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|  | ASIA-PACIFIC TELECOMMUNITY | Document No: |
| **The 6th Meeting of the APT Conference Preparatory****Group for WRC-23 (APG23-6)** | **APG23-6/OUT-08** |
| 14 – 19 August 2023, Brisbane, Australia | 18 August 2023 |

Working Party 1

**APT VIEW and Preliminary APT Common Proposal on WRC-23 agenda item 1.1**

**Agenda Item 1.1:**

*to consider, based on the results of the ITU R studies, possible measures to address, in the frequency band 4 800-4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the pfd criteria in No.* ***5.441B*** *in accordance with Resolution* ***223 (Rev.WRC 19)****;*

**1. Background**

WRC-19 approved WRC-23 agenda item 1.1 calling upon WRC-23 “to consider, based on the results of ITU-R studies, possible measures to address, in the frequency band 4 800-4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the power flux-density criteria in RR No. **5.441B** in accordance with Resolution **223 (Rev.WRC-19)**”.

WP 5B and 5D are the responsible groups, according to the CPM23-1 results ([*CA/251*](https://www.itu.int/dms_pub/itu-r/md/00/ca/cir/R00-CA-CIR-0251%21%21PDF-E.pdf)), to address the ITU-R preparatory work for WRC-23. WP 5B has developed a preliminary draft revision to Recommendation ITU-R M.2116 “Technical characteristics and protection criteria for the systems operating in the aeronautical mobile service and maritime mobile service within the 4 400-4 990 MHz frequency range”. WP5D has developed a supporting material “Technical and regulatory conditions for the protection of stations of the Aeronautical Mobile Service (AMS) and Maritime Mobile Service (MMS) located in international airspace or waters (i.e. outside national territories) and operating in the frequency band 4 800-4 990 MHz”. Regulatory aspects and technical studies for Agenda Item 1.1 were analyzed in this supporting material.

At the 2nd session of the Conference Preparatory Meeting (CPM23-2), six (6) Methods were developed to satisfy this agenda item (Section 1/1.1/4) based on agreement on new Method E and the consolidation of the three Methods F/G/H in a single Method F as shown in the table below.

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| **Method A** | NOC to RR except for consequential changes |
| **Method B** | NOC to RR except for modification of Resolution **223** to apply the existing pfd value to all countries listed in RR No. **5.441B**, as well as other consequential changes* *resolves* 5 of Resolution **223 (Rev.WRC‑19)** is deleted
 |
| **Method C** | Modification of the existing pfd criterion in RR No. **5.441B**, as well as other consequential changes* The current pfd value of −155 dB (W/(m2·1 MHz)) is replaced with alternatives for the pfd value and the coastal boundary for the application thereof.
* 5 alternative options: pfd limits ranging from -115 dB(W/(m2·1 MHz)) to −140 dB(W/(m2·1 MHz)) attached to varying coastal boundaries from 22 km to EEZ.
* Administrations currently exempt from the pfd criterion would continue to remain exempt.
 |
| **Method D** | Modification of the existing pfd criterion in RR No. **5.441B** and applying it to all countries listed in RR No. **5.441B**, as well as other consequential changes* The current pfd value of −155 dB (W/(m2·1 MHz)) is replaced with a new pfd value and coastal boundary in line with the alternatives of Method C.
* *resolves* 5 of Resolution **223 (Rev.WRC‑19)** is deleted
 |
| **Method E** | Applying a pfd criterion and extension of list of countries where it is not applied through separate regulatory measures* either regulatory protection mechanisms of i) a pfd criterion imposed on IMT stations together with RR No. **9.21** or, ii) only the application of No. **9.21** can be considered
* Two footnotes will be created where existing RR **No. 5.441B** will apply a new (lower) pfd limit on IMT based on the study outcomes and a new RR No. 5.A11 will be established that only applies RR No. **9.21**.
* Countries wishing to identify the band for IMT will be free to elect which footnote it prefers to join.
* *resolves* 5 of Resolution **223 (Rev.WRC‑19)** is deleted
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| **Method F** | Application of RR No. **9.21** and bilateral/multilateral coordination agreements with coastal States for the protection of AMS/MMS stations in international airspace and international waters* the pfd criterion of RR No. **5.441B** is deleted
* development of Rec. and/or Rep. in Resolution **223 (Rev. WRC-19)** is added
* *resolves* 5 of Resolution **223 (Rev.WRC‑19)** is deleted
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**2. Documents**

* Input Documents:

APG23-6/INP-[06](https://www.apt.int/sites/default/files/2023/06/APG23-6-INP-06_WP1_Report.docx) (Co-Chairs, WP1), [13](https://www.apt.int/sites/default/files/2023/07/APG23-6-INP-13_Cambodia_WP1_PACP_for__WRC-23_Agenda_Items.docx) (CBG), [29](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-29_Japan_WP1_PACP_WRC-23_Agenda_Items.docx) (J), [47](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-47_Indonesia_WP1_PACP_WRC-23_Agenda_Items.docx) (INS), [58](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-58_Thailand_WP1_PACP_WRC-23_Agenda_Items.docx) (THA), [65](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-65_Iran_WP1_Preliminary_Views_on_WRC-23_Agenda_Items.docx)(Rev.1) (IRN), [76](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-76_Singapore_WP1_PACP_WRC-23_Agenda_Items.docx) (SNG), [77](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-77_Multicountry_WP1_PACP_WRC-23_Agenda_Item_1.1.docx) (AUS,NZL), [87](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-87_KOR_WP1_PACP_WRC-23_Agenda_Items.docx) (KOR), [92](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-92_Philippines_WP1_PACP_WRC-23_Agenda_Items.docx) (PHL), [103](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-103_China_WP1_PACP_WRC-23_Agenda_Items.docx) (CHN), [109](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-109_Malaysia_WP1_PACP_WRC-23_Agenda_Items.docx) (MLA), [118](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-118_VietNam_WP1_PACP_WRC-23_Agenda_Items.docx) (VTN)

* Information Documents

APG23-6/INF-[07](https://www.apt.int/sites/default/files/2023/07/APG23-6-INF-07_Brief_on_AI1.1.docx) (DG Chair), [25](https://www.apt.int/sites/default/files/2023/07/APG23-6-INF-25_ICAO-Position_for_ITU-WRC23.docx) (ICAO), [40](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-40_GSMA_Views_WRC-23_for_mobile.docx) (GSMA Hong Kong), [45](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-45_Japan_Views_on_proposal_WRC-27_Agenda_Item_review_and_update_regulatory_provisions.docx) (RCC), [46](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-46_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [47](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-47_GSA_PACP_WRC-23_Agenda_Items.docx) (GSA), [52](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-52_CITEL_preparation_for_WRC-23.pdf) (CITEL)

**3. Summary of discussions**

**3.1 Summary of APT Members’ views**

**3.1.1**  **Cambodia (Kingdom of)** - **Document APG23-6/INP-**[**13**](https://www.apt.int/sites/default/files/2023/07/APG23-6-INP-13_Cambodia_WP1_PACP_for__WRC-23_Agenda_Items.docx)

Cambodia supports Method F as the consideration of possible measures to address the protection of stations of the aeronautical mobile service (AMS) and the maritime mobile services (MMS) located in international airspace and waters operating in the 4 800-4 990 MHz frequency band, while taking into account the implementation of International Mobile Telecommunications (IMT) systems in this frequency band.

**3.1.2**  **Japan** - **Document APG23-6/INP-**[**29**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-29_Japan_WP1_PACP_WRC-23_Agenda_Items.docx)

Japan supports modification of current regulatory conditions to enable countries to facilitate IMT deployment while ensuring the protection of stations of the aeronautical mobile service and maritime mobile service located in international airspace or waters in the frequency band 4 800-4 990 MHz.

**3.1.3**  **Indonesia (Republic of)** - **Document APG23-6/INP-**[**47**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-47_Indonesia_WP1_PACP_WRC-23_Agenda_Items.docx)

Views

Indonesia supports identification of the frequency band 4 800-4 990 MHz for IMT with no additional measures such as pfd limit for the protection of AMS/MMS stations in international airspace/waters, while method E and method F is under consideration.

Proposals for the PACP on Agenda Item 1.1

The APT Members support the identification of IMT in the frequency band 4 800-4 990 MHz with no additional measures such as pfd limit are imposed on IMT stations for the protection of AMS/MMS stations in international airspace/waters. However, RR No. **9.21** would continue to apply, providing a mechanism for protection of AMS/MMS operations from IMT. The protection of AMS/MMS stations is limited to the areas of national territories of countries using these stations. The use of AMS/MMS stations outside of national territories shall not claim protection from mobile and other services deployed within national territories.

**3.1.4**  **Thailand (Kingdom of)** - **Document APG23-6/INP-**[**58**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-58_Thailand_WP1_PACP_WRC-23_Agenda_Items.docx)

Thailand supports modification of the power flux-density criteria to facilitate IMT deployment while ensuring the protection of stations of the Aeronautical Mobile Service (AMS) and the Maritime Mobile Service (MMS) located in international airspace or waters in the frequency band 4 800 – 4 990 MHz. Therefore, Thailand prefers Method D in the CPM Report.



**3.1.5 Iran (Islamic Republic of)** - **Document APG23-6/INP-**[**65**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-65_Iran_WP1_Preliminary_Views_on_WRC-23_Agenda_Items.docx)**(Rev.1)**

This Administration, at this stage, supports method A (NOC) to ensure protection of the existing services in the frequency band 4 800-4 990 MHz.

However, should a potential alternative solution be emerged at the Conference this Administration could consider such potential alternative solution with a view to achieve a workable solution.

In view of the above, This Administration is of the view that:

An acceptable level of PFD, among those levels mentioned in Method C, if agreed by consensus would be a workable solution allowing both services (AMS and MMS) and IMT system sharing the frequency band 4 800 MHZ to 4 990 MHz with adequate compatibility.

With such approach a fair and balanced conditions for the smooth operation of these services could be established.

Attention is drawn to the fact that as the footnote is currently worded IMT assignments shall NOT claim protection from AMS and MMS assignments. Taking into account RR **5.43** RR **5.43A**, this implies that IMT assignment shall not also caused harmful interference to AMS and MMS assignments which proved necessary assurance that AMS and MMS assignments would be able to continue their operation without any difficulties.

**3.1.6 Singapore (Republic of)** - **Document APG23-6/INP-**[**76**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-76_Singapore_WP1_PACP_WRC-23_Agenda_Items.docx)

Singapore supports possible new measures to protect stations of the AMS and the MMS that are located in international airspace or waters and are operating in the frequency band 4 800-4 990 MHz in accordance with Resolution **223 (Rev.WRC-19)**, and the implementation of IMT in the band.

Singapore considers that any protection of AMS/MMS in international airspace and waters within 4 800-4 990 MHz band, for the implementation of IMT, should be subject to the agreement between the concerned administrations, i.e., between a Coastal State and other states which have interest in ensuring protection of AMS/MMS applications authorized by them and operating in international airspace/waters close to the coastal state in question.

Singapore proposes Method F to satisfy this agenda item.

**3.1.7 Australia and New Zealand**- **Document APG23-6/INP-**[**77**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-77_Multicountry_WP1_PACP_WRC-23_Agenda_Item_1.1.docx)

Australia and New Zealand support ongoing protection of the aeronautical mobile service (AMS) and maritime mobile services (MMS) located in international airspace or waters and operating in the frequency band 4 800-4 990 MHz. AMS and MMS shall remain protected on the basis of the pfd limit provided in RR No **5.441B.** Australia and New Zealand do not consider that RR No. **9.21** alone is sufficient for AMS and MMS protection. Australia and New Zealand could support an appropriate revision to the pfd limit, provided that it continues to ensure protection to AMS and MMS stations. We support the application of the pfd limit to all countries listed in RR No **5.441B** and the deletion of Resolves 5 of Resolution **223 (Rev.WRC 19)****.**

Australia and New Zealand support Method D, Alternative 2 - Modification of the existing pfd criteria in RR No. **5.441B** and applying it to all countries listed in RR No. **5.441B**, as well as other consequential changes.

Australia and New Zealand support the following pfd limit in Alternative 2 of Method D:

*−140 dB(W/(m2 · 1 MHz)) produced up to 19 km above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State, for the protection of the aeronautical mobile service in the frequency bands 4 800-4 825 MHz and 4 835-4 950 MHz and −134 dB(W/(m2 · 1 MHz)) produced up to 30 m above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State, for the protection of the maritime mobile service in the frequency band 4 800-4 990 MHz.*

Australia and New Zealand oppose methods E and F.

Australia and New Zealand proposes the following **Preliminary APT Common Proposal** to ensure the protection of AMS and MMS stations.



**3.1.8 Korea (Republic of)** - **Document APG23-6/INP-**[**87**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-87_KOR_WP1_PACP_WRC-23_Agenda_Items.docx)

The Republic of Korea proposes that the following views should be reflected properly in section 4 (APT Views), if APG agreed. If not, it should be included in section 6 (Issues for Consideration at APG Coordination Meeting at WRC-23) of [the template of the APT OUTPUT](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-09Rev.1_TMP_and_OUT_Template_for_PACP.docx).

**a. Modification of the pfd limits**

* ITU-R studies in preparation for WRC-23 have not identified a suitable alternative to a pfd criterion for the protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from IMT stations. On the other hand, studies have shown that the pfd criterion could be relaxed to a certain extent. Among the ITU-R studies related to modification of the pfd limits, the Republic of Korea is of the view that for the continuous operation of AMS and MMS located in international airspace and waters, the pfd limits per a station should consider the maximum antenna gain, i.e. the antenna of the AMS and MMS pointings towards IMT stations.
* The Republic of Korea, therefore, proposes new pfd values in RR No.**5.441B** as follows:
* In the frequency bands 4 800-4 825 MHz and 4 835-4 950 MHz, −140 dB(W/(m2 · 1 MHz)) produced up to 19 km above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State;
* In the frequency band 4 800-4 990 MHz, −134 dB(W/(m2 · 1 MHz)) produced up to 30 m above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State.
* The Republic of Korea is also of the view that these new pfd values need to be applied to IMT stations of all countries listed in RR No. **5.441B**.

**b. Application of RR No. 9.21 and bi/multilateral coordination**

* Some APT Members are of the view that the application of RR No. **9.21** and bi/multilateral coordination under Method F is out of scope and does not consider additional measures for the protection of AMS/MMS stations in the international airspace and international waters, which is the scope of this agenda item.
* In the CPM Report on this agenda item, Method F considers the application of RR No. **9.21** and bilateral/multilateral coordination agreements but does not consider additional measures such as pfd limits for the protection of AMS/MMS stations in international airspace/waters. Furthermore, this Method also suggests that the protection of AMS/MMS stations is limited to the areas of national territories of countries using these stations. Regarding this Method, the Republic of Korea is of the view that this Method does not respond to the objective of WRC-23 agenda item 1.1 since this Method does not enable the protection of AMS/MMS stations in the international airspace and waters in many communication scenarios, such as communications between aircrafts, between ships or between ships and aircraft outside the coverage area of ground stations. In addition, the Republic of Korea would like to note that there is an example of RR footnote for the protection of radio services in international airspace and waters:
	+ For example, RR No. **5.509D** “Before an administration brings into use an earth station in the fixed-satellite service (Earth-to-space) not for feeder links for the broadcasting-satellite service in the frequency bands 14.5-14.75 GHz (in countries listed in Resolution **163 (WRC-15)**) and 14.5-14.8 GHz (in countries listed in Resolution **164** **(WRC-15)**), it shall ensure that the power flux-density produced by this earth station does not exceed −151.5 dB(W/(m2 · 4 kHz)) produced at all altitudes from 0 m to 19 000 m above sea level at 22 km seaward from all coasts, defined as the low-water mark, as officially recognized by each coastal State.”

**c. Deletion of *resolves* 5 of Resolution 223**

* Some APT Members are of the view that the revised pfd limits need to be applied to all Members listed in RR No. **5.441B** and the deletion of *resolves* 5 would enable such protection also in a coastal area of counties listed in *resolves* 5, also ensuring a fair application of the technical conditions to all countries listed in RR No. **5.441B**.

**d. Methods in the CPM Report**

* In this respect, the Republic of Korea supports Alternative 2 of Method D and opposes Methods E and F described in the CPM Report.

**3.1.9 Philippines (Republic of the)** - **Document APG23-6/INP-**[**92**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-92_Philippines_WP1_PACP_WRC-23_Agenda_Items.docx)

Philippines supports the protection of stations of the aeronautical mobile service (AMS) and maritime mobile service (MMS) located in international airspace or waters (i.e. outside national territories) and operated in the frequency band 4 800-4 990 MHz on the basis of the application of both RR No. **9.21** and an appropriate pfd criteria on IMT stations.

**3.1.10 China (People’s Republic of)** - **Document APG23-6/INP-**[**103**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-103_China_WP1_PACP_WRC-23_Agenda_Items.docx)

China is of the view that AMS and MMS located in international airspace and waters and operated in 4800-4990 MHz should not claim protection from IMT systems located in national territory. China supports Method F.

The reasons are as follows:

* There is no specific notification and registration procedure in international airspace and waters for frequency assignments of AMS and MMS stations in this frequency band pursuant to RR No. **11.14.** Such a situation does not provide possibility to obtain international rights recognition with respect to frequency assignments of AMS and MMS stations in international airspace and waters and to claim protection against subsequent assignments from another country taking into account RR No. **8.1**
* The frequency band and services relevant to this agenda item are not mentioned in RR No. 15.28, which is the only provision mentioned international protection directly.
* No country has jurisdiction over the use of spectrum in international airspace and waters.

It is proposed to include the abovementioned view in the PACP on WRC-23 Agenda Item 1.1

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**3.1.11 Malaysia** - **Document APG23-6/INP-**[**109**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-109_Malaysia_WP1_PACP_WRC-23_Agenda_Items.docx)

Malaysia is open to consider any appropriate measures that address the protection of stations of the aeronautical and maritime mobile services located in international airspace and waters (i.e., outside national territories) operating in the 4 800-4 990 MHz frequency band, while taking into account the operation of IMT stations in this frequency band, as practicable.

**3.1.12 Viet Nam (Socialist Republic of)** - **Document APG23-6/INP-**[**118**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-118_VietNam_WP1_PACP_WRC-23_Agenda_Items.docx)

Viet Nam is of the view that:

* There are impractical and undue requests to protect AMS and MMS stations which are non-registered in the MIFR neither un-known status of their conformity, where appropriate, with a plan. In this circumstance, the use of AMS and MMS stations in the international space shall not be prioritized over the use of terrestrial services in the frequency band 4 800-4 990 MHz.
* Any request, such as a hard pfd limit at the border of the national territorial of Member States, would restrict the rights of Member States wish to use IMT stations on their national territories, lead to unfair, unequal and inefficient use of the radio frequency spectrum, which would in turn contradict the provisions of the Constitution, the Convention, Resolutions of the Plenipotentiary Conference and the Radio Regulations.
* The protection of AMS and MMS stations operating in 4 800-4 990 MHz frequency band in international airspace and waters should only be implemented through bilateral or multilateral agreements between involved administrations. Therefore, Method F would satisfy WRC-23 agenda item 1.1 with fair treatment to the need of concerned administrations.
* The alternative pfd criteria in Method C and E could only be consider if not restrict the rights of Member States to use IMT stations on their national territories.
* Any pfd criterion shall not be applied to all countries identified this band for IMT, also call as countries listed in RR No. 5.441B, at least to countries listed in *resolve 5* of Resolution **223**. Therefore method B and D be opposed.

**3.2 Summary of issues raised during the meeting**

* There was a discussion on registration procedure in international airspace and waters for frequency assignments of AMS and MMS stations in this frequency band 4 800 – 4 990 MHz
* Some APT Members have raised concerns regarding no specific registration procedure in international airspace and waters for frequency assignments of AMS and MMS stations. This situation does not provide possibility to obtain international recognition with respect to frequency assignments of AMS and MMS stations in international airspace and waters as well as to claim protection against subsequent assignments from another country taking into account RR No. **8.1**
* Some APT Members are of the view that the radio stations located in international waters and airspace need to be protected.
* The BR provided information during this discussion that there are around 150 AMS and MMS stations recorded in the MIFR located inside national territories with service areas outside the territorial waters. These notifications are from 3 countries located in Regions 1 and 2. Some APT Members expressed such information was not recorded in any input contributions at this meeting and need to be verified further.
* There was discussion regarding appropriate revision to the pfd limit:
* Some APT Members expressed that the relaxed pfd limits shall be applied to IMT stations of administrations listed listed in RR No **5.441B** and the deletion of Resolves 5 of Resolution **223 (Rev.WRC-19).**
* Some APT Members also expressed concerns that such pfd limit at the border of the national territorial of Member States, would impose limitations for Member States who wish to introduce IMT stations in the frequency band 4 800 – 4 990 MHz within their respective national territories.
* Some APT Members are of the view that bilateral or multilateral agreements between the administrations would be sufficient for the protection of AMS and MMS stations through coordination procedure under RR Article 9 including No**. 9.21**. However, Some APT Members have raised concerns that the current application of bilateral or multilateral coordination agreements is limited to the areas of national territories of countries using these stations may not fully address the need for the protection of the AMS and MMS stations in international airspace and waters, which is the focus of this agenda item.
* There was a discussion on the Methods to satisfy agenda item 1.1, and different views were expressed by APT Members in this regard.

**4. APT View(s)**

APT Members do not have a detailed specific PACP for this agenda item at this stage. However, there could be some consensus at WRC-23 to provide the appropriate regulatory provision, taking into account appropriate Method(s) and associated limit(s) contained in the CPM Report, which, on the one hand, ensures the continued operation of AMS and MMS stations in the frequency band 4 800 – 4 990 MHz and, on the other hand, facilitates the use of the above mentioned band for IMT.

**5. Preliminary APT Common Proposal**

None.

**6. Issues for Consideration at APG Coordination Meeting at WRC-23 (if any)**

APT Members would consider potential consensus on the matter with the view to find a satisfactory solution mutually agreed by concerned Administrations.

**7. Views from Other Organisations** (as provided in the information documents to

APG23-6)

**7.1 Regional Groups**

**7.1.1 RCC** - **Document APG23-6/INF-**[**45**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INP-45_Japan_Views_on_proposal_WRC-27_Agenda_Item_review_and_update_regulatory_provisions.docx)

The RCC Administrations oppose applying the PFD limits to protect stations of the aeronautical and maritime mobile services located in international airspace and waters (i.e., outside national territories) since:

* this imposes restrictions on services within national territories;
* administrations do not hold exclusive spectrum rights in international airspace and waters and there is no notification and registration procedure in international airspace and waters for AMS and MMS in this band;
* AMS and MMS stations do not have priority over other applications of terrestrial services in international airspace and waters or within national territories of countries.

Protection of AMS and MMS stations’ frequency assignments in international airspace and waters can be provided if agreed by concerned administration(s) since it can impose restrictions on their frequency assignments within national territories. Such agreement may be reached, for example, through developing the relevant harmonized spectrum utilization plans for AMS and MMS, based on the standards approved by ICAO and IMO.

Method F from CPM Report

**7.1.2 CEPT** - **Document APG23-6/INF-**[**46**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-46_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

CEPT is of the view that,

AMS and MMS stations located in international airspace or waters and operated in the band 4800 -4990 MHz shall be protected on the basis of the following pfd limits provided in RR No. 5.441B and derived from detailed AMS and MMS characteristics and protection criteria:

* In the frequency bands 4800-4825 MHz and 4835-4950 MHz, −140 dB(W/(m2 · 1 MHz)) produced up to 19 km above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State.
* In the band 4800-4990 MHz, −134 dB(W/(m2 · 1 MHz)) produced up to 30 m above sea level at 22 km from the coast, defined as the low-water mark, as officially recognized by the coastal State.

These pfd criteria shall apply to IMT operating in national territories in order to protect AMS and MMS stations located in international airspace or waters and operating in the band 4800-4990 MHz, i.e. beyond the territorial seas.

The above new pfd criteria shall apply to all countries listed in RR No. 5.441B ensuring consistency in the application of the limits.

**7.1.3 CITEL** - **Document APG23-6/INF-**[**52**](https://www.apt.int/sites/default/files/2023/08/APG23-6-INF-52_CITEL_preparation_for_WRC-23.pdf)

Two Preliminary Proposals:

* An administration proposes MOD 5.441B / MOD RESOLUTION 223

This proposal updates the pfd limit (value TBD) in No. 5.441B based on the results of studies (Method C). Text indicating the review of the pfd criterion at WRC-23 and the IMT identification effective date is no longer required and removes the list of exempted countries.

* An administration proposes MOD 5.441B / ADD 5.A11 / MOD RESOLUTION 223

This proposal updates the pfd limit (value TBD as in Method C) in No. 5.441B for certain countries based on the results of studies and proposes a new footnote for other countries without a pfd limit in a new footnote 5.A11 (Method D). Text indicating the review of the pfd criterion at WRC-23 and the IMT identification effective date is no longer required.

**7.2 International Organisations**

**7.2.1 ICAO** - **Document APG23-6/INF-**[**25**](https://www.apt.int/sites/default/files/2023/07/APG23-6-INF-25_ICAO-Position_for_ITU-WRC23.docx)

To support any measures based on the results of studies taken to ensure the protection of flight testing in international airspace, especially those stations operated in accordance with RR No. **5.440A**.

To oppose any proposed measure that is not in line with the results of studies and reduces the level of protection of flight test operations in international airspace and above international waters, especially those operated in accordance with RR No. **5.440A**.

To ensure that the proposed methods to satisfy this agenda item do not have a negative impact on the use of aviation systems in other frequency bands.

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