, overregulation needs to be avoided and some degree of operational flexibility which is necessary for the maintenance of the non-GSO system in the FSS, BSS and MSS, may need to be duly considered.
- APT Members also support the development of appropriate regulatory measures for frequency assignments to non-GSO space stations that do not comply with the post-milestone requirements/procedures.

◆ Topics for discussion:

- APT Members need further consideration on the appropriate set of equations to be supported under Method B2 Option B2b.

APT Views on WRC-23 Agenda Items: AI 7 (Topic F)

◆ APT Views:

- APT Members support the exclusion of the territory of a country from the service area of feeder link of another country and the adjustment of coverage area to the smallest to be aligned with the service area of feeder link under RR AP 30A.
- APT Members support developing specific measures to avoid creating obstacles to those administrations wishing to establish satellite networks of RR AP 30B over their territories, taking into account the roll-off of the receiving beams of adjacent satellite networks. Further studies on the adjustment of the coverage area to the smallest to be aligned with the service area of the RR AP 30B submissions under consideration is required, since the alignment of the coverage area with the service area may not be always feasible, especially when the satellite network is already in operation.
- APT Members do not support Method F1 of the CPM Report.
- No PACP for this topic.

◆ Summary of Issues during APG23-6:

- Some APT Members are of the view that relevant elements of provision 6.16 of RR Appendix 30B should also be included in the final method of this Topic, allowing an administration that at any time before, during, or after the publication to request exclusion of its territory from the feeder-link service area of a satellite network of other administrations.

APT Views on WRC-23 Agenda Items: **AI 7 (Topic H)**

◆ **APT Views:**

- APT Members support the possible removal of the concept of “implicit agreement” from the RR AP 30/30A and AP 30B. In this regard, APT Members support Methods H1B or H1C of the CPM Report.
- No PACP for this topic.

◆ **Summary of Issues during APG23-6:**

- On the aspect of EPM degradation tolerance in RR AP 30/30A of Regions 1 and 3, some APT Members are of the view that there should be no change due to lack of technical studies supporting such modification. In this regard, some APT Members prefer Method H2A presented in the draft CPM Report.
- Some other APT Members are of the view that sufficient studies were done to arrive at 0.25 dB as a proper value for the EPM degradation.
- On the issue of implicit agreement, some APT Members are of the view that Method H1C is just retaining the possibility for special agreement between administrations which are already addressed in RR. Therefore, Method H1C will not be achieved to satisfy this topic which is removed the concept of implicit agreement and the regulatory consequence.
- Some APT Members do not support either of Methods H1C or H1D for general application as addressing the issue of removal of the implicit agreement due to the same reason, however, these APT Members support Method H1D over H1C if they want to choose one of these two Methods.
- Some APT Members do not support Method H1B Option 2 and Method H1D.

Preliminary APT Common Proposals for WRC-23 Agenda Items

Working Party 5: General Issues and agenda of future WRCs

Agenda Items: 2, 4, 8, 9.1.b, 9.2, and 10

Chair:

Dr. Mohammad Taghi Shafiee (Islamic Rep. of Iran)



shafiee@cra.ir

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 2**

- **Preliminary APT Common Proposal (PACP):**

In accordance with Resolution 27 (Rev.WRC-19), APT Members considered the following issues and prepared a number of proposals to modify the RR:

Issue 1: Consideration of the ITU-R Recommendations incorporated by reference (IBR) in the Radio Regulations which have been revised and approved since WRC-19,

Issue 2: Removal of reference to Resolution 27 (Rev.WRC-19) in some provisions in the Radio Regulations,

Issue 3: Standardizing how to reference ITU-R Recommendations in non-mandatory nature,

Details of the related proposals along with explanatory text are given below:

DG Chair: Ms. Keiko Mori (Japan)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 4**

- Preliminary APT Common Proposal (PACP):

In accordance with Resolution **95 (Rev.WRC-19)**, APT Members reviewed Resolutions and Recommendations of previous conferences and prepared a number of proposals to modify or suppress some of Resolutions and Recommendations of previous conferences.

Details of the related proposals along with explanatory text are given below:

DG Chair: Ms. Keiko Mori (Japan)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 8**

- **Preliminary APT Common Proposal (PACP):**

APT Members propose to modify Resolution **26 (Rev.WRC-19)**:

- to improve the clarity of the process and alignment with current practice,
- to address the issue of timely consideration of administrations requests to vary footnotes in accordance with Resolution **26 (Rev.WRC-19)**, it is proposed to modify Resolution **26 (Rev.WRC-19)** to encourage administrations to submit their proposals under this agenda item to the second session of the CPM and invites the CPM to include these proposals for information in its Report to the Conference.

- **APT Views:**

Issue A: Support deletion of country footnotes or country names from footnotes

Issue B: Addition of country names into existing footnotes is not intended by this standing agenda item. WRCs may continue to deal with such requests on a case-by-case basis, subject to the principle that there are no objections from the affected countries according to Annex 1 to Resolution **26 (Rev.WRC-19)**

Issue C: Addition of new country footnotes shall not be considered under this agenda item,

Issue D: Availability of proposals under WRC standing Agenda Item 8

DG Chair: Mr. Neil Meaney (Australia)

Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 9.1 b)**

- Preliminary APT Common Proposal (PACP):

- NOC to RR Articles and Appendices (Changes to the Radio Regulations are outside the scope of WRC-23 agenda item 9.1)

- APT Views:

APT Members support ITU-R studies undertaken to date in accordance with Resolution **774 (WRC-19)**, and development of new ITU-R recommendations providing guidelines to protect RNSS (space-to-Earth) receivers from the amateur and amateur-satellite services in the frequency band 1 240-1 300 MHz based on Report ITU-R M.2513 without considering the removal of the amateur and amateur-satellite service allocations. APT Members support no changes to the Radio Regulations under agenda item 9.1 Topic B. APT Members recognize that the provisions of RR Nos. **5.28** to **5.30** shall continue to apply despite the new Recommendation under development. APT Members also support the suppression of Resolution **774 (WRC-19)** if Recommendation ITU-R M.[AS GUIDANCE] can be finalized and approved before WRC-23.

DG Chair: Ms. Jaekyung Park (Republic of Korea)



Preliminary APT Common Proposals on WRC-23 Agenda Items: **AI 9.2**

- **Preliminary APT Common Proposal (PACP):**
 - None

DG Chair: Mr. Paul Burford (Australia)

APT Views and Preliminary APT Common Proposals on **WRC-23 Agenda Item 10**

- WRC-27 preliminary items contained in Resolution 812 (WRC-19)
- New proposed items for inclusion in the agenda for WRC-27
- New proposed items for inclusion in the preliminary agenda for WRC-31
- General issues on WRC-23 agenda item 10
- Proposed urgent ITU-R studies during WRC-27 study cycle

DG Chairs:

Dr. Mohammad Taghi Shafiee (Islamic Rep. of Iran) – General Issues

Mr. HyoungJin Choi (Rep. of Korea) – Fixed, Mobile and IMT Issues

Mr. Jia Huang (P.R. of China)- Satellite Issues

Mr. Takahiro Yokoyama (Japan) – Science Issues

Mr. Stuart Shepard (Australia) – Aeronautical and Maritime issues



APT views on WRC-27 preliminary items in Resolution 812

Item	Subject	APT View
2.1	New allocations to radiolocation in 231.5 GHz and 275 GHz	<ul style="list-style-type: none">• Support for WRC-27/WRC-31• Preference is for WRC-27
2.2	Aeronautical and maritime GSO ESIM	<ul style="list-style-type: none">• No Consensus for WRC-27,• No Consensus for inclusion of non-GSO
2.3	FSS allocation in [43.5-45.5 GHz]	<ul style="list-style-type: none">• Support for WRC-31• No support for WRC-27
2.4	Determining pfd and eirp limits in Article 21 for 71-76 and 81-86 GHz	<ul style="list-style-type: none">• Support for WRC-31 and protection of MS,• No support for WRC-27
2.5	Compatibility of satellite services with passive services in 71-76 GHz and 81-86 GHz	<ul style="list-style-type: none">• Support for WRC-31,• No support for WRC-27
2.6	Space weather sensors	<ul style="list-style-type: none">• Support for WRC-27• Modifications to Res. 657
2.7	Non-GSO feeder link in 71-76 GHz and 81-86 GHz	<ul style="list-style-type: none">• No support for WRCs• SUP Res. 178

APT views on WRC-27 preliminary items in Resolution 812

Item	Subject	APT View
2.8	Non-GSO space link in 1.5/1.6 GHz	<ul style="list-style-type: none"> • No support for WRCs • SUP Res. 249
2.9	New MS allocation in 1300 -1350 MHz	<ul style="list-style-type: none"> • No support for WRCs • SUP Res. 250
2.10	VHF maritime frequencies in Appendix 18	<ul style="list-style-type: none"> • Support for WRC-27 • Modifications to Res. 363
2.11	New EESS allocation in 22.55-23.15 GHz	<ul style="list-style-type: none"> • Support for WRC-31 • No support for WRC-27
2.12	Removal except aero mobile in 694-960 MHz	<ul style="list-style-type: none"> • Ensure Protection of services to which the band is allocated as well as services in the adjacent band, • Support for WRC-31, [3400 – 3600] and [3600 – 3700] MHz, [in Region 3]
2.13	Narrowband MSS in [1.5 – 5]GHz	<ul style="list-style-type: none"> • NO support for WRCs • SUP Res 248

APT views on AI 10 – General Issues

➤ **Modification to Resolution 804**

- APT members propose modifications to Resolution 804 (Rev.WRC-19) to improve the management of the work under WRCs standing agenda item for establishing agendas for future WRCs.
- The volume of the agenda of a WRC and the workload of the preparatory work needed to be kept at a manageable level.
- Issues that can be resolved under the standing agenda items of WRCs or through the regular activities of ITU-R should not be converted into stand alone agenda item of WRCs.
- Topic/subject under agenda item 9.1 should, as much as possible, be avoided since some of them are more complex than standard agenda items.
- Addition of new Annex 3: A guidance for the development of future WRCs agenda items and their supporting resolutions associated with those agenda items to facilitate the preparatory work within administrations and regional telecommunication organisations under WRCs standing agenda item 10, as well as reaching consensus during a WRC.

APT Views and PACPs on AI 10 – General Issues

➤ **Proposed ToR for WRC-23 responsible group for AI10**

The principles for establishing agendas for WRCs as detailed in Resolution 804 (Rev.WRC-19), and the course of actions included in that Resolution need to be applied by the WRC-23 Working Group responsible for agenda item 10.

Previous experiences showed that during the last WRCs, some of the principles and course of actions included in this basic Resolution have not been completely and fully taken into account.

➤ **Proposed New WRC RESOLUTION** on course of actions to be taken by the first session of the CPM regarding ITU-R studies relevant to WRCs agenda items.

APT Members recognized that previous experiences show that during ITU-R studies relevant to some WRC agenda items, different studies have been received that used different assumptions, even for the main parameters, for sharing and compatibility studies which leads to extremely different results.

Therefore, it would be difficult or impractical for relevant ITU-R study group/working party to properly reflect such results in the section "Methods to satisfy the agenda item".

Proposed items for inclusion in **WRC-27** agenda

- **Technical and regulatory measures to ensure coexistence between spaceborne SAR and RDS in the frequency band 9.2-10.4GHz,**
- **New allocation to FSS (s-to-E) in 17.3-17.7 GHz in Region 3, and new allocation to BSS (s-to-E) in 17.3-17.8 GHz in Region 3,**
- **An agenda item towards identification of a portion(s) of the frequency range 4.4-15.35 GHz for the terrestrial component of IMT**

Proposed items for inclusion in **WRC-27** agenda

- **APT Members support to consider an agenda item for WRC-27 towards identification of a portion(s) of the frequency range 4.4-15.35 GHz for the terrestrial component of IMT.**

APT Members agreed to further discuss the frequency bands listed below at WRC-23, if time permits, taking into account the priority and workload of WRC-23:

- portion of 4400-4800 MHz
- 6425-7025 MHz (Region 3)
- portion of 7125-8500 MHz
- portion of 8500-10000MHz (some may require additional allocations to the MS)
- 10.5-10.68 GHz
- 12.75-13.25GHz
- 13.25-14.3 GHz
- 14.5-15.35 GHz

Item under consideration for inclusion in **WRC-27** agenda

➤ **New MSS allocations below 4 GHz**

- APT Members has considered this item, but not agreed to the following potential title, which APT Coordination meeting during WRC-23 continue to discuss to find the acceptable title.
- Studies towards potential new [secondary] allocation(s) to the mobile satellite service in the frequency bands: 698-960 MHz; 1 427-1 518 MHz; 1 710-1 980 MHz; 2 010-2 025 MHz; 2 110-2 170 MHz; 2 500-2 690 MHz; and 3 400-3 700MHz and for new [secondary] allocation(s) to the mobile satellite service in the bands 2 010-2 025 MHz (Regions 1 and 3) and 2 200 - 2 215 MHz

Proposed items for inclusion in **WRC-31** preliminary agenda

- **Allocation of 275-325 GHz to MS, FS, RAS and EESS (passive)**
- **Revisions of sharing conditions in the frequency band 13.75-14 GHz to facilitate efficient use of the band by uplink FSS earth stations with smaller antenna sizes**
- **Regulatory provisions to avoid harmful interference to the radiocommunication services caused by Wireless Power Transmission (APT Members may consider to transfer this item to WRC-27 depending on WRC-27 workload)**

Proposed urgent ITU-R studies during WRC-27 study cycle

➤ **Regulatory framework for non-GSO FSS to protect GSO FSS/BSS**

APT Members are of the view that it is necessary to conduct studies to ensure the compatibility between non-GSO FSS and MSS systems in the frequency bands which Resolution 35 (WRC-19) apply, taking into account the long-term sustainability, the equitable access, and rational and compatible use of the non-GSO orbital and spectrum resources consistent with the objectives of Article 44 of the Constitution and the Resolution 219 of the Plenipotentiary Conference 2022 by Radiocommunication Assembly and a future competent WRC.