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| **The 5th Meeting of the APT Conference Preparatory****Group for WRC-23 (APG23-5)** | **APG23-5/OUT-32****(Rev.1)** |
| 20 – 25 February 2023, Busan, Republic of Korea | 25 February 2023 |

Working Party 4

**PRELIMINARY VIEWs on WRC-23 agenda item 7**

**TOPICS A, B, C, D, E, F, G, H, I, J, K aND PROPOSED NEW TOPIC**

**Agenda Item 7:**

*to consider possible changes, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, on advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution* ***86 (Rev.WRC-07)****, in order to facilitate the rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit.*

# General Aspect

1. Background

* In the implementation of Resolution **86** (Rev. Marrakesh, 2002), WRC-23 is invited by Resolution **86** (Rev. WRC-07) to consider, under the standing Agenda Item 7, any proposals which deal with deficiencies and improvements in the Regulatory/Procedural matters for frequency assignments pertaining to space service, ensuring these procedures, and the related Appendices of the Radio Regulations support latest technologies and regulatory practices, as far as possible.
* Working Party 4A (WP 4A) is the ITU-R group responsible for WRC-23 agenda item 7 (AI 7).
* During the seventh meeting of WP 4A held from 14-22 September 2022, the Ad-Hoc of the Plenary on WRC-23 AI 7 worked on completing the draft CPM text for all previously identified Topics. The final results of all the discussion on WRC-23 AI 7 Topics is shown in the table below:

| **Agenda item 7 Topic** | **Status** |
| --- | --- |
| Topic A – Non-GSO Orbital tolerances | See [Annex 26](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N26%21MSW-E.docx) draft CPM textSee [Annex 20](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N20%21MSW-E.docx) for current WD |
| Topic B – Post-milestone reporting | See [Annex 27](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N27%21MSW-E.docx) for draft CPM textSee [Annex 21](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N21%21MSW-E.docx) for current WD |
| Topic C – 7/8 & 20/30 GHz GSO MSS protection | See [Annex 28](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N28%21MSW-E.docx) for draft CPM text |
| Topic D – D1 – Mod to App 1 to Annex 4 of RR AP**30B**D2 – New AP4 parameters for Rec. ITU-R S.1503 updatesD3 – BR reminders for BIU/BBIU | See [Annex 29](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N29%21MSW-E.docx) for draft CPM text |
| Topic E – RR AP**30B** Improved procedures for new Member States | See [Annex 30](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N30%21MSW-E.docx) for draft CPM text |
| Topic F – Excluding uplink service area in RR AP**30A** for R1&3 and RR AP30B | See [Annex 31](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N31%21MSW-E.docx) for draft CPM text |
| Topic G – Amendments to Resolution **770 (WRC-19)** | See [Annex 32](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N32%21MSW-E.docx) for draft CPM text |
| Topic H – Enhanced protection of RR AP**30**/**30A**/**30B** | See [Annex 33](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N33%21MSW-E.docx) for draft CPM text |
| Topic I – Special agreements under RR Appendix **30B** | See [Annex 34](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N34%21MSW-E.docx) for draft CPM text |
| Topic J – MODs to Resolution **76 (Rev.WRC-15)** | See [Annex 35](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N35%21MSW-E.docx) for draft CPM text |
| Topic K – MODs to Resolution **553 (Rev.WRC-15)** | See [Annex 36](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N36%21MSW-E.docx) for draft CPM text |

* The meeting agreed to drop Topic L due to the lack of studies and incomplete draft CPM text.
* The results of discussion of each Topic could be found in the following sections of this Information document and also in Document [4A/856](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21%21MSW-E.docx).

2. Documents

* Input Documents AP23-5/[INP17(J)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-17_Japan-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Japan - Document APG23-5/INP-17

* Japan supports to review an advance publication, coordination, notification and recording procedures of satellite networks subject to this agenda item in accordance with Resolution 86 (Rev. Marrakech, 2002).

3.1.2 Australia - Document APG23-5/INP-59

* Australia supports consideration of possible changes to improve advance publication, coordination, notification and recording procedures for space services in the Radio Regulations in accordance with Resolution **86 (Rev.WRC 07)**, provided that such changes do not result in modification of frequency allocations in Article 5 of the Radio Regulations.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support consideration of possible changes to improve advance publication, coordination, notification and recording procedures for space services in the Radio Regulations in accordance with Resolution **86 (Rev.WRC-07)**, provided that such changes do not result in modification of frequency allocations in Article **5** of the Radio Regulations, except for the provisions in the footnotes of the Table of Frequency Allocations in Article **5** relating to advance publication, coordination, notification and recording procedures.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* None.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* None.

7.1.2 ASMG (as of February 2023)

* None.

7.1.3 CEPT (as of February 2023)

* CEPT supports retaining the current process of continuing evolution at successive WRCs of the regime governing space services. CEPT also favours a stable and predictable regulatory framework for efficient use of spectrum and orbit resources. CEPT intends to develop specific positions susceptible to bring improvement to the regulatory process.
* CEPT favours the review of any RR provision which can bring accurate solutions to specific detected inconsistencies and develop new improved provisions with emphasis on solving the most urgent issues, i.e., well characterized issues whose improvement is urgent and impacting.

7.1.4 CITEL (as of February 2023)

* None.

7.1.5 RCC (as of February 2023)

* None.

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as of February 2023)

* None.

7.2.3 WMO (as of February 2023)

* WMO does not support changes to the Radio Regulations that would impose unnecessary constraints on MetSat and EESS systems or that would overcomplicate the regulatory procedures for the corresponding ITU filings for the frequency bands that are used by these systems. WMO will follow the development of Agenda Item 7 issues as they are identified and studied.

7.2.3 IARU R3 (as of February 2023)

* None.

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# Topic A: Tolerances for Certain Orbital Characteristics of Non-GSO Space Stations in the FSS, BSS and MSS

1. Background

* WRC-19 invited the ITU-R to study “as a matter of urgency, tolerances for certain orbital characteristics of non-GSO space stations of the fixed-satellite, mobile-satellite or broadcasting satellite services to account for potential differences between the notified and deployed orbital characteristics for 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.”[[1]](#footnote-1)
* The objective of these studies would be to determine the allowable differences between the values recorded in the MIFR for the specified orbital characteristics of non‑GSO space stations operating on notified frequency assignments and those representative of the actual deployment of these non-GSO space stations. Studies of tolerances arise from the obligations stipulated in the RR No. **11.44C** and No. **11.49.2** (and its associated sub-footnotes)**,** Resolution **35 (WRC-19)** and RR Appendix **4**.
* The concept of orbital tolerances for a space station on board a GSO satellite already exists with, in particular, item A.4.a.2 (Orbital tolerances) and its associated sub items, A.4.a.2.a (the planned longitudinal tolerance easterly limit), A.4.a.2.b (the planned longitudinal tolerance westerly limit) and A.4.a.2.c (the planned inclination excursion). Effective limits on some of these tolerances are contained elsewhere in the Radio Regulations (e.g., the constraint on E/W longitudinal tolerances for GSO satellites operating in unplanned bands in Section III of RR Article **22**). However, there are no equivalent limits for tolerances in RR Appendix **4** for a space station on board a non-GSO satellite. This difference was recognized during discussions at WRC-19 on the BIU of frequency assignments to non-GSO satellite systems and on the milestone-based approach for the implementation of frequency assignments to space stations in a non-geostationary orbit satellite system in specific frequency bands and services. This recognition led to the invitation for study mentioned above.

**Information on on-going ITU-R Study**

* The first WP 4A virtual meeting (28-29 May 2020) established Correspondence Group 5 (CG #5) and developed the associated Terms of Reference (ToR) for this CG, in order to advance the work on this Topic by electronic means, in the periods between WP 4A meetings. 2 CG meetings were held in 2020.
* During the third WP 4A virtual meeting (22 February – 3 March 2021), the meeting considered 2 inputs from the US that were consolidated into the Working Document (WD) towards a Preliminary Draft New Report on WRC-23 Agenda Item 7, Topic A. This WD is a compilation of inputs received so far from Luxembourg, Canada, US, China, Russia and Norway.
* During the fourth WP 4A virtual meeting (14 – 28 July 2021), there were inputs from US and Canada that were merged with the existing WD, but not discussed due to lack of time. The WD is found in Document [4A/392 (Annex 13](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0392%21N13%21MSW-E.docx)).
* During the fifth WP 4A virtual meeting (27 October – 4 November 2021), there were inputs from Canada and US that were merged into the existing WD, but there was no discussion on the WD due to lack of time. The merged WD is found in Document [4A/522 (Annex 22)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0522%21N22%21MSW-E.docx).
* During the sixth WP 4A virtual/hybrid meeting (11-20 May 2022), there was no introduction of documents or discussions due to lack of time. There was some offline work whereby the input from Canada was merged into the WD (Document [4A/691(Annex 25)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N25%21MSW-E.docx)) and the US/Canada inputs were used to form the preliminary draft CPM text (Document [691(Annex32)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N32%21MSW-E.docx)).
* During the seventh WP 4A virtual/hybrid meeting (14-22 September 2022), the meeting considered the following inputs [4A/722](https://www.itu.int/md/R19-WP4A-C-0722/en)(CHN), [740](https://www.itu.int/md/R19-WP4A-C-0740/en)(USA), [776](https://www.itu.int/md/R19-WP4A-C-0776/en)(B), [784](https://www.itu.int/md/R19-WP4A-C-0784/en)(CAN), [796](https://www.itu.int/md/R19-WP4A-C-0796/en)(IRN), [802](https://www.itu.int/md/R19-WP4A-C-0802/en)(LUX) on the draft CPM text. The edits from Document [4A/739](https://www.itu.int/md/R19-WP4A-C-0739/en)(USA) were incorporated into the existing WD and that merged document will be carried forward for any future consideration at the next meeting (Document [4A/856(Annex 20)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N20%21MSW-E.docx)).
* There are 4 methods shown in the draft CPM text (Document [4A/856 (Annex 26)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N26%21MSW-E.docx)):
	+ Method A1: No change to the Radio Regulations.
	+ Method A2: A draft new WRC-23 Resolution on the implementation of tolerances for satellites of non-GSO FSS/BSS or MSS systems to be referred to in Nos. **11.44C.1, 11.49.2** and **11.51.**
	+ Option A: covers satellites of NGSO FSS, BSS or MSS systems
	+ Option B: covers satellites of NGSO FSS, BSS or MSS systems subject to **Resolution 35 (WRC-19)**
	+ Method A3: Modify RR Appendix **4** data items related to the planned tolerances for each of the four orbital characteristics for NGSO systems subject to RR No. **11.44C** and refer to them in the relevant provisions of RR Article **11** and in Resolution **35 (WRC-19)**
	+ Method A4: New footnotes in RR Article **11** pointing to a draft new WRC-23 Resolution, applicable to the Resolution **35 (WRC-19)** frequency bands, calling for periodic reporting on the altitude and inclination of deployed satellites and providing provisions for ensuring that deviations, excluding temporary deviations, do not increase interference or require additional protection

2. Documents

* Input Documents AP23-5/[INP11(THA)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [29(IND)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [39(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [48(SNG)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [55(VTN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [66(KOR)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx), [81(INS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [84(TON)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-84_Tonga-WP4-Preliminary_View_on_WRC-23_Agenda_Item_7.docx), [86(TON)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-86_Tonga-WP4-Proposed_modification_to_the_Chapter_4_of_draft_CPM_Report.docx), [91(CHN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdom of) – Document APG23-5/INP-11

* Thailand supports Method A2 in the current draft CPM text with a draft new WRC-23 Resolution on the implementation of tolerances for certain orbital characteristics of satellites of non-GSO FSS/BSS or MSS systems to be referred to in RR Nos. **11.44C.1**, **11.49.2** and **11.51**, where relevant.
* Thailand is of the views that:
	+ taking into account the existing non-GSO systems subject to Resolution **35 (WRC-19)** that may operate beyond the allowable orbital tolerances, appropriate regulatory consequences need to be developed; and
	+ appropriate transitional measures after the decision of WRC-23 should also be developed.

3.1.2 India (Republic of) – Document APG23-5/INP-29

* India supports the method that provides adequate tolerance to accommodate other NGSO systems in similar altitudes to ensure efficient sharing of orbital resources and the tolerance should be just adequate for operators to safely fly their satellites on a day-to-day basis. Noting that this tolerance is only for determining whether an operator is operating satellites within its ITU filing parameters, and sufficient ITU filing tolerance is required to enable accommodation of additional systems on an operational basis.

3.1.3 Iran (Islamic Republic of) – Document APG23-5/INP-39

* I.R. of Iran supports the Method A2, Option A as contained in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022).
* In addition, it is worth to mention that:
	+ It is important to recognize that the design considerations, the need to ensure safe flight operations between satellites in the same and/or other systems, inter alia, can lead to notifying administrations needing to operate some space stations in orbital parameters that are at variance from the notified orbital parameters or to employ orbital practices that do not increase interference or protection requirements;
	+ The degree of tolerances subject to this topic is an objective value that may be accepted in order to allow the proper deployment of the systems, and avoid over-regulation during the deployment of the systems;
	+ Not to be retroactively applicable;
	+ Specifying a concept for allowable orbital altitude deviation/tolerance for a non-GSO system is important from the perspective of efficient use of the non-GSO orbital resource. Developing allowable orbital altitude deviation/tolerance limitations or similar constructs would create certainty for later filed/deployed systems regarding the nominal operational altitude, and altitude variation, of earlier deployed systems and facilitate safe operations of multiple systems;
	+ It is worth mentioning that over regulation, retrospectively and inflexibility to be avoided allowing all operators while complying with the establish tolerances could duly deploy their systems and achieved their objectives. In this regard, an altitude and inclination tolerances around 8 to 10% for altitude and around 3 degrees for inclination could be considered as a pragmatic and practical values or pragmatically some percentage around 8-10% for altitude.

3.1.4 Singapore (Republic of) – Document APG23-5/INP-48

* Supports the development of the definition of tolerances limited to the four orbital characteristics of non-GSO space stations in FSS, BSS and MSS identifying a “notified orbital plane”.
* Tolerance values, in altitude, need to be large enough to ensure sufficient separation to minimize the risk of collisions between satellites in the same system as well as satellites in another satellite system.
* If the tolerance values specified are too small, it will not be possible for more than one system to operate on the same orbit, thus prohibiting the entry of new systems
* Does not support the development of tolerances under this topic for the orbital characteristics of non-GSO space stations whose frequency assignments belong to services other than the FSS, BSS and MSS.
* Supports the development of these tolerances in the context of ITU regulatory procedures such as BIU and the milestone-based approach. In the absence of such tolerances, it is unclear whether the requirements of Resolution **35 (WRC-19)** are met.
* To avoid collision with another non-GSO space station or to permit reorganisation of satellites in an orbit-plane after a launch of new non-GSO space stations, supports specific regulatory measures to temporary exceed the defined tolerances if final tolerances definition could not address such operational requirements.
* Supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not maintain these to-be-developed orbital tolerances.
* Supports Method A2 Option A i.e. a draft new WRC-23 Resolution on the implementation of tolerances for certain orbital characteristics of satellites of NGSO FSS/BSS or MSS systems to be referred to in RR Nos. **11.44C.1, 11.49.2 and 11.51**.

3.1.5 Vietnam (Socialist Republic of) - Document APG23-5/INP-55

* Viet Nam supports the development of the definition of tolerances of non-GSO space stations that operate in the FSS, BSS and MSS, limited to the differences between the notified and deployed non-GSO orbital characteristics for 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.
* Viet Nam supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not maintain or exceed the orbital tolerances.

3.1.6 Australia – Document APG23-5/INP-59

* The scope of any studies should be limited to the differences between the notified and deployed non-GSO orbital characteristics for 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. Australia supports regulatory methods that are not too stringent on operators that they can make genuine adjustments to the orbits of NGSO satellites based on the operational requirements. Australia does not support the expansion of the scope of this topic outside those frequencies in Resolution 35 (WRC-19). In this regard, Australian view mostly aligns with the Method A2 as proposed in the draft CPM text.

3.1.7 Korea (Republic of) – Document APG23-5/INP-66

* As the Republic of Korea supports the development of the definition of tolerances of non-geostationary-satellite orbit (non-GSO) space stations in the FSS, BSS and MSS subject to Resolution **35 (WRC-19)**, among the methods presented in the draft CPM Report, Methods A2 (Option B), A3 and A4 can be supported.
* Indonesia supports the development of tolerances of non-GSO space stations that operate in the FSS, BSS and MSS.

3.1.8 Indonesia – Document APG23-5/INP-81

* Indonesia supports the development of tolerances of non-GSO space stations that operate in the FSS, BSS and MSS.

3.1.9 Tonga – Document APG23-5/INP-84

* Tonga supports allowing National Administrations to submit orbital tolerances to the ITU via a modification of Resolution **35 (WRC-19)** and the introduction of new Appendix 4 elements. It is Tonga’s view that the responsibility to determine appropriate orbital tolerances for non-GSO systems lie with National Regulators, while the ITU Bureau will collect this information as submitted by Administrations and verify compliance with BIU / BBIU and Resolution **35 (WRC-19)**. Determining orbital tolerances is a complex exercise and implies taking into account several factors, including the characteristics of the non-GSO system involved, the effect of atmospheric drag on its satellites and the variations of such atmospheric drag with solar activity as well as the characteristics of the non-GSO system involved. It is therefore not appropriate to try and define an equation or even a fixed value that can work for all non-GSO systems. Lastly, it is important to highlight that assigning a specific tolerance to a non-GSO system does not imply that such non-GSO system will prevent access of another system to the relevant orbital resources, as the involved operators can always coordinate their operations, accordinglyIn fact, already today there are several systems operating at the same / similar orbit altitudes and inclinations within their respective tolerances without any reported problem. In brief, Tonga supports Method A3 of the current CPM text and invites APT to support Method A3.

See also Document APG23-5/INP-86.

3.1.10 China (People’s Republic of) – Document APG23-5/INP-91

* China supports Method A2 to develop a new Resolution on the implementation of tolerances for the certain orbital characteristics of non-GSO space stations in FSS, BSS and MSS.
* China supports the development of these tolerances in the context of RR notification and recording of frequency assignments procedures such as BIU and the milestone-based approach.
* China also supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations if it operates beyond the specified allowable tolerances.

3.2 Summary of issues raised during the meeting

* Some APT Members are concerned with Method A3 of Topic A, which provides administrations with the flexibility to decide on the orbital tolerance values that they wish to comply with for their NGSO systems, to the BR.

4. APT Preliminary View(s)

* APT Members support the development of the definition of tolerances of non-geostationary-satellite orbit (non-GSO) space stations in the FSS, BSS and MSS. 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 taking into account the operational aspects of the non-GSO space stations in the FSS, BSS and MSS, 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 to them, in order to comply with the established orbital tolerances.
* APT Members support Method A2 presented in the draft CPM Report together with the consideration in that Method, implementable and practical value, for example, 100 km for orbital altitude and 3 degrees for orbital inclination.

5. Other View(s) from APT Members

* Some APT Members note that in practice Method A3 with a fixed maximum value is equivalent to Method A2 with the same maximum value.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to take into account the outcome of CPM23-2 meeting, in order to develop the Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* Support studies on identifying acceptable tolerances for the following orbital characteristics: for 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;
* Agree that:
1. The development of tolerances under this topic should be limited to the fixed-satellite service, the broadcasting-satellite service and the mobile-satellite service.
2. Specific regulatory measures for tolerances ought to be taken in order to avoid collision with another non-geostationary space station. Tolerances for the orbital characteristics should on one hand provide flexibility of satellite operators to manoeuvre their satellites without wasting too much fuel on the other hand provide no room for abuse to go out of the notified orbital characteristics;
3. Special cases in the orbiting phase should be taken into account and that regulatory procedures should clearly define this.
4. Appropriate regulatory provisions ought to be developed for frequency assignments to non-GSO space stations that do not maintain or exceed the orbital tolerances and the effects that will result from these exceedances on the file submitted to the ITU.

7.1.2 ASMG (as of February 2023)

* Support studies on acceptable tolerances for the following orbital characteristics:
	+ 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
* The development of tolerances under this topic will be limited to the FSS, BSS and MSS systems.
* Develop regulatory measures to determine tolerances with respect to orbital characteristics, provided granting flexibility for satellite operators to manage their satellites, and prevent non-compliance with the reported orbital characteristic.

7.1.3 CEPT (as of February 2023)

* CEPT supports the development of the definition of tolerances limited to the four orbital characteristics of non-GSO space stations in FSS, BSS and MSS identifying a “notified orbital plane”.
* CEPT does not support the development of tolerances under this topic for the orbital characteristics of non-GSO space stations whose frequency assignments belong to services other than the FSS, BSS and MSS.
* CEPT supports the development of these tolerances in the context of ITU regulatory procedures such as BIU and the milestone-based approach. In the absence of such tolerances it is unclear whether the requirements of Resolution 35 (WRC-19) are met.
* To avoid collision with another non-GSO space station or to permit reorganisation of satellites in an orbit-plane after a launch of new non-GSO space stations, CEPT supports specific regulatory measures to temporary exceed the defined tolerances if final tolerances definition could not address such operational requirements.
* CEPT supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not maintain these to-be-developed orbital tolerances.

7.1.4 CITEL (as of February 2023)

* Some Administrations support the study into the need for such tolerances, and are of the view that the study of tolerances for the characteristics of notified orbital planes for non-GSO FSS, BSS and MSS systems should be limited to the four parameters identified in the minutes of the Plenary of WRC-19: 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. Depending upon the results of these studies, allowable differences between the orbital characteristics of the notified orbital plane, as defined in No. 11.44C.1, and the actual deployed orbital plane of a non-GSO space station could be determined.
* An Administration is also of the view that the above-mentioned four parameters, identified in the minutes of the plenary of WRC-19, are the only orbital parameters that could be considered in any application of Nos. 11.44C.2, 11.44D.2, 13.6 or any other relevant existing provisions of the Radio Regulations.

7.1.5 RCC (as of February 2023)

* Only FSS, MSS or BSS. Only satellite systems with the altitude of the apogee below 15 000 km should be considered.
* Tolerances for 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 shall depend on the type of orbit of the space station.
* The regulatory mechanisms for temporarily excess of the established tolerances need to be developed in order to meet the operational requirements of non-GSO systems. No specific Method.

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as of February 2023)

* None.

7.2.3 WMO (as of February 2023)

* None.

7.2.4 IARU R3 (as of February 2023)

* None.

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# Topic B: Post-milestone reporting procedure for non-GSO systems

1. Background

* WRC-19 discussed at length and ultimately agreed on Resolution **35 (WRC-19)**, “A milestone-based approach for the implementation of frequency assignments to space stations in a non-geostationary-satellite system in specific frequency bands and services.” This Resolution contains a detailed procedure to be followed by administrations and the Radiocommunication Bureau (BR) when recording and maintaining in the Master International Frequency Register (MIFR) frequency assignments for non-geostationary satellite (non-GSO) systems to which the Resolution applies. One aspect raised but not addressed in a regulatory sense in the Resolution relates to the case where a non-GSO system has completed the milestone process and subsequently experiences an intermediate- or long-term reduction of the number of satellites deployed. To set the stage for potential future consideration of a procedure for such cases, and to generate data not now available to the BR, WRC-19 included *resolves* 19 in Resolution **35 (WRC-19)**, which requires administrations to inform the BR, for information purposes only, of the date when the number of satellites capable of transmitting or receiving the recorded frequency assignments deployed falls below a specified threshold. Further, if appropriate and applicable, the same *resolves* states that the notifying administration should also inform the BR of the date on which the deployment of the total number of satellites was resumed. The BR is to publish all information received under *resolves* 19 on its website.
* In arriving at an agreement on *resolves* 19, WRC-19 also agreed that certain related text should be included in the minutes of a WRC-19 Plenary session as follows: “in considering agenda item 7 Issue A, WRC-19 invites ITU-R to study, as a matter of urgency, possible development of a post‑milestone procedure taking into account the reporting defined in § 18 of the Resolution **35 (WRC-19)** (WRC‑19 Documents [500](https://www.itu.int/md/R16-WRC19-C-0500/en) and [571](https://www.itu.int/md/R16-WRC19-C-0571/en)).” Note that when the WRC Plenary minutes text was agreed, what is now *resolves* 19 in the Finals Acts version of Resolution **35 (WRC-19)** was actually *resolves* 18. The change occurred in going from the provisional version to the final version of the Final Acts, and renumbering the provisional *resolves* 3*bis* to 4 and the consequential renumbering of all later *resolves.*

**Information on on-going ITU-R Study**

* The first WP 4A virtual meeting (28-29 May 2020) established Correspondence Group 5 (CG #5) and developed the associated Terms of Reference (ToR) for this CG, in order to advance the work on this Topic by electronic means, in the periods between WP 4A meetings. 2 CG meetings were held in 2020.
* During the third WP 4A virtual meeting (22 February – 3 March 2021), the meeting considered 1 input from the US that was consolidated into the Working Document (WD) on Non-GSO System Post Milestone Reporting. This WD is a compilation of inputs received so far from Luxembourg and US.
* During the fourth WP 4A virtual meeting (14 – 28 July 2021), there were inputs from US, Russia and Canada that were merged with the existing WD, but not discussed due to lack of time. The WD is found in Document [4A/392 (Annex 14)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0392%21N14%21MSW-E.docx).
* the France/Luxembourg input contained preliminary draft CPM text which proposes to suppress resolves 19 for Resolution 35 (WRC-19) and to develop a new draft Resolution, based on the suspension provisions of No. **11.49**. The WD towards draft CPM text is found in Document [4A/392 (Annex 36)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0392%21N36%21MSW-E.docx).
* During the fifth WP 4A virtual meeting (27 October – 4 November 2021), there were inputs from Canada, Luxembourg and US that were merged into the existing WD on this Topic (Document [4A/522 (Annex23)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0522%21N23%21MSW-E.docx)) as well as the WD towards the draft CPM text (Document [4A/522 (Annex 29)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0522%21N29%21MSW-E.docx)), but there was no discussion due to lack of time.
* During the sixth WP 4A virtual/hybrid meeting (11-20 May 2022), there was no introduction of documents or discussions due to lack of time. There was some offline work whereby the input from US was merged into the WD (Document [4A/691(Annex 26)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N26%21MSW-E.docx)) and the US/Luxembourg (on behalf of CEPT)/Russia inputs were merged into preliminary draft CPM text (Document [4A/691(Annex 33)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N33%21MSW-E.docx)).
* During the seventh WP 4A virtual/hybrid meeting (14-22 September 2022), the meeting considered the following inputs [4A/742](https://www.itu.int/md/R19-WP4A-C-0742/en)(USA), [777](https://www.itu.int/md/R19-WP4A-C-0777/en)(B), [797](https://www.itu.int/md/R19-WP4A-C-0797/en)(IRN) on the draft CPM text. The edits from Document [4A/741](https://www.itu.int/md/R19-WP4A-C-0741/en)(USA) were incorporated into the existing WD and that merged document will be carried forward for any future consideration at the next meeting (Document [4A/856(Annex 21)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N21%21MSW-E.docx)).
* There are 2 methods shown in the draft CPM text (Document [4A/856(Annex 21)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N21%21MSW-E.docx)):
* Method B1: No change to the Radio Regulations.
* Method B2: involves changes to Resolution **35 (WRC-19)** to remove *resolves* 19and adoption of changes to RR Article **11** and a new Resolution to capture the post-milestone procedure for systems subject to Resolution **35 (WRC-19)**. The new draft Resolution contains 2 options regarding the required threshold for decreases in the number of deployed satellites capable of transmitting/receiving the recorded frequency assignments to apply such Resolution:
	+ Option B2a: involves a single percentage (95/P%) of the system’s satellites, without regard to the number of satellites in the NGSO system
	+ Option B2b: proposes a different number X depending on the number of satellites in the NGSO system.

2. Documents

* Input Documents AP23-5/INP[29(IND)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [39(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [48(SNG)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [55(VTN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [66(KOR)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx), [81(INS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [91(CHN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [98(MLA)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Japan - Document APG23-5/INP-17

* Japan generally supports the on-going ITU-R studies carried out by WP4A regarding Topic B.

3.1.2 India (Republic of) – Document APG23-5/INP-29

* India recommends that this issue may be postponed until WRC-27. This issue may be addressed after experience is gained with the Resolution 35 milestone process.

3.1.3 Iran (Islamic Republic of) - Document APG23-5/INP-39

* I.R. of Iran has not decided on any position with respect to the methods/options as are proposed in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022).
* However, depending outcome of CPM23-2 on Method B2 option B2a, we may also consider when developing a post-milestone procedure, some degree of operational flexibility, for instance X% for some period including temporary operations, which is necessary for the maintenance of the continued operation of non-GSO system in the FSS, BSS, and MSS.

3.1.4 Singapore (Republic of) – Document APG23-5/INP-48

* Supports 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.
* Supports a regulatory solution aligning the post milestone procedures in this new Resolution with No. **11.49** and Resolution **35 (WRC-19)** allowing some operational flexibilities:
	+ - * Possibility to operate a minimum 95% of the number of satellites notified in the MIFR without regulatory impact.
			* Possibility to operate less than 95% of the number of satellites notified in the MIFR for a maximum period of 3 years without regulatory impact.
			* Considering the process to duly notify the Bureau based on similar regulatory mechanism as in No. **11.49**.
* Supports a reduction in the number of satellites notified in the MIFR if the deployed number of satellites falls below 95% of that which was notified in the MIFR for a continuous period exceeding 3 years.
* Considers the application of only No. **13.6** by the BR insufficient as a solution for this Topic.
* Supports Method B2 i.e. involves changes to Resolution **35 (WRC-19)** to remove *resolves* 19and adoption of changes to RR Article **11** and a new Resolution to capture the post-milestone procedure for systems subject to Resolution **35 (WRC-19)** and option B2a which involves a single percentage of the system’s satellites, without regard to the number of satellites in the NGSO system.

3.1.5 Vietnam (Socialist Republic of) – Document APG23-5/INP-55

* Viet Nam supports the development of the post-milestone procedures for NGSO satellite systems in FSS, BSS and MSS.
* Viet Nam also supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not comply with the post-milestone procedures.

3.1.6 Australia – Document APG23-5/INP-59

* Australia supports the development of the final post-milestone procedures at WRC-23 to supplement what was considered the temporary post-milestone procedures as contained in resolves 19 of Resolution **35 (WRC-19)**. Australia supports Method B2 that scales according to the size of the constellation. Large constellations that have claimed BIU should maintain higher percentage of satellites before notifying BR on partial suspensions. Australian view mostly aligns with either Options B2a or B2b as proposed in the draft CPM text.

3.1.7 Korea (Republic of) – Document APG23-5/INP-66

* As the Republic of Korea supports the development of the post-milestone procedures for non-GSO satellite systems in FSS, BSS and MSS subject to Resolution **35 (WRC-19)**, among the methods presented in the draft CPM Report, Method B2 with option B2b can be supported.

3.1.8 Indonesia (Republic of) – Document APG23-5/INP-81

* Indonesia supports the implementation of the post-milestone procedures for non-GSO satellite systems in FSS, BSS and MSS subject to Resolution **35 (WRC-19)**.

3.1.9 China (People’s Republic of) – Document APG23-5/INP-91

* China supports Method B2 to develop a new Resolution to replace *resolves* 19 of Resolution **35 (WRC-19**), to suppress *resolves* 19 of Resolution **35 (WRC-19)** and leave the rest of the Resolution **35 (WRC-19)** as is otherwise.
* China supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations which cannot comply with the provisions contained in the developing post-milestone procedure.

3.1.10 Malaysia – Document APG23-5/INP-98

* Malaysia supports the development of final post‐milestone procedures at WRC‐23 to replace the post‐milestone procedures defined in *resolves 19* of Resolution **35 (WRC‐19)**, to ensure that the number of space stations recorded in the Master International Frequency Register (MIFR) for non-GSO systems closely aligns with what is actually deployed in space, while maintaining some degree of operational flexibility which is necessary for the maintenance of the non-GSO system in the FSS, BSS and MSS.
* Malaysia supports the development of a new Resolution for adoption at WRC-23, suppressing *resolves* 19 of Resolution **35 (WRC-19)** and leaving the rest of the Resolution **35 (WRC-19)** as is otherwise.
* Malaysia also supports the development of appropriate regulatory consequences for frequency assignments to non‐GSO systems that do not respect the procedures in this new Resolution on post-milestone procedures.
* Based on the draft CPM Report, Malaysia supports **Method B2**.

3.2 Summary of issues raised during the meeting

* Some APT Members informed that although the post milestone procedure will be mainly used after WRC-27, they are of the view that instead of postponing its consideration, it is preferable to have clearly defined regulations developed during this Conference. This allows administrations to have sufficient time to plan or define their launch/deployment strategies for the next coming years. If no decision is made during this WRC-23, then administrations will not know what to anticipate in terms of regulatory implications when the post milestone procedure is not met.

4. APT Preliminary View(s)

* 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.
* APT Members prefer Method B2 presented in the draft CPM Report, but are still considering other options to address this Topic.

5. Other View(s) from APT Members

* Some APT Members are of the view that this issue may be postponed until WRC-27. This issue may be addressed after experience is gained with the Resolution 35 (WRC-19) milestone process.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to take into account the outcome of CPM23-2 meeting, in order to develop the Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* Support changes to Resolution 35 (WRC-19) to remove resolves 19 and adoption of changes to RR Article 11 and a new resolution to capture the post-milestone procedure for systems subject to Resolution 35 (WRC-19) in order to ensure that the real number of deployed non-GSO satellite system in the space is reflected in the MIFR taking into consideration the complexity of the operation of Non-GSO systems.
* Support that the development of the post-milestone procedures for Non-GSO satellite to cover the mandate of the WRC-19 Plenary session was only limited to frequency assignments to non-GSO systems in specific bands and services(FSS/MSS/BSS) subject to Resolution 35 (WRC‑19).
* Encourage that the operational features of non-GSO systems with a small number of satellites need to be further taken into account.
* Support a regulatory solution aligning the post milestone procedures in this new Resolution with No. 11.49 and Resolution 35 (WRC-19).
* Consider the application of only No. 13.6 by the BR insufficient as a solution for this Topic.

7.1.2 ASMG (as of February 2023)

* Support developing Resolution 35 (WRC-19) to replace resolves 19 to ensure that the content of the MIFR for non-GSO systems closely aligns with what is actually deployed in space.
* Allow the deployed satellites to be reduced by a percentage of the number of satellites recorded in the MIFR for a specified period (to be determined) without affecting the MIFR entries, bearing in mind that this percentage depends on the total number of satellites in the system, taking into account that flexibility should be granted to allow operational requirements of Non-GSO systems when the mile-stone approach is duly established while no overruns allowed
* Support the developing regulatory provisions to handle frequency assignments of Non-GSO satellites that do not comply with these procedures to be developed under this topic.

7.1.3 CEPT (as of February 2023)

* CEPT supports 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.
* CEPT supports a regulatory solution aligning the post milestone procedures in this new Resolution with No. **11.49** and Resolution **35 (WRC-19)** allowing some operational flexibilities:
	+ Possibility to operate a minimum [95%] of the number of satellites notified in the MIFR without regulatory impact.
	+ Possibility to operate less than [95%] of the number of satellites notified in the MIFR for a maximum period of 3 years without regulatory impact. (A suspension process analogue to the GSO case is proposed.)
	+ Considering the process to duly notify the Bureau based on similar regulatory mechanism as in No. **11.49**.
* CEPT supports a reduction in the number of satellites notified in the MIFR if the deployed number of satellites falls below [95%] of that which was notified in the MIFR for a continuous period exceeding 3 years.
* CEPT considers that the application of No. **13.6** by the BR is not an adequate solution for Topic B.

7.1.4 CITEL (as of February 2023)

* An Administration is of the view that final post-milestone procedures should be developed at WRC-23 to replace resolves 19 of Resolution 35 (WRC-19). It is also of the view that the development of new Resolution should also permit some temporary flexibilities on the real number of non-GSO satellites deployed compared to the number of satellites contained in the Master Register in order to allow some operational flexibility.
* An Administration is also of the view that additional provisions similar to No. 11.49 (suspension) are required in the RR in order to provide time to non-GSO satellite operators not operating in accordance with the characteristics of their recorded frequency assignments to make the proper adjustments.

7.1.5 RCC (as of February 2023)

* The operational features of non-GSO systems with a small number of satellites need to be taken into account. The developed post-milestone procedure shall not impose additional restrictions on non-GSO satellite systems using highly elliptical orbit. Method B2

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as of February 2023)

* None.

7.2.3 WMO (as of February 2023)

* None.

7.2.4 IARU R3 (as of February 2023)

* None.

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# Topic C: 7/8 & 20/30 GHz GSO MSS protection

## 1. Background Information

* Topic C under agenda item 7 was established to verify the effectiveness of the regulatory protection of geostationary satellite orbit (GSO) mobile-satellite service (MSS) from interference caused by non-GSO systems and networks, and to identify possible inconsistencies in the RR provisions of the Radio Regulations (RR) applicable to the frequency bands:
* 7 250-7 750 MHz (space-to-Earth);
* 7 900-8 025 MHz (Earth-to-space);
* 20.2-21.2 GHz (space-to-Earth); and
* 30-31 GHz (Earth-to-space).

**Information on on-going ITU-R Study**

* The September 2022 meeting of WP 4A considered six input documents towards the development of the draft CPM text as Annex 28 to Chairman’s Report (Document 4A/856 [Annex 28](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N28%21MSW-E.docx)).
* The draft CPM text contains three methods, as follows:
* Method **C1** No change to the Radio Regulations.
* Method **C2[[2]](#footnote-2)** Add a newprovision, RR No. **22.2*bis****,* toextend the concept of RR No. **22.2** to GSO MSS networks in the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space).

Under this method, four implementation options are identified.

* + - Option **C2A**: under this option, the concept of RR No. **22.2** is extended to GSO MSS in the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) with the addition of a new provision No. **22.2*bis***.

Under the next two options, C2B and C2C, below, it is proposed to stipulate in the RR that, in the bands covered by RR No. **5.461**, RR No. **9.21** shall not apply to GSO MSS with respect to non-GSO systems for which complete notification information are received by the Bureau after the last date of WRC-23 or the entry into force of final acts of WRC-23.

* + - Option **C2B**: under this option, the exception referred to above is reflected directly in the new RR No. **22.2*bis****;*
		- Option **C2C**: under this option, the exception referred to above is reflected in the RR through a modification to RR No. **5.461**;
		- Option **C2D**: under this option, the application of RR No. **9.21** remains unchanged i.e., assignments to GSO, non-GSO and to terrestrial service continue to be relevant. Furthermore, it is indicated through a footnote to RR No. **22.2*bis***, that this provision applies to GSO MSS with respect to non-GSO systems only in case of a successful application of RR No. **9.21**.

For Options **C2B** to **C2D**, it is also proposed to add new RR Appendix **4** data items for assignments to non-GSO systems in the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) subject to Section IA of RR Article **9** to allow notifying administrations for GSO MSS operators to conduct reliable interference assessment into their networks using information directly from the BR IFIC publication without having to contact the notifying administration.

* Method **C3[[3]](#footnote-3)** Extend the concept of RR No. **22.2** to GSO MSS with respect to non-GSO systems in the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) in the relevant provisions of RR Article **5**. Therefore, it is proposed to modify RR No. **5.461** for the frequency bands 7 250-7 375 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space) and add two new footnotes RR No. **5.A7C3** and RR No. **5.B7C3** for the bands 7 375 -7 750 MHz (space-to-Earth) and for the bands 20.2-21.2 GHz and 30-31 GHz, respectively.

2. Documents

* Input Document(s):[INP-17](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-17_Japan-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (J), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-68](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-68_Rep_of_Korea-WP4-Proposed_modification_to_the_Chapter_4_of_draft_CPM_Report.docx) (KOR), [INP-81](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (INS), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf) (RCC)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Japan - Document APG23-5/[INP-17](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-17_Japan-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Japan supports protection of geostationary satellite networks in the mobile-satellite service operating in the 7/8 GHz and 20/30 GHz bands from emissions of non-geostationary satellite systems operating in the same frequency bands and identical directions, by means of appropriate regulatory solutions. In view of that, Japan supports Method C2 Option C2B or C2D at this moment.

3.1.2 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* I.R. of Iran may consider Method C3 in order to modify RR No. **5.461** for the frequency bands 7 250-7 375 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to-space) and add two new footnotes RR No. **5.461*bis*** and RR No. **5.461*ter*** for the bands 7 375 -7 750 MHz (space-to-Earth) and for the bands 20.2-21.2 GHz and 30-31 GHz, respectively.

It is reiterated thatRR No. **22.2** has been designed as a general Rule to cover/address the protection of GSO satellite network from non-GSO satellite system without any reference tospecific frequency band(s). However, the objectives of that provision could be transposed/ included in RR No. **5.461** to meet and address the concerns of the GSO mobile satellite networks. In so doing, addition of so-called RR No. **22.2**bis in Article 22 of the RR referencing specific frequency bands which open those provisions to other frequency bands should be avoided. So, changes in the regulatory objectives RR No. Article **22** which covers all satellite systems are, therefore, inappropriate.

* With respect to deletion/removal of RR No. **9.21** from the footnote RR No. **5.461** is anotherissue and to be discussed, separately. At the time that mobile satellite networks were referred to in RR No. **5.461**, the legislator intended by using that inclusion which was introduced another safety valve and condition such as allocation to application of RR No. **9.21**. Considering that such application which is an admission to the Table of Frequency Allocation requiring to seek agreement from other administrations has no relation with protection of GSO satellite networks by non-GSO satellite systems Therefore, RR **9.21** is independent from the objectives RR Article **22.2**. However, retention or removal of RR No. **9.21** may be considered and decided by WRC-23, irrespective of RR No. **22.2.**

3.1.3 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports necessary regulatory changes to protect GSO satellite networks in the MSS in 7/8GHz and 20/30 GHz bands from emissions of NSGO satellite systems. Australia will support Methods that modifies relevant provisions of Article 22 and Article 5 footnotes as long as such modifications do not modify frequency allocations. Hence Australia supports preservation of MSS allocation made subject to RR.9.21. The Australian view mostly aligns with the versions of Method C2 as proposed in the draft CPM text.

3.1.4 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* As the Republic of Korea supports extending the application of the concept of RR No. **22.2** for the protection of GSO MSS networks in the frequency bands 7 250-7 750 MHz (space-to-Earth), 7 900-8 025 MHz (Earth-to- space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space), among the methods presented in the draft CPM Report, Method C2 (Option C2B or C2C where RR No. **9.21** does not apply to GSO MSS networks with respect to non-GSO systems) can be supported.
* In addition, in order to ensure the protection of GSO MSS networks from non-GSO systems, Method C3 needs to be modified not to apply RR No. **9.21** to GSO MSS networks with respect to non-GSO systems for which complete notification information is received by the Bureau after the last day of WRC-23 or the entry into force of Final Acts of WRC-23.

3.1.5 Indonesia (Republic of) - Document APG23-5/[INP-81](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Indonesia supports protection of geostationary satellite networks in the mobile-satellite service operating in the 7/8 GHz and 20/30 GHz bands from emissions of non-geostationary satellite systems operating in the same frequency bands and identical directions.
* Indonesia is of the view that in the current regulatory framework, the protection of GSO MSS networks from non-GSO systems in these bands is not ensured.

3.1.6 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports to comprise new or modified footnotes extending the application of concept of provisions of RR No. 22.2 to provide protection for GSO satellite networks operating in the MSS in 7/8 & 20/30 GHz.

3.2 Summary of issues raised during the meeting

* Some APT Members support Methods that extend the application of concept of provisions of RR No. **22.2** into footnote No. **5.461**.
* Some APT Members are of the view that, in order to ensure the protection of GSO MSS networks from non-GSO systems, Method C3 needs to be modified in order that GSO MSS networks no longer apply RR No. **9.21** with respect to non-GSO systems for which complete notification information is received by the Bureau after the last day of WRC-23 or the entry into force of Final Acts of WRC-23.
* Some APT Members are of the view that RR No. **9.21** is an admission to the Table of Frequency Allocation and needs to be properly implemented in order that the allocation is admitted to function. Therefore, No. 9.21 is independent from the objectives RR Article **22.2** i.e., theapplication of RR No. **9.21** in footnote RR No. **5.461** requiring to seek agreement from other administrations is an admission to the Table of Frequency Allocation and has no relation with protection of GSO satellite networks by non-GSO satellite systems. Accordingly, the retention or removal of RR No. **9.21** may be considered and decided by WRC-23, irrespective of RR No. **22.2.**
* Some APT Members noted thatRR No. **22.2** was generally intended to address protection of GSO satellite network from non-GSO satellite system without any reference tospecific frequency bands. The objectives of that provision could be included in RR No. **5.461** to address the concerns of the GSO mobile satellite networks. However, the addition of RR No. **22.2**bis in Article **22** referencing specific frequency bands which open those provisions to other frequency bands should, to the extent practicable, be avoided.

4. APT Preliminary View(s)

* APT Members support extending the application of concept of provisions of RR No. **22.2** for the protection of geostationary-satellite networks in the mobile-satellite service operating in the bands 7/8 GHz and 20/30 GHz from emissions of non-geostationary-satellite networks. See also Section 3.2 above.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to consider the issues raised during the APG23-5 meeting (see Section 3.2) as well as the outcome of the CPM23-2 meeting, and provide views to the Methods to address this topic as identified in the CPM Report developed by CPM23-2, in order to formulate Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support the inclusion of new or modified footnotes in the Table of Frequency Allocations to broaden the scope of application of the provisions of No. **22.2** of the Radio Regulations to provide protection for GSO networks operating in the mobile-satellite service in the frequency bands defined in 7/8 and 20/30 GHz from satellite system emissions non-GSO operating in the same frequency bands and directions.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Supportthe proposed regulatory solution to protect GSO MSS networks from the emissions of non-GSO systems and networks operating in the same bands and identical directions:
	+ 1. 7 250-7 375 MHz (space-to-Earth),
		2. 7 900-8 025 MHz (Earth-to-space),
		3. 20.2-21.2 GHz (space-to-Earth), and
		4. 30-31 GHz (Earth-to-space).

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports the identification and definition of criteria, extensions and addition of provisions in order to quantify the protection of GSO networks operating in the MSS from interference caused by non-GSO networks or systems operating in the same frequency bands 7250-7750 MHz (space-to-Earth), 7900-8025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) and in identical directions.
* More specifically, CEPT supports:
	+ the modification of footnote RR No. 5.461 to exempt agreements under RR No. 9.21 regarding GSO networks in the MSS in the frequency bands 7250-7300 MHz and 7300-7375 MHz with respect to non-GSO systems for which complete coordination information are received by the Bureau after the last date of WRC-23 or the entry into force of final acts of WRC-23.
	+ • extend the provisions of RR No. 22.2 via an additional Article No. 22.2bis to GSO networks in the MSS in the concerned frequency bands.
	+ Introducing new RR Appendix 4 data items for assignments to non-GSO systems in the above-mentioned frequency bands to better facilitate analysis of potential interference for victim GSO networks.

7.1.4 CITEL – Document WRC-23-IRW-22/[22](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0022) (as of December 2022)

* None.

7.1.5 RCC – Document APG23-5/[INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf)

* Support the development of technical and regulatory mechanisms for protecting GSO networks in the mobile satellite service operating in 7/8 and 20/30 GHz from emissions of non-GSO satellite systems operating in the same frequency bands and same direction, without limiting the use of existing GSO and non-GSO satellite networks/systems in MSS.
* No specific Method

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic D1: Mod to App 1 to Annex 4 of RR AP30B

## 1. Background Information

* WRC-19 adopted modifications to §§ 1.1 and 1.2 of Annex 4 of RR Appendix**30B** by replacing 10 and 9 degrees stipulated for orbital separation by 7 and 6 degrees, respectively. However, in § 2 of Appendix 1 to Annex 4 of RR Appendix **30B**, there is still a reference to 10 and 9 degrees for the calculation of the aggregate C/I ratio at a given downlink test point.
* WRC-23 agenda item 7 Topic D1 considers this discrepancy and a method toalign the values of orbital separation with those in §§ 1.1 and 1.2 of of the Annex 4 of RR Appendix**30B** adopted by WRC-19.

**Information on on-going ITU-R Study**

* The September 2022 meeting of WP 4A finalized the draft CPM text as Annex 29 to Chairman’s Report (Document 4A/856 [Annex 29](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N29%21MSW-E.docx)).
* As an issue under Topic D, that addresses inconsistencies in regulatory provisions or formalizing certain existing practices, this issue is considered to be straightforward and for which consensus was achieved within ITU-R while presented. Hence, the draft CPM text contains a single method to address this topic, that is to modify Section 2 of Appendix 1 to Annex 4 of RR Appendix **30B** to reflect the values of the minimum orbital separation as adopted by WRC-19 in sections 1.1 and 1.2 of Annex 4 of RR Appendix **30B**.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx) (VTN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN), [INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx) (MLA)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL), [INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf) (RCC)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports Method D1 in the current draft CPM text to modify Section 2 of Appendix 1 to Annex 4 of RR Appendix **30B** to reflect the values of the minimal orbital separation as adopted by WRC-19 in sections 1.1 and 1.2 of Annex 4 of RR Appendix **30B**.

3.1.2 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* I.R. of Iran support the single Method D1, D2 & D3 proposed in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022), for sub-topics D1, D2 & D3 under the Topic D, respectively.

3.1.3 Viet Nam (Socialist Republic of) - Document APG23-5/[INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx)

* Viet Nam supports to modify Section 2 of Appendix 1 to Annex 4 of RR Appendix **30B** to reflect the values of the minimum orbital separation as adopted by WRC-19 in sections 1.1 and 1.2 of Annex 4 of RR Appendix **30B**.

3.1.4 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports the single Method as proposed in the draft CPM text

3.1.5 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* The Republic of Korea supports the single method presented in the draft CPM Report for modifications to Section 2 of Appendix 1 to Annex 4 of RR Appendix (AP) **30B** to reflect the values of the minimum orbital separation as adopted by WRC-19 in §§ 1.1 and 1.2 of Annex 4 of RR AP **30B**.

3.1.6 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports each single Method to satisfy WRC-23 agenda item 7 Topic D1, D2 and D3.

3.1.7 Malaysia - Document APG23-5/[INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)

* Malaysia supports the modification to Appendix 1 to Annex 4 of RR Appendix **30B** to reflect the values of the minimum orbital separation as adopted by WRC-19, under the **single method** of the draft CPM Report.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support the single method in the draft CPM Report to address this topic.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* None.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support the only method specified under this topic for modifications to Appendix 1 to Annex 4 of Appendix 30B of the Radio Regulations to reflect minimum orbital separation values as approved by WRC-19 in §§ 1.1 and 2.1 of Annex 4 of Appendix 30B of the RR.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support the only method identified under this topic.

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports correcting the values of the coordination arc in the aggregate C/I calculation in Appendix 1 to Annex 4 of RR Appendix **30B** based on the coordination arc reductions decided at WRC‐19.

7.1.4 CITEL – Document APG23-5/[INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

* Some administrations support to align the values referred to in Appendix 1 to Annex 4 of RR Appendix **30B** with those contained in §§ 1.1 and 1.2 of Annex 4 to Appendix **30B** **(Rev. WRC-19)** for the orbital spacing and incorporate the Rule of Procedure on Section 2 of Appendix 1 to Annex 4 in the RR.

7.1.5 RCC – Document APG23-5/[INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf)

* Support the value of the coordination arc in Appendix **1** to Annex **4** to the RR Appendix **30B** to be aligned it with the WRC-19 decision and the Rules of Procedure approved.
* Support Method D1.

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic D2: New AP4 parameters for Rec. S.1503 updates

## 1. Background Information

* Recommendation ITU-R S.1503 defines an algorithm that can be used to determine whether a non‑GSO FSS network meets the equivalent power flux-density (epfd) limits in Article **22** of the Radio Regulations (RR).
* A revision to this Recommendation from version S.1503-2 to S.1503-3 was approved at the October 2017 meeting of Study Group 4. Several of the changes proposed to Recommendation ITU-R S.1503 would require additional data elements to allow the BR to be able to undertake an examination of a non-GSO system to ensure that it is compatible with the EPFD limits in Article **22** of the Radio Regulations.
* As agreed by WRC-19, the new parameters is be included in RR Appendix **4** as mandatory parameters, a similar approach that was taken in previous revisions to Recommendation ITU-R S.1503. Hence, WRC-23 agenda item 7 Topic D2 is established to develop the proposed modifications to RR Appendix **4** describing the data elements required by the revision to Recommendation ITU-R S.1503. Draft changes to RR Appendix **4** are proposed in the Annex, but the exact changes needed will depend on the contents of the revision to Recommendation ITU-R S.1503 as agreed by WP 4A.

**Information on on-going ITU-R Study**

* It was agreed by the WP 4A meeting, in Recommendation ITU-R S.1503, a critical part of the regulation of non-GSO systems and protection of the GSO. In order to facilitate further development and enhancements to this framework, the May 2022 meeting of WP 4A agreed to:
* Identify those items which at that meeting were mature and ready to be included in a revision to Recommendation ITU-R S.1503. Those items were included in a PDRR ITU-R S.1503-3.
* Start work immediately upon a further revision to this Recommendation to address those items that have been discussed but are not yet mature enough to be included in the current revision.
* Work at the September 2022 meeting of WP 4A focussed on progressing those two tracks, firstly on the PDRR and whether this document could be upgraded to a DRR. Agreement could not be reached on an upgrade to DRR at this meeting and the output document on this subject had the word preliminary within square brackets in the title to the document. Another area of disagreement was the content in Part G of the PDRR and whether it should be left unchanged, modified, deleted or moved (see Document 4A/856 [Annex 4](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N04%21MSW-E.docx)).
* A second document was the WD-PDRR ITU-R S.1503, where it was agreed to focus further study on a set of five items. This document also contained the results of technical discussions on these items over recent meetings of WP 4A and a compilation WD towards a PDRR containing all those proposed modifications which were received at this meeting (see Document 4A/856 [Annex 7](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N07%21MSW-E.docx)).
* In order to progress the work on Recommendation ITU-R S.1503 prior to the meeting in June/July 2023, it was agreed to hold a Correspondence Group (CG) virtual meeting focused on the five items identified in the WD-PDRR. Notwithstanding the lack of agreement at this meeting, the WP 4A meeting in 2023 has every intention of finalizing a draft revision and sending that draft revision to SG 4 for adoption and ultimately approval.
* In the meantime, the September 2022 meeting of WP 4A managed to develop the draft CPM text as Annex 29 to Chairman’s Report (Document 4A/856 [Annex 29](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N29%21MSW-E.docx)).
* As an issue under Topic D, that addresses inconsistencies in regulatory provisions or formalizing certain existing practices, this issue is considered to be straightforward and for which consensus was achieved within ITU-R while presented. Hence, the draft CPM text contains a single method to address this topic, that is to modify RR Appendix **4** to support the implementation of agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data items.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-29](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (IND), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx) (VTN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN), [INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx) (MLA)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL)

## 3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports Method D2 in the current draft CPM text to modify RR Appendix **4** to support the implementation of agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data items.

3.1.2 India (Republic of) - Document APG23-5/[INP-29](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* India supports the modification to Recommendation ITU-R S.1503 to improve the modelling of NGSO systems while ensuring that Article 22 EPFD limits are met to protect GSO systems.

3.1.3 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* I.R. of Iran support the single Method D1, D2 & D3 proposed in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022), for sub-topics D1, D2 & D3 under the Topic D, respectively.

3.1.4 Viet Nam (Socialist Republic of) - Document APG23-5/[INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx)

* Viet Nam supports the modification of RR Appendix **4** to support the implementation of agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data items.

3.1.5 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports the single Method as proposed in the draft CPM text.

3.1.6 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* The Republic of Korea supports the single method presented in the draft CPM Report for modifications to RR AP **4** to support the implementation of agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data items.

3.1.7 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports each single Method to satisfy WRC-23 agenda item 7 Topic D1, D2 and D3.

3.1.8 Malaysia - Document APG23-5/[INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)

* Subject to Recommendation ITU-R S.1503 being adopted by Study Group 4, Malaysia supports the modification of RR Appendix **4** to support the implementation of agreed revisions to the Recommendation, including new data elements and modified data items, under the **single method** of the draft CPM Report.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support the single method in the draft CPM Report to address this topic.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* None.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support for the proposed changes to Recommendation ITU-R S.1503 to require additional data elements. In order for the BR to perform an examination of a non-GSO system for compliance with the EPFD limits in Article 22 of the Radio Regulations while ensuring the protection of the FSS.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support Method D2-2 as indicated in the draft CPM text in Annex (1)
* Support the possible upgrade of the Preliminary Draft Revision to Recommendation ITU-R S.1503-3 to a Draft Revision to Recommendation in Annex (2)

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports making modifications to Appendix **4** in consequence to the update to Recommendation ITU‐R S.1503. CEPT acknowledges the existence of other methods that could allow administrations to provide the additional parameters required by updates to Recommendation ITU‐R S.1503, e.g., by defining new fields in the.xml file that describes a non‐GSO system operating parameter.

7.1.4 CITEL – Document APG23-5/[INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

* An administration supports the modification of RR Appendix **4** to implement the agreed revisions to Recommendation ITU-R S.1503-3, including new data elements and modified data items.

7.1.5 RCC – Document WRC-23-IRW-22/[7 A1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0007) (as of December 2022)

* None.

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic D3: BR reminders for BIU/BBIU

## 1. Background Information

* WRC-23 agenda item 7 Topic D3 addresses the establishment of reminders for confirming the bringing into use (or bringing back into use) of a satellite network or system under RR Nos. **11.44B**, **11.44C**, **11.49** (**11.49.1** and **11.49.2**), RR Appendices **30/30A** §5.2.10 (20*bis* and 24*bis*) and RR Appendix **30B** §8.17 (14*ter*).
* To assist administrations in managing their ITU satellite system filings under the Radio Regulations, WRCs, RRB and the Radiocommunication Bureau (BR) have, over time, included in the RR or Rules of Procedures reminders for most of the provisions with strict time limits for submission of mandatory information. Indeed, an unfortunate oversight in the application of the RR, e.g., missing a deadline for providing information, may jeopardize a satellite system project.
* These reminders exist for most key provisions of the RR, under Nos. **9.47** or **9.62** (acknowledgement of receipt of a request for coordination or absence of reply or decisions on a coordination request), or Nos. **11.44** and **11.49** (bringing into use or bringing back into use of frequency assignments) or No. **11.47** (provisionally recorded assignments), but also under No. **13.6**, all footnotes referring to the payments under Decision 482, and under many similar other occurrences in the Appendices **30**/**30A** and **30B**, and numerous resolutions, as e.g. Resolution **35 (WRC-19)**.
* One critical time limit, however, does not yet include a formal BR reminder. This is the confirmation of bringing into use or bringing back into use of frequency assignments under RR Nos. **11.44B**, **11.44C**, **11.49** (**11.49.1** and **11.49.2**), RR Appendices **30/30A** §5.2.10 (20*bis* and 24*bis*) and RR Appendix **30B** §8.17 (14*ter*) where the notifying administration shall inform the Bureau within 30 days of the end of the 90-day period after the bringing into use or bringing back into use that a space station in the geostationary-satellite or non-geostationary-orbit having the capability to transmit or receive on that assigned frequency, has been deployed and maintained at the notified orbital position or one of the notified orbital planes, as appropriate, for a continuous period of 90 days.
* In order to ensure proper response within the regulatory timeframe, e.g., as soon as the date of receipt of the bringing or bringing back into-use information, it was deemed that the message should be sent sufficiently early e.g., as soon as the date of receipt of the bringing or bringing back into-use information. It seems that for some cases, the dispatch of this message has occurred almost at the end of the 120-day period which provides little flexibility to the notifying administration to respond to the BR message timely.

**Information on on-going ITU-R Study**

* The September 2022 meeting of WP 4A finalized the draft CPM text as Annex 29 to Chairman’s Report (Document 4A/856 [Annex 29](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N29%21MSW-E.docx)).
* As an issue under Topic D, that addresses inconsistencies in regulatory provisions or formalizing certain existing practices, this issue is considered to be straightforward and for which consensus was achieved within ITU-R while presented. Hence, the draft CPM text contains a single method to address this topic, that is the addition of footnotes to RR Nos. **11.44B**, **11.44C**, **11.49**, RR Appendices **30/30A** §5.2.10, and RR Appendix **30B** §8.17providing a formal reminder of the deadline for informing the Bureau of completion of BIU/BBIU in cases not subject to RR No. **11.47** or RR Appendices **30/30A** §5.2.7 or RR Appendix **30B** §8.16, as applicable, and for bringing into use or bringing back into use initiated within 120 days of the end of the regulatory deadline to be sent by the Bureau to the notifying administration.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-29](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (IND), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (SNG), [INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx) (VTN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN), [INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx) (MLA)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports Method D3 in the current draft CPM text to add footnotes to RR Nos. **11.44B**, **11.44C**, **11.49**, RR Appendices **30/30A** §5.2.10, and RR Appendix **30B** §8.17providing a formal reminder of the deadline for informing the Bureau of completion of BIU/BBIU in cases not subject to RR No. **11.**47 or RR Appendices **30/30A** §5.2.7 or RR Appendix **30B** §8.16, as applicable, and for bringing into use or bringing back into use initiated within 120 days of the end of the regulatory deadline to be sent by the Bureau to the notifying administration.

3.1.2 India (Republic of) - Document APG23-5/[INP-29](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-29_India_WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* India supports additional reminders from the BR to support administrations in maintaining their ITU filings.

3.1.3 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* I.R. of Iran support the single Method D1, D2 & D3 proposed in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022), for sub-topics D1, D2 & D3 under the Topic D, respectively.

3.1.3 Singapore - Document APG23-5/[INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Supports the single method identified for this Topic to add reminders for confirming the bringing into use and bringing back into use of systems/networks.

3.1.4 Viet Nam (Socialist Republic of) - Document APG23-5/[INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx)

* Viet Nam generally supports to establish reminders for confirming the bringing into use or bringing back into use of a satellite network or system.

3.1.5 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports the single Method as proposed in the draft CPM text.

3.1.6 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* The Republic of Korea supports the single method presented in the draft CPM Report for addition of footnotes to RR Nos. **11.44B**, **11.44C**, **11.49**, RR APs **30**/**30A** § 5.2.10, and RR AP **30B** § 8.17 providing a formal reminder of the deadline for informing the Bureau of completion of bringing into use (BIU)/bringing back into use (BBIU) in cases not subject to RR No. **11.47** or RR APs **30**/**30A** § 5.2.7 or RR AP **30B** § 8.16, as applicable, and for BIU/BBIU initiated within 120 days of the end of the regulatory deadline to be sent by the Bureau to the notifying administration.

3.1.7 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports each single Method to satisfy WRC-23 agenda item 7 Topic D1, D2 and D3.

3.1.8 Malaysia - Document APG23-5/[INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)

* Malaysia supports the modification to the RR providing a formal reminder of the deadline for informing the Bureau of the completion of BIU/BBIU and for BIU/BBIU initiated within 120 days of the end of the regulatory deadline, to be sent by BR to the notifying administration, under the single method of the draft CPM Report.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support the single method in the draft CPM Report to address this topic.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* None.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support that the Radio Bureau sending a reminder to the notifying administration regarding the confirmation of the BIU/BBIU date under Nos. **11.44B**, **44.11C**, **44.11D**, and **44.11E**, as applicable.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support BR sending a reminder to the notifying administration regarding the confirmation of the BIU/BBIU date under Nos. **11.44B**, **44.11C**, **44.11D**, and **44.11E**, as applicable.

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports establishing reminders for confirming the bringing into use or bringing back into use of a satellite network or system under Nos. **11.44B**, **44.11C**, **44.11D**, and **44.11E**.

7.1.4 CITEL – Document APG23-5/[INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

* An administration supports the establishment of reminders for confirming the bringing into use (or bringing back into use) of a satellite network or system in unplanned bands, RR Appendices **30/30A** and RR Appendix **30B**.

7.1.5 RCC – Document WRC-23-IRW-22/[7 A1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0007) (as of December 2022)

* None.

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic E: Improved procedures under RR Appendix 30B for new ITU Member States

## 1. Background Information

* Article 7 of RR Appendix **30B** contains a procedure for the addition of a new allotment to the Plan for a new Member State of the Union. However, administrations have found difficulties adding their new allotment to the Plan without the need to conduct coordination. This is due to the fact that there have been a lot of submissions for additional systems with global/regional coverage after WRC-07.
* § 1.1 of Article 1 of RR Appendix **30B** (Rev.WRC-19) stipulates that “The objective of the procedures prescribed in this Appendix is to guarantee in practice, for all countries, equitable access to the geostationary-satellite orbit in the frequency bands of the fixed-satellite service covered by this Appendix”.
* WRC-19 introduced Resolution **170 (WRC-19)** which offers preferential conditions for administrations having no network in the RR Appendix **30B** List and which wants to convert their allotment in the Plan into an assignment with modifications outside the envelope of the initial allotment while restricted to providing service to its national territory. However, after WRC-19 administrations found difficulty adding their new allotment to the Plan with the current procedures of Articles 6 and 7 of RR Appendix **30B** and also those including in Resolution **170 (WRC-19)**, which offers certain preferential conditions for administrations having no network in the RR Appendix **30B** List and which wants to convert their allotment in the Plan into an assignment with modifications outside the envelope of the initial allotment while restricted to providing service to its national territory.
* Under this Topic, it is considered to improve the Article 7 procedure of RR Appendix **30B** (Rev.WRC-19) for new ITU Member State to obtain a national allotment like other ITU Member States that already have national allotment in the fixed-satellite service (FSS) Plan.

**Information on on-going ITU-R Study**

* At the September 2022 meeting of WP 4A, the BR submitted two documents associated with the Planned bands in response to specific requests made to them from the last meeting of WP 4A, as follows:
* Document [4A/720](https://www.itu.int/md/R19-WP4A-C-0720/en) (BR): Statistics of the new notices of satellite networks submitted under § 6.1 of Article 6 of RR Appendix **30B**
* Document [4A/813](https://www.itu.int/md/R19-WP4A-C-0813/en) (BR): Updated statistics on submissions and suppressions for additional uses under Article 4 of RR Appendices **30** and **30A** in Regions 1 and 3.
* In addition, the BR also provided Document [4A/844](https://www.itu.int/md/R19-WP4A-C-0844/en) (BR) on “Updated statistics on the coordination activities for submissions made in accordance with Resolution **559 (WRC-19)**”which provided the current status of those coordination activities. As part of that document the BR was seeking the advice of WP 4A in which cases the introduction of those Resolution **559 (WRC-19)** assignments in the Regions 1 and 3 Plans could be accepted without a need to modify the technical parameters of those Resolution **559 (WRC-19)** assignments. While WP 4A was not in a position to provide specific advice in response to this request, the WP did approve a Note to the BR Director that contained views of WP 4A on the current coordination situation and provided some additional ideas that could help to further progress those coordination activities (see [Annex 40](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N40%21MSW-E.docx)).
* The September 2022 meeting of WP 4A considered three input documents towards the development of the draft CPM text as Annex 30 to Chairman’s Report (Document 4A/856 [Annex 30](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N30%21MSW-E.docx)).
* The draft CPM text contains three methods, as follows:
* Method **E1** No changes to the Radio Regulations.
* Method **E2** Modification to the Radio Regulations to grant to new ITU Member States the same privileges as those granted by WRC‑19 to administrations having no assignments in the RR Appendix **30B** List or under coordination.
* Method **E3** Modification the Article 7 procedure of RR Appendix **30B (Rev.WRC-19)** to better facilitate any new ITU Member State to obtain a national allotment by re‑considering the priority between the Article 7 requests and the application of Article 6 for additional systems.

2. Documents

* Input Document(s):[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (SNG), [INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx) (VTN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-81](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (INS), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL), [INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf) (RCC)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.3 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* I.R. of Iran is considering the Method E2/E3 does not have any position at this stage.
* The difficulties encountered by New Member States by obtaining an allotment in the Plan with the current procedures of Articles 6 and 7 of RR Appendix **30B** and also those included in Resolution **170 (WRC‑19)**, which offers certain preferential conditions to provide service to their national territory is an important and fundamental issue which embodied in the Article **44** of the ITU Constitution .Such difficulties stem from enormous number of additional use occupying every 0.5 degree of available orbital arc.
* In accordance to the Article **44** of the ITU’s Constitution, In using frequency bands for radio services, Member States shall bear in mind that radio frequencies and any associated orbits, including the geostationary-satellite orbit, are limited natural resources and that they must be used rationally, efficiently and economically, in conformity with the provisions of the Radio Regulations, so that countries or groups of countries may have equitable access to those orbits and frequencies, taking into account the special needs of the developing countries and the geographical situation of particular countries. To this effect, following points need to be taken into account:
1. To modify the Article 7 procedure of RR Appendix **30B** (Rev.WRC‑19) to better facilitate any new ITU Member State to obtain a national allotment by re‑considering the priority between the Article 7 requests and the application of Article 6 for additional systems, doesn’t solve their difficulties;
2. To grant new ITU Member States the same privileges as those granted by WRC‑19 to administrations having no assignments in the RR Appendix **30B** List or under coordination, some possible amendments to RR Appendix **30B** are suggested, which are not sufficient to address the extreme difficult situation of New ITU Member States;
3. In view of the above, there is a need to find a suitable solution, apart from existing proposed methods as outlined in draft CPM text, to tackle the difficulties of administrations in applying Article 7 e.g., one national allotment without having to conduct inconclusive bilateral coordination with other administrations.

3.1.3 Singapore - Document APG23-5/[INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Supports granting new ITU Member States the same rights as those granted to administrations having no assignments in the Appendix **30B** List, or under coordination, as adopted in Resolution **170 (WRC-19)**.
* Supports technical assessments of the interference scenarios for new ITU Member States so that the possible solution, to the extent possible, does not affect the existing allotments in the Plan and assignments in the List of Appendix **30B**.
* Supports encouraging new ITU Member States to adjust their submissions in order to respect the requirements contained in § 1.2 of Annex 1 to Appendix **30B**.
* Supports finding a solution on a case-by-case basis, which could be compatible with allotments in the Plan and assignments in the List, to meet the interference criteria defined in § 1.4 of Annex 1 to Appendix **30B** for this new ITU Member State.
* Supports Method E2 which is to grant new ITU Member States the same rights as those granted by WRC‑19 to administrations having no assignments in the RR Appendix **30B** List or under coordination as adopted in Resolution 170 (WRC-19), by making appropriate amendments to RR Appendix **30B**.

3.1.4 Viet Nam (Socialist Republic of) - Document APG23-5/[INP-55](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx)

* Viet Nam supports ITU-R studies to improve the procedures under Appendix 30B of the Radio Regulations for new ITU Member States.

3.1.5 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports technical assessments of the interference scenarios for new ITU Member States and analysis of the affect to existing allotments in the Plan and assignments in the List of Appendix 30B. Australia supports the need to determine a case-by-case solution for a number of new ITU Member States having difficulty to obtain national allotment that is implementable to protect national allotments and additional systems in the List. Australia does not support a generic approach to make amendments to procedures within RR Appendix 30B that may not address these specific cases. In this regard, Australia view mostly aligns with the Method E2 as proposed in the draft CPM text.
* Australia supports development of improved procedures under RR Appendix 30B for new ITU Member States while retaining existing protection arrangements for the Australian allotments in the Appendix 30B Plan. Australia supports the new improved procedures to be included into RR Appendix 30B.

3.1.6 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* As the Republic of Korea supports the possibility of granting new ITU Member States the same right as those granted to other Member States in RR AP **30B**, among the methods presented in the draft CPM Report, Methods E2 and E3 can be supported.

3.1.7 Indonesia (Republic of) - Document APG23-5/[INP-81](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-81_Indonesia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Indonesia supports equitable access to the GSO satellite orbit and frequencies resources in the frequency bands of the fixed-satellite service for new ITU Member States in order to obtain national allotments in the FSS Plan.

3.1.7 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports the efforts to grant new ITU Member States the same privilege as those granted to other Member States in AP**30B**, in order to ensure equitable access to orbits and frequencies resources.
* China supports finding a solution on a case-by-case basis, which could be compatible with allotments in the Plan and assignments in the List of AP**30B,** to meet the interference criteria defined in § 1.4 of Annex 1 to AP**30B** for this new ITU Member State.

3.2 Summary of issues raised during the meeting

* Some APT Members encourage new ITU Member States to adjust the submissions in order to comply with the requirements as contained in § 1.2 of Annex 1 to Appendix **30B**.
* Some APT Members are considering Methods E2 and E3 to address this topic, but notes that,
	+ Method E3 in the draft CPM Report does not resolve the difficulties for new ITU Member State to obtain a national allotment.
	+ The proposed modifications to RR Appendix 30B under Method E2 in the draft CPM Report are not sufficient to address the difficulties of the new ITU Member State to obtain a national allotment.
	+ Therefore, there is a need to find a suitable solution, apart from existing proposed methods outlined in draft CPM text, to tackle the difficulties of administrations in applying Article 7, without one national allotment having to conduct inconclusive bilateral coordination with other administrations.

4. APT Preliminary View(s)

* APT Members support granting new ITU Member States the same right as those granted to other Member States in Appendix **30B**, based on principles stipulated in Article **44** of the Constitution, Resolution **2 (Rev.WRC-03)** and those contained in Article **1** of AP**30B**
* APT Members support technical assessments of the interference scenarios for new ITU Member States so that the possible solution does not affect the existing allotments in the Plan and assignments in the List of Appendix **30B**.
* APT Members are of the view that, in case that an overall solution is not found, it is recommended to find a workable solutions, inter alia, on a case-by-case basis, which could be compatible with allotments in the Plan and assignments in the List of Appendix **30B,** to meet the interference criteria defined in § 1.4 of Annex 1 to Appendix **30B** for this new ITU Member State.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to consider the issues raised during the APG23-5 meeting (see Section 3.2) as well as the outcome of the CPM23-2 meeting, and provide views to the Methods to address this topic as identified in the CPM Report developed by CPM23-2, in order to formulate Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support ongoing studies to improve procedures under Appendix **30B** of the Radio Regulations for new ITU Member States, in order to ensure equitable access to orbital and frequency resources, while emphasizing that no restrictions are imposed on the allotments and assignments of Appendix **30B** of the current Member States taking into account the decision of the Radio Regulations Board at its 89th meeting.
* The need for conducting additional studies to analyze all possible interference scenarios to enable these countries to obtain orbits slots and allotments under Appendix **30B**.
* Encourage effective coordination and cooperation discussions between new ITU Member States and affected administrations to resolve any issues.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support ongoing studies to improve procedures under Appendix **30B** of the Radio Regulations for new ITU Member States, in order to ensure equitable access to orbital and frequency resources.
* Agree to request WRC-23 to grant new ITU Member States, including South Sudan, the same right as those granted to administrations having no assignments in the Appendix 30B List, or under coordination, as adopted in Resolution **170 (WRC-19)**
* Support option 3 of Part E above noting that it is concerned with the pending network and not the network in the List (in operation) given that 7 administrations must coordinate with the satellite network in the List.

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports to grant new ITU Member States the same conditions as those granted to administrations having no assignments in the Appendix **30B** List, or assignments listed under 6.1, as adopted in Resolution **170 (WRC-19)**, in addition to the procedure for the addition of a new allotment to the Plan for a new Member State of the Union, already contained in Article **7** of Appendix **30B** of the RR.
* CEPT supports that a comprehensive understanding of the interference scenarios for new ITU Member States can be achieved through additional technical analysis.
* CEPT encourages new ITU Member States and the resulting affected administrations to actively undertake and cooperate in coordination discussions to resolve any interference cases in addition to consider RR changes.

7.1.4 CITEL – Document APG23-5/[INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

* An Administration is of the view that new ITU Member States seeking to obtain an allotment under Article **7** of Appendix **30B**, should be granted the same privilege as those granted to Administrations having no assignments in the Appendix **30B** List, or under coordination, as adopted in Resolution **170 (WRC-19)** and is also of the view that additional technical analysis is needed to reach a comprehensive understanding of the interference scenarios for new ITU Members.

7.1.5 RCC – Document APG23-5/[INP-45](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-45_Status_of_RCC_preparation_to_the_WRC-23.pdf)

* Support granting to new Member States of the Union the same rights that are granted to other Member States in RR Appendix 30B, based on the principles set out in Article **44** of the ITU Constitution.
* The procedure for the addition of a national allotment to the Plan of the RR Appendix **30В** for a new Member State of the Union, can be improved, while ensuring the protection of national allotments and assignments in the RR Appendix **30В** List, based on consultations with affected Administrations.
* No specific Method.

7.2 Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic F: Exclusion of feeder-link/uplink service & coverage areas in AP30A/30B

1. Background

* Provision 3.4 of Article 3 of RR Appendix **30A** stipulates that: “The Regions 1 and 3 feeder-link Plan is based on national coverage from the geostationary-satellite orbit. The associated procedures contained in this Appendix are intended to promote long-term flexibility of the Plan and to avoid monopolization of the planned bands and orbit by a country or a group of countries”.
* Provision 2.6bis of RR Appendix **30B** stipulates that: “When submitting additional system(s), administrations shall fully comply with the requirements stipulated in Article 44 of the ITU Constitution. In particular, these administrations shall limit the number of orbital positions and associated spectrum so that:
* the orbital/spectrum natural resources are used rationally, efficiently and economically; and
* the use of multiple orbital locations to cover the same service area is avoided.       (WRC‑07)”.
* In view of the purpose of the planned space services together with their associated procedures, the intent of this Topic is to address the issue of submissions with global uplink coverage area or the coverage area extending beyond the service area which poses an obstacle for an administration or a group of named administrations to deploy its national system or their sub-regional systems.

**Information on on-going ITU-R Study**

* The fourth WP4A meeting (14 – 28 July 2021) considered the Japanese contribution [4A/369](https://www.itu.int/md/R19-WP4A-C-0369/en) and the multi-county contribution [4A/375R1](https://www.itu.int/md/R19-WP4A-C-0375/en) on the related subjects of excluding the territory of an administration from the uplink service area in RR Appendix 30A for Regions 1 and 3, and on implementing a regulatory solution for addressing the implications of this exclusion while extending this to RR Appendix 30B. It was agreed that these two subjects are closely related and should be studied together as a new Topic F under AI 7.
* As Document 4A/375R1 included discussion of both aspects of the Topic it was agreed to carry that document forward as a placeholder WD for this new Topic, with the following possible solutions:
* Introduce a provision in RR Appendix 30A that allows an Administration to request the exclusion of its national territory from the service area of satellite networks of other Administration.
* Require the notifying Administration of an interfered-with satellite network to shape the coverage of the satellite receiving antenna of the interfered-with satellite network outside its service area in order not to create an obstacle for the deployment of national or sub-regional satellite networks of other countries in both RR Appendix 30A and Appendix 30B.”
* The WD on Topic F found in Annex 21 to the WP 4A Chairman’s Report [(Doc 4A/392 (Annex 21))](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0392%21N21%21MSW-E.docx).
* During the fifth WP 4A virtual meeting (27 October – 4 November 2021), there were inputs from Japan (Doc 4A/512), Luxembourg and a multi African country input that were not introduced during the meeting, due to lack of time.
* During the sixth WP 4A virtual/hybrid meeting (11-20 May 2022), there were inputs from Japan (Doc 4A/545) and Saudi Arabia (Doc 4A/664), proposing methods for the draft CPM text. Nevertheless, there were concerns raised on the inability to adjust/modify the uplink coverage area of an operational, or soon to be launched, satellite should an administration exclude their territory from the service area late in the process. Also, the proposal from Saudi Arabia suggesting coordination based on territory is an entirely new concept with no real technical basis to support it. The multi country input Doc 4A/672 provided examples of currently filed systems to highlight the difficulties faced under this Topic F. The draft CPM text has not been developed yet. These documents ie [4A/479](https://www.itu.int/md/R19-WP4A-C-0479/en), [4A/545](https://www.itu.int/md/R19-WP4A-C-0545/en), [4A/664](https://www.itu.int/md/R19-WP4A-C-0664/en), [4A/672](https://www.itu.int/md/R19-WP4A-C-0672/en) would be the source material for the draft CPM text.
* During the seventh WP 4A virtual/hybrid meeting (14-22 September 2022), the meeting considered the following inputs [4A/713](https://www.itu.int/md/R19-WP4A-C-0713/en)(J), [760](https://www.itu.int/md/R19-WP4A-C-0760/en)(ATU), [799](https://www.itu.int/md/R19-WP4A-C-0799/en)(IRN), [803](https://www.itu.int/md/R19-WP4A-C-0803/en)(LUX), [837](https://www.itu.int/md/R19-WP4A-C-0837/en)(ARS) on the draft CPM text.
* There are 4 methods shown in the draft CPM (Document [4A/856 (Annex 31)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N31%21MSW-E.docx)):
* Method F1: No change to the Radio Regulations.
* Method F2: making amendments to provisions of Appendix 30A/Appendix 30B to request notifying administration of network with high receiving sensitivity (relative satellite antenna gain of at least 20 dB) over territory of other administration to accept uplink interference coming from territory of other administration, and to remove right to claim protection from harmful interference, from territory of administration that has not agreed to be included in service area
* Method F3: making amendments to provisions of Appendix 30A/Appendix 30B to allow relocation of test points from excluded territory to new location, and to request notifying administration of a satellite network having relative satellite antenna gain derived from the minimum ellipse required to cover the service area of equal to or less than −20 dB over territory of other administration, to accept uplink interference coming from territory of other administration
* Method F4: to allow an administration to request the exclusion of its territory from the feeder-link service area of a satellite network of other administrations under Appendix 30A, and to include definition of feeder link coverage area in Annex 3 of Appendix 30A

2. Documents

* Input Documents AP23-5/INP[17(J)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-17_Japan-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [39(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [48(SNG)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [55(VTN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-55_Viet_Nam-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.18_1.19_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [66(KOR)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx), [91(CHN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Japan - Document APG23-5/INP-17

* For **Topic F**, Japan supports the subjects of excluding the territory of an administration from the uplink service area and defining the coverage area to be the smallest area which encompasses the service area in RR Appendix **30A** for Regions 1 and 3, while Japan has no intention on extending the latter idea to RR Appendix **30B** at this moment. Japan supports Method F4.

3.1.2 Iran (Islamic Republic of) - Document APG23-5/INP-39

* Islamic Republic of Iran has not yet decided on any position with respect to the Methods which are proposed in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022). However, it supports the adoption of appropriate provisions and necessary adjustments and modifications to procedures to allow an administration to exclude its territory from the feeder-link service area of a satellite network of other administrations operating under RR Appendix **30A** in Regions 1 and 3 and in RR Appendix **30B.**
* This administration is of the view that relevant elements of provision **6.16** of RR Appendix **30B** should also be included in the final method, 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.
* Even if, an administration does not request coordination, that administration allow to ask exclusion under provision **6.16** of the Appendix **30B** as stated in the following:

***Quote***

*“6.16 An administration may at any time during or after the above-mentioned four-month period inform the Bureau about its objection to being included in the service area of any assignment, even if this assignment has been entered in the List. The Bureau shall then inform the administration responsible for the assignment and exclude the territory and test points[[4]](#footnote-4)6bis that are within the territory of the objecting administration from the service area. The Bureau shall update the reference situation without reviewing the previous examinations.     (WRC‑19)”*

***Unquote***

3.1.3 Singapore (Republic of) – Document APG23-5/INP-48

* Supports developing specific measures to avoid creating obstacles to other administrations wishing to establish satellite networks over their territories, taking into account the need for the roll-off of the space station receive beam to be fully protected. The regulatory and technical solutions should be implementable and not unduly restrict the operations of other satellite networks, in particular those already in operation.
* It is noted that alignment of the coverage area with the service area is not always technically feasible.
* Supports Method F3 in making amendments to provisions of Appendix **30A**/Appendix **30B** to allow relocation of test points from excluded territory to new location, and to request notifying administration of a satellite network having relative satellite antenna gain derived from the minimum ellipse required to cover the service area of equal to or less than −20 dB over territory of other administration, to accept uplink interference coming from territory of other administration.

3.1.4 Vietnam (Socialist Republic of) – Document APG23-5/INP-55

* Viet Nam supports 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 Appendix **30A**.

3.1.5 Australia – Document APG23-5/INP-59

* Australia supports studies towards finding an appropriate regulatory measure for facilitation of equitable feeder-link/uplink spectrum access while taking into consideration existing assignment and allotments in RR Appendices 30A and 30B.
* Australia supports the development of a procedure that allows an administration included in the service area of the uplink to be excluded from this service area when requested. Australia support development of a simple definition of the coverage area that is the smallest area practicable.

3.1.6 Korea (Republic of) – Document APG23-5/INP-66

* As the Republic of Korea supports excluding the territory of a country from the service area of the feeder link of RR AP **30A** and adjustment of coverage area of the feeder link to the smallest service area of that submission under RR AP **30A**, as well as adjustment of coverage area to the smallest to be aligned with the service area of the submissions under RR AP **30B**, among the methods presented in the draft CPM Report, Methods F2 and F3 can be supported.

3.1.7 China (People’s Republic of) – Document APG23-5/INP-91

* China supports 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**.
* China supports developing possible specific measures to avoid creating obstacles to those administrations wishing to establish satellite networks of AP**30B** over their territories, taking into account the ability for the roll-off of the receiving beams of adjacent satellite networks, and further study 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 needed.

3.2 Summary of issues raised during the meeting

* 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.

4. APT Preliminary View(s)

* 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 are considering Methods F2, F3 and F4 presented in the draft CPM Report.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to take into account the outcome of CPM23-2 meeting, in order to develop the Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* Note that for the down-link, there are provisions that facilitate an Administration or a group of named Administrations to coordinate the downlink. Nevertheless, it has not yet been the case for the feeder-link/up-link.
* Note that there is no provision for the feeder-link/uplink to prevent one Administration from creating an obstacle to the establishment of space systems by other countries in the feeder-link/uplink.
* Consider the following for satisfying this Topic:
* Introducing a provision in RR Appendix 30A that allows an Administration to request the exclusion of its national territory from the service area of satellite networks of other Administrations.
* Adding a footnote to that new provision and § 6.16 of Article 6 of Appendix 30B to request a notifying administration of a satellite network having high receiving sensitivity (relative satellite antenna gain of at least -20 dB) over territory of other Administration to accept uplink interference emanating from the territory of other Administration if so requested.
* Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A.

7.1.2 ASMG (as of February 2023)

* Support the introduction of provisions in Appendices 30A and 30B to establish regulatory and technical measures that allow administrations to use their assignments and encourage progressive between notifying administrations. Notwithstanding, the deployment of national or sub-regional satellite networks in accordance with Appendices 30A and 30B shall not be impeded. Taking into account the current operational satellite networks.

7.1.3 CEPT (as of February 2023)

* CEPT supports exploring if bilateral coordination solutions or national licensing conditions can address encountered problems on a case-by-case basis.
* CEPT supports developing specific measures, if needed, to avoid creating obstacles to establish satellite networks by other countries over their territories considering implementable regulatory and technical solutions that will not unduly restrict operations of other satellite networks, in particular satellite networks already in operation.
* CEPT notes that, as an example, aligning the coverage area with the service area is not always technically feasible.
* CEPT supports developing specific measures taking into account the required roll-off of the space station receive beam to be fully protected.
* CEPT encourages administrations involved in Resolution **559 (WRC-19)** coordinations to make utmost efforts to communicate with requesting administrations and to timely reply in order to complete coordination.

7.1.4 CITEL (as of February 2023)

* An Administration supports method F3 of the Draft CPM text. In summary, the preliminary proposals are:
* a new provision under Article 4 of RR Appendix 30A to allow an Administration to request the exclusion of its territory from the feeder-link service area of a satellite network of other Administrations.
* a new footnote under Article 4 of RR Appendix 30A and a revised footnote of Article 6 of RR Appendix 30B to allow relocation of test points from the excluded territory to a new location within the remaining part of its service area if such relocation do not cause more interference.
* new provisions under Article 4 of RR Appendix 30A and Article 6 of Appendix 30B to request a notifying administration of a satellite network having relative satellite antenna gain derived from the minimum ellipse required to cover the service area of equal to or less than -20 dB over territory of other Administration to accept uplink interference emanating from the territory of other Administration if so requested.

7.1.5 RCC (as of February 2023)

* Support further ITU-R studies on the impact of excluding feeder-link/up-link service and coverage areas in the bands subject to the RR Appendices 30A and 30B. No specific Method

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as February 2023)

* None.

7.2.3 WMO (as of February 2023)

* None.

7.2.4 IARU R3 (as of February 2023)

* None.

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# Topic G: Amendments to Res. 770 (WRC-19)

1. Background

* In addressing the *invites* of Resolution **770 (WRC-19)** to provide a functional description to implement the methodology contained in that Resolution, it has been determined that additional information is required to allow for a proper implementation. That is, corrections or clarifications need to be made to Resolution **770 (WRC-19)** before it can be consistently applied, some of which are regulatory in nature.
* The WD towards a preliminary draft new Recommendation ITU-R S.[RES 770] includes the compilation of relevant studies and results. Based on this work, it has been recognized that some modifications to Resolution **770 (WRC-19)** are required to allow for its implementation.
* ITU-R studies showed the need to implement such guidance in this Resolution.
* Include the value of speed of light: 2.99792458 x 105 km/s
* Modify the lower value for prain (unavailability of the link without interference) in (Step 0-10) as 0.01% instead of 0.001%
* Determine procedural and regulatory provisions to ensure that administrations having submitted CR/Cs and/or notifications before 15 December 2023 are given the opportunity to rectify the data already submitted (e.g. pfd and e.i.r.p. masks used to compute epfd statistics at the victim GSO receiver by applying the methodology contained in Recommendation ITU-R S.1503) based upon which the methodology in Resolution **770 (WRC-19)** is applied.

**Information on on-going ITU-R Study**

* During the fifth WP 4A virtual meeting (27 October – 4 November 2021), based on French input Doc 4A/493, the Intra-service sharing group has studied Resolution **770 (WRC-19)** and identified difficulties in application of this Resolution, along with possible solutions. A Note was prepared to the WP 4A Chairman, proposing this as a Topic under AI 7 (Document [4A/ 522 (Annex 42)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0522%21N42%21MSW-E.docx)). Since there was agreement on the technical aspects of these changes, the closing Plenary of WP 4A therefore agreed to establish a new AI 7 Topic to address the required changes in the Resolution.
* During the sixth WP 4A virtual/hybrid meeting (11-20 May 2022), the French input Doc 4A/625 proposed 2 Methods to address modifications to this Resolution **770 (WRC-19)** that was used to form the preliminary draft CPM text (Document [4A/691(Annex 35)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N35%21MSW-E.docx)). In addition, that input also proposed some updates to the Preliminary Draft New Recommendation ITU-R S.[RES 770] (Document [4A/691(Annex 1)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N01%21MSW-E.docx)).
* During the seventh WP 4A virtual/hybrid meeting (14-22 September 2022), the meeting considered the following inputs [4A/691(Annex 35)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N35%21MSW-E.docx) and [822](https://www.itu.int/md/R19-WP4A-C-0822/en)(F) for the draft CPM text.
* There are 3 methods shown in the draft CPM text (Document [4A/856(Annex 32)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N32%21MSW-E.docx)):
* Method G1: No changes to Resolution **770 (WRC-19)**.
* Method G2: Modify Resolution **770 (WRC-19)** to allow for its implementation.
* Method G3: Remove Annex 2 from Resolution **770 (WRC-19)** and move it to a new Recommendation which would be incorporated by reference in Resolution **770 (WRC-19)**.

2. Documents

* Input Documents AP23-5/INP[39(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [66(KOR)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx), [91(CHN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [98(MLA)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Iran (Islamic Republic of) - Document APG23-5/INP-39

* Islamic Republic of Iran supports the Method G2, proposes that the modifications are included in a revision of Resolution **770 (WRC‑19**), as contained in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022).

3.1.2 Australia - Document APG23-5/INP-59

* Australia could accept either method G2 or G3 as proposed in the draft CPM text.

3.1.3 Korea (Republic of) – Document APG23-5/INP-66

* As the Republic of Korea supports possible modifications to Resolution **770 (WRC-19)** to make its implementation feasible based on results of ITU-R studies, among the methods presented in the draft CPM Report, Methods G2 and G3 can be supported.

3.1.4 China (People’s Republic of) – Document APG23-5/INP-91

* China supports to modify Resolution **770 (WRC-19)** in order to eliminate difficulties applying this Resolution.

3.1.5 Malaysia – Document APG23-5/INP-98

* Malaysia supports modification of Resolution **770 (WRC‐19)** to facilitate the implementation of the methodology contained in that Resolution, under **Method G2** or **Method G3**.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support possible modifications to Resolution **770 (WRC-19)** to make its implementation feasible based on results of ITU-R studies.
* APT Members are considering Methods G2 or G3 presented in the draft CPM Report.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to take into account the outcome of CPM23-2 meeting, in order to develop the Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* Support the modification of Resolution 770, with the need to follow up on the results of discussions on this agenda item to ensure that there is no impact on geostationary satellites.

7.1.2 ASMG (as of February 2023)

* Support amending Resolution **770 (WRC-19)** and follow the discussions on this subject to ensure that there is no impact on GSO systems.

7.1.3 CEPT (as of February 2023)

* CEPT supports Method 3 of the draft CPM text in ITU-R WP 4A in which Annex 2 of Resolution **770 (WRC-19)** is included in a ITU-R Recommendation.

7.1.4 CITEL (as of February 2023)

* None.

7.1.5 RCC (as of February 2023)

* Support the revision of Resolution 770 (WRC-19) in accordance with the results of ITU-R studies in order to eliminate difficulties applying this resolution. Method G2

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as of February 2023)

* None.

7.2.3 WMO (as of February 2023)

* None.

7.2.4 IARU R3 (as of February 2023)

* None.

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# Topic H: Enhanced protection of RR Appendices 30/30A in R1&3 and RR Appendix 30B

1. Background

* Before WRC-15, in accordance with § 4.1.10 of Article 4 of Appendix 30/30A, an Administration that has not notified its comments either to the administration seeking agreement or to the Bureau within a period of four months following the date of its BR IFIC referred to in § 4.1.5 shall be deemed to have agreed to the proposed assignment. This concept of “implicit agreement” since WRC-2000 had led to a situation in which the reference situation (EPM – equivalent protection margin) of many assignments in the BSS Plans has severely been degraded.
* WRC-15 modified the above-mentioned § 4.1.10 indicating that an Administration that has not notified its agreement within a period of four months following the date of the BR IFIC referred to in § 4.1.5 shall be deemed to have not agreed to the proposed assignment unless the provisions of §§ 4.1.10a to 4.1.10d and § 4.1.21 are applied.
* However, if the provisions of §§ 4.1.10a to 4.1.10d and § 4.1.21 are applied, the use of the concept of “implicit agreement” would lead to the same situation in which the “reference situation” (EPM – equivalent protection margin) of many assignments in the BSS Plans would severely be degraded. It is worth mentioning that § 4.1.10d provides only 30 days to an Administration to react.
* Furthermore, as an assignment in the Plan is for future use and that it has higher status than an assignment in the List stemming from additional use, it is also proposed to apply a tolerance of 0.25 dB instead of 0.45 dB in respect of its the equivalent downlink protection margin.
* It is further recalled that the value of 0.45 dB was merely used to facilitate the revision of the Regions 1 and 3 Plan by WRC-2000.
* A situation similar to that above can also occur in Appendix **30B** when an administration intends to convert an allotment into an assignment or when an administration, or one acting on behalf of a group of named administrations, intends to introduce an additional system or modify the characteristics of assignments in the List that have been brought into use in accordance with the RR Appendix **30B.** In that case the administration shall submit to the Radiocommunication Bureau all required information as specified in RR Appendix **4**. Then, the Bureau determines administrations whose allotments in the Plan, or assignments in the List or pending assignments are considered as being affected by this assignment under § 6.5 of RR Appendix **30B**.
* Affected administrations have 4 months after the publication of the Special Section of this assignment to comment it (§ 6.10) plus an additional period of 1 month subject to application of § 6.13. If, after this period, despite several reminders sent by the Bureau (i.e., § 6.9, § 6.11, § 6.14, § 6.14*bis*), the affected administration has not given a decision, this administration is considered as given its implicit agreement to this assignment under § 6.15.

**Information on on-going ITU-R Study**

* In the ITU-R/WP-4A meeting, on 27 October- 4 November 2021, two documents submitted on behalf of 25 African countries, the first with specific proposals for addressing Resolution **559 (WRC-19)** coordination activities (Doc. [4A/480](https://www.itu.int/md/R19-WP4A-C-0480/en)), and the second with proposals for addressing long-term protection of BSS and FSS Plan assignments (Doc. [4A/477](https://www.itu.int/md/R19-WP4A-C-0477/en)) and also from the BR including [4A/401](https://www.itu.int/md/R19-WP4A-C-0401/en),[4A/403](https://www.itu.int/md/R19-WP4A-C-0403/en),[4A/404](https://www.itu.int/md/R19-WP4A-C-0404/en) and [4A/405](https://www.itu.int/md/R19-WP4A-C-0405/en), in connection with statistic of the new notices of satellite networks submitted under § 6.1 of Article 6 of RR Appendix 30B, Change in reference situation (EPM) between WRC-2000 and October 2021 for Regions 1 and 3 Plan assignments, Report on the coordination of submissions made in accordance with Resolution 559 (WRC-19), and statistics on submissions for additional uses under Article 4 of RR Appendices 30 and 30A in Regions 1 and 3 since WRC-2000, respectively.
* During the sixth WP 4A virtual/hybrid meeting (11-20 May 2022), the issue of long-term protection of the Regions 1&3 Appendix **30/30A** Plan bands and Appendix **30B** allotments/assignments was discussed. There were inputs from the BR ie Doc 4A/679 and 680, providing statistics on the submissions made in these bands. Another BR input Doc 4A/683 provided an update on the coordination activities for Resolution **559 (WRC-19)** submissions. Doc 4A/557 from Iran provided a detailed history of the evolution of the situation in the planned bands and proposed that long-term protection of the planned bands be identified as an AI 7 Topic.
* After a discussion with the proponents of this issue, the Chairman of WP 4A proposed a new AI 7 Topic with the scope limited to the issues of addressing implicit agreement in Regions 1 and 3 Appendices **30/30A** and Appendix **30B**, and to reverting to a coordination protection trigger of 0.25 dB for assignments in the Regions 1 and 3 Plan, as opposed to the current trigger of 0.45 dB. This solution was accepted by the meeting.
* Currently, there is 1 method shown in the preliminary draft CPM text (Document [4A/691(Annex36)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N36%21MSW-E.docx)) to add provisions in Appendices **30/30A**, modify provision in Appendix **30B** on the concept of implicit agreement and amend the EPM degradation tolerance in Appendices **30/30A** from 0.45 dB to 0.25 dB.
* During the seventh WP 4A virtual/hybrid meeting (14-22 September 2022), the meeting considered the following inputs [4A/714](https://www.itu.int/md/R19-WP4A-C-0714/en)(J), [759](https://www.itu.int/md/R19-WP4A-C-0759/en)(ATU), [800](https://www.itu.int/md/R19-WP4A-C-0800/en)(IRN), [804](https://www.itu.int/md/R19-WP4A-C-0804/en)(LUX), [836](https://www.itu.int/md/R19-WP4A-C-0836/en)(ARS) for the draft CPM text. Due to the sensitivity and complexity of the issues, offline discussions were held in order to come up with the Methods for the 2 aspects dealt under this Topic.
* On the aspect of implicit agreement in Appendices 30/30A/30B, there are 3 methods shown in the draft CPM text (Document [4A/856(Annex 33)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N33%21MSW-E.docx)):
	+ - H1A: no change to the Radio Regulations
		- H1B: remove implicit agreement for assignment of AP**30/30A** R1/3 Plans or intending to enter into those Plans and allotment of AP**30B** Plan or intending to enter into that Plan
		- H1C: new mechanism to replace implicit agreement whereby the administration of the additional use/system is allowed to operate (with commitment to respect certain conditions) until the bringing into use of the national assignment/allotment of the other administration
* On the aspect of EPM degradation tolerance in Appendices 30/30A of Regions 1/3, there are 2 methods shown in the draft CPM text (Document [4A/856(Annex 33)](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N33%21MSW-E.docx)):
	+ - H2A: no change to the Radio Regulations
		- H2B: to apply EPM degradation tolerance of 0.25 dB instead of 0.45 dB for protection of an assignment in the RR Appendices **30/30A** Regions 1 and 3 Plans or assignments with national coverage from a submission of non-national coverage.

2. Documents

* Input Documents AP23-5/INP[17(J)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-17_Japan-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [39(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [48(SNG)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx), [59(AUS)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [66(KOR)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx), [91(CHN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx), [103(J)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-103_On_the_results_of_ITU-R_studies_of_Topic_H_of_WRC-23_Agenda_Item_7.docx)
* Information Documents APG23-5/[INF39(CEPT)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf), [43(CITEL)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Japan - Document APG23-5/INP-17

* For **Topic H**, Japan supports the revision of implicit agreement provisions, but does not support to reduce the EPM degradation tolerance from 0.45 dB to 0.25dB, since it does not agree with the principle of WRC-2000 Plan. Japan supports Method H1B and H2A.
* See also Document APG23-5/INP-103.

3.1.2 Iran (Islamic Republic of) - Document APG23-5/INP-39

* Islamic Republic of Iran supports Method H1B for the issue of the “implicit agreement” to remove this concept from regulatory provisions § 4.1.10 and other related provisions of Article 4 of RR Appendices 30/30A and RR Appendix 30B as well.
* This administration is of the view that adding a new methodology such as the temporary agreement referred to in Method H1C would not be an appropriate solution to satisfy Topic F.
* Islamic Republic of Iran supports the Method H2B, as contained in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022). It is proposed to apply EPM degradation tolerance of 0.25 dB instead of 0.45 dB for protection of an assignment in the RR Appendices **30/30A** Regions 1 and 3 Plans (Assignments with national coverage from a submission of supra national coverage).

3.1.3 Singapore (Republic of) – Document APG23-5/INP-48

* Supports to enhance the protection of Appendices **30/30A** in Regions 1 & 3 and Appendix **30B** for networks in the Plan and the List.
* Supports to replace the implicit agreement in case of no comments in due time of an affected Regions 1 and 3 BSS Plan assignments or Appendix **30B** allotments from an additional use/system, by a new regulatory solution allowing the administration of the additional use/system to operate until the national assignment/allotment is brought into use.
* Supports to not consider mutual interference between Regions 1 and 3 BSS Plan assignments or Appendix **30B** allotments and additional use/system networks using this new regulatory solution since they will not operate simultaneously the same frequency range over the same area.
* Does not support to reduce the EPM degradation tolerance in Appendices **30/30A** without any technical studies supporting the reasoning behind such a modification.
* For the implicit agreement aspect, supports Method H1C which is to use a new mechanism to replace the implicit agreement whereby the administration of the additional use/system is allowed to operate (with commitment to respect certain conditions) until the bringing into use of the national assignment/allotment of the other administration. For the AP30/30A EPM degradation tolerance aspect, supports Method H2A which is no change to the Radio Regulations

3.1.4 Australia – Document APG23-5/INP-59

* Australia support development of procedures that will remove implicit agreement scenarios.
* Australia supports technical studies on a rationale for changes to the EPM degradation tolerances.

3.1.5 Korea (Republic of) – Document APG23-5/INP-66

* As the Republic of Korea supports the possible removal of the concept of the “implicit agreement” in the RR APs **30**, **30A** and **30B**, among the methods presented in the draft CPM Report, Methods H1B and H1C can be supported.
* Regarding EPM degradation tolerance in RR APs **30**/**30A**, among the methods presented in the draft CPM Report, Method H2A is supported due to lack of technical studies supporting the possible modification.

3.1.6 China (People’s Republic of) – Document APG23-5/INP-91

* China supports to enhance the protection of Appendices **30** and **30A** in Regions 1 & 3 and Appendix **30B** for networks in the Plan and the List.
* China support studies on this topic to provide a reasonable solution that ensures the reference situation (EPM - equivalent protection margin) is not degraded due to the concept of “implicit agreement” in Appendices **30**, **30A** and **30B**.
* China is not in favor of reducing the EPM degradation tolerance in Appendices **30** and **30A** at this stage.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* 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 are considering Methods H1B and H1C presented in the draft CPM Report.

5. Other View(s) from APT Members

* 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.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to take into account the outcome of CPM23-2 meeting, in order to develop the Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ATU (as of February 2023)

* Support the enhancement of the protection of Appendices 30/30A in Regions 1 and 3 and Appendix 30B for networks in the Plan and the List.
* Support studies on this topic to provide a fair solution that ensures that the reference situation (EPM - equivalent protection margin) is not degraded due to the concept of “implicit agreement” in Appendices (30), (30A) and (30B).
* Support the application of EPM degradation tolerance of 0.25 dB instead of 0.45 dB for protection of an assignment in the appendices 30, 30A in region 1 & 3 plans or assignments with national coverage from submission of a non-national coverage.
* Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A.

7.1.2 ASMG (as of February 2023)

* Support studies related to this topic with aim to provide a reasonable solution to ensure the reference situation is not degraded due to the concept of “implicit agreement” in Appendices AP30/30A/30B, thus improving the status of allotments/assignments in the plans that are affected by the decline of the reference situation (EPM) so that These allotments/assignments are effectively usable by the concerned administrations wishing to access the AP30/30A/30B plans for the provision of the broadcasting-satellite service or the fixed-satellite service

7.1.3 CEPT (as of February 2023)

* CEPT supports to enhance the protection of Appendices 30/30A in Regions 1 & 3 and Appendix 30B for networks in the Plan and the List.
* CEPT supports to replace the implicit agreement in case of no comments in due time of affected Regions 1 and 3 BSS Plan assignments or Appendix 30B allotments on an additional use/system, with a new regulatory solution allowing the administration of the additional use/system to operate until the national assignment/allotment is brought into use.
* CEPT supports to not consider mutual interference between Regions 1 and 3 BSS Plan assignments or Appendix 30B allotments and additional use/system networks using this new regulatory solution, since they will not operate the same frequency range over the same area simultaneously.
* CEPT does not support to reduce the EPM degradation tolerance in Appendices 30 and 30A without any technical studies supporting the reasoning behind such a modification.

7.1.4 CITEL (as of February 2023)

* One Administration is of the view that implicit agreement is sometime the unique solution to complete a coordination when an administration didn’t answer to several request of coordination. But in parallel, this administration recognizes that current implicit agreement mechanism with regards to National allotment could lead to a situation where an administration isn’t able to operate its national allotment due to very low reference margin. To alleviate this problem, this administration would encourage to find an alternative mechanism which fully protect national allotment even if the administration misses to provide its comment to BR in due time and which allow temporary operation of additional system without considering this national allotment until its BIU.

7.1.5 RCC (as of February 2023)

* None.

7.2 International Organisations

7.2.1 ICAO (as of February 2023)

* None.

7.2.2 IMO (as of February 2023)

* None.

7.2.3 WMO (as of February 2023)

* None.

7.2.4 IARU R3 (as of February 2023)

* None.

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# Topic I: Special agreements under RR Appendix 30B

## 1. Background Information

* When an administration intends to convert an allotment into an assignment or when an administration, or one acting on behalf of a group of named administrations, intends to introduce an additional system or modify the characteristics of assignments in the List that have been brought into use in RR Appendix **30B**, the administration shall submit to the Radiocommunication Bureau all required information as specified in RR Appendix **4**. Then, the Bureau determines administrations whose allotments in the Plan, or assignments in the List or pending assignments are considered as being affected by this assignment under § 6.5 of RR Appendix **30B**.
* Affected administrations have 4 months after the publication of the Special Section of this assignment to comment it (§ 6.10) plus an additional period of 1 month subject to application of § 6.13. If, after this period, despite several reminders sent by the Bureau (i.e., § 6.9, § 6.11, § 6.14, § 6.14*bis*), the affected administration has not given a decision, this administration is considered as given its implicit agreement to this assignment under § 6.15.
* At the time of the Part B submission of this assignment under § 6.17 or § 6.25, as appropriate, the final characteristics of this assignment could impact the overall aggregate carrier-to-interference levels of the allotment of the administration which didn’t give their decision in due time. These overall aggregate carrier-to-interference levels are used to determine the protection of this allotment or assignment for future submissions under § 6.1 and if an allotment can still be put into operation with decent services. Implicit agreements could lead to a situation that no decent services can be provided because of very low overall aggregate carrier-to-interference levels.
* It is also important to note that the same consequence would occur if the affected administration signed an explicit agreement and the targeting area for the assignment submitted under § 6.1 is close to the territory of this administration which signed an explicit agreement.

**Information on on-going ITU-R Study**

* At the September 2022 meeting of WP 4A, the BR submitted two documents associated with the Planned bands in response to specific requests made to them from the last meeting of WP 4A, as follows:
* Document [4A/720](https://www.itu.int/md/R19-WP4A-C-0720/en) (BR): Statistics of the new notices of satellite networks submitted under § 6.1 of Article 6 of RR Appendix **30B**
* Document [4A/813](https://www.itu.int/md/R19-WP4A-C-0813/en) (BR): Updated statistics on submissions and suppressions for additional uses under Article 4 of RR Appendices **30** and **30A** in Regions 1 and 3.
* In addition, the BR also provided Document [4A/844](https://www.itu.int/md/R19-WP4A-C-0844/en) (BR) on “Updated statistics on the coordination activities for submissions made in accordance with Resolution **559 (WRC-19)**”which provided the current status of those coordination activities. As part of that document the BR was seeking the advice of WP 4A in which cases the introduction of those Resolution **559 (WRC-19)** assignments in the Regions 1 and 3 Plans could be accepted without a need to modify the technical parameters of those Resolution **559 (WRC-19)** assignments. While WP 4A was not in a position to provide specific advice in response to this request, the WP did approve a Note to the BR Director that contained views of WP 4A on the current coordination situation and provided some additional ideas that could help to further progress those coordination activities (see [Annex 40](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N40%21MSW-E.docx)).
* The September 2022 meeting of WP 4A considered two input documents towards the development of the draft CPM text as Annex 34 to Chairman’s Report (Document 4A/856 [Annex 34](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N34%21MSW-E.docx)).
* The draft CPM text contains three methods, as follows:
* Method **I1** No changes to the Radio Regulations.
* Method **I2** Proposes to:

– define a new type of agreement between a notifying administration of a national allotment and of an assignment, respectively. Under such agreement, the administration of the national allotment allows the assignment to operate until the bringing into use of its national allotment. At that time, the administration of the assignment commits to respect the section 2.2 of Annex 4 pfd levels over the territory of the national allotment. As the national allotment and the assignment will not operate simultaneously the same frequency over the same area, mutual interference is not considered.

– develop a new Resolution allowing the notifying administration of a national allotment, subject to agreements under § 6.15 of RR Appendix 30B:

• to sign this new type of agreement with the notifying administration of the concerned assignments;

• to request the Bureau to update the reference situation without reviewing the previous examinations, and

• to request the notifying administrations of assignments for which the procedures of Article 6 of RR Appendix 30B have not yet been completed and which have been examined by the Bureau before the signature of such agreement to make their utmost efforts to take into account the new reference situation of this national allotment.

* Method **I2** recognizes the special agreements being envisioned. Such special agreement would allow an additional system that would otherwise affect RR Appendix **30B** Plan allotments to go forward with the understanding that at the time those otherwise affected allotments are brought into use, the additional system would take the necessary steps to protect them.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (SNG), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT), [INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports Method I2 in the current draft CPM text to define a new type of agreement between notifying administrations of a national allotment and of an assignment, respectively, and to develop a new Resolution allowing the notifying administration of a national allotment, subject to agreements under § 6.15 of RR Appendix **30B**.

3.1.2 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Islamic Republic of Iran supports the Method I2, as contained in the draft CPM text (Document CPM23-2/1-**E, dated 25 November 2022).**
* **Method I2 proposes** to:
	+ define a new type of agreement between notifying administrations of a national allotment and of an assignment, respectively. Under such an agreement, the administration of the national allotment allows the assignment to operate until the bringing into use of its national allotment. At that time, the administration of the assignment commits to respect the section 2.2 of Annex 4 pfd levels over the territory of the national allotment. As the national allotment and the assignment will not operate simultaneously the same frequency over the same area, mutual interference is not considered.
	+ develop a new Resolution allowing the notifying administration of a national allotment, subject to agreements under § 6.15 of RR Appendix **30B**:

• To sign this new type of agreement with the notifying administration of the concerned assignments;

• To request the Bureau to update the reference situation without reviewing the previous examinations, and

• to request the notifying administrations of assignments for which the procedures of Article 6 of RR Appendix **30B** have not yet been completed and which have been examined by the Bureau before the signature of such agreement to make their utmost efforts to take into account the new reference situation of this national allotment.

3.1.3 Singapore - Document APG23-5/[INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Supports the development of a regulatory solution based on a specific agreement, on a voluntary basis, allowing an administration suffering from low reference protection margin for its national allotment in Appendix 30B due to agreements under § 6.15, to retrieve adequate reference protection margin.
* Supports the possibility to sign a specific agreement between an additional system and a national allotment in Appendix 30B permitting the additional system to cover the territory of the national allotment in Appendix 30B until the BIU of this national allotment in Appendix 30B.
* Supports the adaptation of the additional system operations to not create harmful interference and to fully protect the operations of the national allotment with which the specific agreement was signed.
* Supports Method I2 which is to define a new type of agreement whereby the administration of the assignment is allowed to operate (with commitment to respect certain conditions) until the bringing into use of the national allotment of the other administration. A new Resolution containing the special procedure of this method requires agreement under § 6.15 of Appendix **30B**.

3.1.4 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia does not currently object to either method proposed in draft CPM text.

3.1.5 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports the development of a regulatory solution based on a specific agreement, on a voluntary basis, allowing an administration suffering from low reference protection margin for its national allotment in Appendix **30B** due to agreements under § 6.15 to retrieve adequate reference protection margin.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members support Method I2 in the draft CPM Report to address this topic.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to provide views to the Methods to address this topic as identified in the CPM Report developed by CPM23-2, in order to formulate Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Follow-up to studies related to this item to consider the possibility of applying additional measures to national allotments subject to agreements under § 15.16 of Appendix **30B** to restore the appropriate overall aggregate carrier-to-interference without altering the orbital position of the national allotments.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support the development of specific measures/regulatory text to restore adequate overall aggregate carrier-to-interference levels without changing the orbital position of the national allotment.
* Support the development of a new WRC Resolution allowing national allotment, subject to agreements under § 6.15 of RR Appendix **30B**, according to the proposal submitted to WP 4A in document 4A/641
* Support Method I2
* Mandate WG4B to prepare the common African contribution proposing CPM text of the Topic to the next Working Party 4A.

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports the development of a regulatory solution based on a specific agreement, on a voluntary basis, allowing an administration suffering from low reference protection margin for its national allotment in Appendix 30B due to agreements under § 6.15 to retrieve adequate reference protection margin.
* CEPT supports the possibility to sign a specific agreement between an additional system and a national allotment in Appendix 30B permitting the additional system to cover the territory of the national allotment in Appendix 30B until the bringing into use of this national allotment in Appendix 30B.
* CEPT supports the adaptation of the additional system operations to not create harmful interference and to fully protect the operations of the national allotment with which the specific agreement was signed.
* CEPT encourages administrations for which § 6.15 of Appendix 30B has been applied with respect to a national allotment, to cooperate and consider signing such a specific agreement.

7.1.4 CITEL – Document APG23-5/[INP-43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf)

* With respect to WRC-23 AI 7, Topic I, an administration is of the view that current regulatory solution proposed under Topic I could be an adequate solution to allow an administration suffering from low reference protection margin for its national allotment in Appendix 30B due to agreements under § 6.15 to retrieve adequate reference protection margin.

7.1.5 RCC – Document WRC-23-IRW-22/[7 A1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0007) (as of December 2022)

* None.

## 7.2 Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic J: MODs to Res. 76 (Rev.WRC-15)

## 1. Background Information

* Resolution **76 (Rev.WRC-15)** calls for the development of Recommendations on procedures ensuring that the aggregate epfd limits are not exceeded and calls for collaboration among administrations to jointly ensure those levels are not exceeded. While the aggregate epfd limits are specified in Tables 1A to 1D of the Resolution, there is no clear methodology nor procedures outlined in Resolution **76 (Rev.WRC-15)** for the involved administrations to collaboratively determine whether these aggregate levels are exceeded.
* This Topic J aims to address a part of this deficiency by developing or calling for the development of a consultation process to be applied to non-GSO fixed-satellite service (FSS) systems operators to avoid and potentially remedy any exceedance of the aggregate interference levels in Tables 1A to 1D of the Resolution based on accurate modelling of non-GSO systems.

**Information on on-going ITU-R Study**

* The September 2022 meeting of WP 4A considered five input documents towards the development of the draft CPM text as Annex 35 to Chairman’s Report (Document 4A/856 [Annex 35](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N35%21MSW-E.docx)).
* The draft CPM text contains three methods, as follows:
* Method **J1** No change to Resolution 76 (Rev.WRC-15)
* Method **J2** Modify Resolution 76 (Rev.WRC-15) to introduce the concept of “consultation process/meetings”.

This method proposes to incorporate the concept of consultation meetings between administrations operating or planning to operate non-GSO FSS systems. Such meetings would provide a forum for them to discuss and agree cooperatively on sharing the aggregate epfd in a manner to achieve the level of protection for GSO satellite networks. Details of the meeting, including decisions, would be sent to the BR.

This method is not meant to address any of the technical aspects relating to the calculation of the aggregate epfd nor the reduction of such aggregate epfd when exceeding the level prescribed in the RR.

* Method **J3** Modify Resolution **76 (Rev.WRC-15)** to introduce the concept of “consultation process/meetings”

This method proposes to amend Resolution **76 (Rev.WRC-15)**, as appropriate, to make administrations able to comply with the aggregate epfd levels included in the same Resolution through a consultation process/meetings.

* Method **J4** Modify Resolution **76 (Rev.WRC-15)** to introduce the concept of “consultation process/meetings”

This proposes to modify Resolution **76** **(Rev.WRC-15)** and introduce the concept of 'consultation process/meetings'. This method is presented to stimulate further discussions as other modifications to the Resolution not identified in this method yet are still required, e.g., the criteria for participation at consultation meetings and technical procedures to be used among administrations during the consultations need further discussion.

* Method **J5** Modify Resolution 76 (Rev.WRC-15) to call for further study on a consultation process

This method proposes to modify and update Resolution **76 (Rev.WRC-15)** to call specifically for further study on a consultation process for non-GSO FSS systems operating in the frequency bands specified in *considering a)* of the Resolution to use to ensure compliance with the aggregate epfd limits in Tables 1A to 1D of the Resolution.

* The meeting noted that the proposed methods to address this Topic includes extensive and detailed consultation procedures being included in Resolution **76 (Rev.WRC-15)**, along with other Methods between these two extremes, and believed that it may be possible to reduce this number at the 2nd Conference Preparatory Meeting towards WRC-23 (CPM23-2) in March 2023.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (SNG), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-84](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-84_Tonga-WP4-Preliminary_View_on_WRC-23_Agenda_Item_7.docx) (TON), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN), [INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx) (MLA)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports the possible modification of Resolution **76 (Rev.WRC-15)** in order to introduce the concept of consultation process/meetings to provide a means for administrations to evaluate aggregate epfd of non-GSO FSS systems and ensure the compliance with the aggregate epfd limits in Tables 1A to 1D of the Resolution.

3.1.3 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Islamic Republic of Iran monitor the objective of this topic and does not have any position. Method J2 (Modify Resolution **76 (Rev.WRC‑15)** to introduce the concept of “consultation process/meetings”) could address the difficulties under this topic.

3.1.3 Singapore - Document APG23-5/[INP-48](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-48_Singapore-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* An accurate aggregate calculation method is needed before requiring changes to the operations of NGSO systems.
* Only operational NGSO systems should be included in consultation meeting, with a minimum number of operational satellites identified under Resolution **35**.
* NGSO systems submitted under multiple ITU filings should be treated as a single system for purposes of Resolution **76**.

3.1.5 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia supports development of a consultation process with clearly defined outputs of the process leading to compliance with aggregate EPFD limits. Australia supports development of the relevant recommendation that can be applied in the consultation process.

3.1.6 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* As the Republic of Korea supports the possible modifications to Resolution **76 (Rev.WRC-15)** to introduce the concept of “consultation process/meetings” in order to ensure protection of GSO FSS and BSS networks, among the methods presented in the draft CPM Report, Methods J2, J3 and J4 can be supported.

3.1.7 Tonga (Kingdom of) - Document APG23-5/ [INP-84](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-84_Tonga-WP4-Preliminary_View_on_WRC-23_Agenda_Item_7.docx)

* Tonga believes it is important to develop (i) a suitable methodology to calculate the aggregate epfd produced by all operational non-GSO FSS systems to determine whether these systems are in compliance with the aggregate power levels given in Tables 1A to 1D of Resolution **76** as well as (ii) a suitable methodology that the administrations of the relevant non-GSO systems should follow to amend their operation in case the above-mentioned power levels are exceeded. These two methodologies could be included in the same Recommendation.
* Moreover, Tonga is of the view that the methodology mentioned in (i) above should model non-GSO systems as accurately as possible so as to reflect the real operations and interference, while ensuring efficient spectrum sharing. Moreover, when executing aggregate calculations, only the operational satellites, as well as those satellites planned to be operational within a period of time to be determined after a consultation meeting, of all participating non-GSO systems should be considered. In this way, the calculations will reflect the actual aggregate interference environment.
* In summary, Tonga supports Method J5 of the current CPM text, which calls for further studies on the above-mentioned methodologies. Only once this work has been completed, the Director of the Radiocommunication Bureau can report to a future Conference on the results of studies and Administrations will have all needed tools to implement properly Resolution **76** and ensure aggregate epfd limits are met.

3.1.7 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports the introduction of the concept of a “consultation/meeting process” with regards to evaluate the aggregate epfd produced by all non-GSO satellite systems.
* China is also of the view that some aspects, such as methodologies to be used to evaluate aggregate EPFD limit compliance, as well as the process and procedures for the consultation meeting, needs to be addressed.

3.1.8 Malaysia - Document APG23-5/[INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)

* Malaysia supports possible modifications to Resolution **76 (Rev.WRC-15)** to introduce the concept of “consultation process/meetings” to collaboratively determine whether the aggregate interference levels in Tables 1A to 1D of the Resolution are exceeded.
* Malaysia recognizes the importance to establish methodologies and procedures to be adopted by the ITU-R with respect to the assessment of the aggregate epfd produced by all operational non-GSO FSS systems and, the reduction of this aggregate epfd levels as appropriate.
* Considering that, at this stage, the draft CPM text proposes 5 methods and that it may be simplified at the 2nd Conference Preparatory Meeting (CPM23-2) in March 2023, in order to ensure protection of GSO FSS and GSO BSS networks, subject to further development on the methods in the draft CPM text, Malaysia may consider **Method J3** or **Method J4**.

3.2 Summary of issues raised during the meeting

* Some APT Members prefer Method J3 in the draft CPM Report to address this topic, but is still considering other Methods J2, J4 and J5 in the draft CPM Report.
* Some APT Members are of the view that operational non-GSO satellites as well as those satellites planned to be operational within a period of time to be determined after a consultation meeting should be included in the consultation meeting, with a minimum number of operational satellites identified under Resolution **35 (WRC-19)**.
* Some APT Members are also of the view that NGSO systems submitted under multiple ITU filings should be treated as a single system for the purposes of Resolution **76 (Rev.WRC-15)**.
* Some APT Members are of the view that an accurate aggregate calculation method is needed before requiring changes to the operations of NGSO systems.
* Some APT Members are of the view that, in case the aggregate epfd of non-GSO FSS systems are exceeded, there should a suitable methodology for administrations to follow the compliance.

4. APT Preliminary View(s)

* None at this stage.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to consider the issues raised during the APG23-5 meeting (see Section 3.2) as well as the outcome of the CPM23-2 meeting, and provide views to the Methods to address this topic as identified in the CPM Report developed by CPM23-2, in order to formulate Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Support the introduction of the concept of a “consultation/meeting process” with regards to evaluating the aggregate epfd produced by all non-GSO satellite systems to reduce them.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support the contents of Document 691 in modification of Resolution **76 (Rev. WRC-15).**

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports the modification of Resolution 76 (Rev.WRC-15) to introduce the concept of “consultation process/meetings”;
* CEPT supports that only those non-GSO systems for which appropriate Notification information under No. 11.2 of the Radio Regulations and for which submission of the information referred to in resolves 2, 3, 7 and/or 8, as applicable, of Resolution 35 (WRC-19) have been submitted should be considered to evaluate the aggregate epfd levels;
* CEPT supports that only those GSO networks for which appropriate Notification information under No. 11.2 of the Radio Regulations and for which submission of the information referred to in No. 11.44B of the Radio Regulations has been submitted should be considered in the evaluation of the aggregate epfd levels;
* CEPT supports that administrations notifying NGSO systems that meet the applicable criteria indicated above can participate in the consultation meetings;
* CEPT also supports non-GSO systems for which appropriate notification information under No. 11.2 of the Radio
* Regulations has been submitted may participate in the consultation meetings;
* CEPT supports that administrations notifying GSO networks that meet the applicable criteria indicated above can participate in the consultation meetings and make comments with respect to the results of the computations;
* CEPT supports that a mechanism should be established to ensure that all administrations are given full visibility of the process;
* CEPT supports that the ITU-R should develop Terms of Reference to regulate the first consultation meeting;
* CEPT supports that the technical work, such as the methodology to be used to evaluate aggregate epfd limit compliance, as well as the methodology to adapt the operation of all non-GSO FSS systems operating co-frequency in frequency bands covered in Tables 1A to Table 1D that are taken into account to evaluate the aggregate epfd levels, should be developed by the ITU Radiocommunication Sector as a matter of urgency;
* CEPT supports that any amendment to the relevant non-GSO FSS systems mentioned above shall not affect the regulatory status of the affected non-GSO systems, including following any modifications to their published characteristics;
* CEPT supports that consultation meetings held under the amended Resolution 76 (WRC-15) shall not occur before the methodologies above are developed by the ITU-R and made available to the membership;
* CEPT supports that those administrations participating in the consultation meetings should designate one administration that should communicate to the Bureau the results of any technical or operational amendment to the relevant non-GSO FSS systems following the application of the amended Resolution 76 (Rev.WRC-15);
* CEPT does not support instructing the BR to develop aggregate epfd calculation tools.

7.1.4 CITEL – Document WRC-23-IRW-22/[22](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0022) (as of December 2022)

* None.

7.1.5 RCC – Document WRC-23-IRW-22/[7 A1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0007) (as of December 2022)

* None.

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Topic K: MODs to Res. 553 (Rev.WRC-15)

## 1. Background Information

* Resolution **553 (Rev.WRC-15)** titled *Additional regulatory measures for broadcasting-satellite networks in the frequency band 21.4-22 GHz in Regions 1 and 3* has been adopted to enhance equitable access to this frequency band.
* Resolution **553 (Rev.WRC-15)** was adopted to provide a better situation regarding equitable access compared with the planning approach. As stated in *considering further a)* to this Resolution a priori planning for BSS networks in this frequency band was avoided as it *“freezes access according to technological assumptions at the time of planning and then prevents flexible use taking account of real-world demand and technical developments”.*
* Unfortunately, the current provisions contradict the above objective of the Resolution and can permanently deprive administrations of being effectively benefited from the Resolution without even once having a notified network in this frequency band.
* Topic K under agenda item 7 of WRC-23 was established to remove certain restrictions in Resolution **553 (Rev.WRC-15)** that could prevent administrations from effectively using the Resolution. These restrictions can be summarized as follows:
* The restriction that makes the Resolution applicable only once by an administration regardless of whether that administration has succeeded in notifying the intended network.
* The restriction that prevents an administration to apply the Resolution if it has even one pending request under the normal procedure of coordination in the relevant frequency band.

**Information on on-going ITU-R Study**

* The September 2022 meeting of WP 4A considered two input documents towards the development of the draft CPM text as Annex 36 to Chairman’s Report (Document 4A/856 [Annex 36](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0856%21N36%21MSW-E.docx)).
* The draft CPM text contains two methods, as follows:
* Method **K1** No changes to Resolution **553 (Rev.WRC-15).**
* Method **K2** This method proposes to modify paragraphs 1 and 2 of the Attachment to Resolution **553 (Rev.WRC-15)** to remove the intended restrictions in the Resolution.

2. Documents

* Input Document(s):[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx) (THA), [INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (IRN), [INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (AUS), [INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx) (KOR), [INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx) (CHN), [INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx) (MLA)
* Information Document(s): [INF-12](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-12_Briefing_on_AI7.docx) (DG 7 Chairs), [INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf) (CEPT)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Thailand (Kingdm of) - Document APG23-5/[INP-11](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-11_Thailand-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_and_7.docx)

* Thailand supports Method K2 in the current draft CPM text to modify paragraphs 1 and 2 of the Attachment to Resolution **553 (Rev.WRC-15)** to remove the intended restrictions in this Resolution.

3.1.3 Iran (Islamic Republic of) - Document APG23-5/[INP-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-39_Iran-WP4-Preliminary_Views_on_WRC_23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Iran supports Method K2 as contained in the draft CPM text (Document CPM23-2/1-E, dated 25 November 2022), which proposes to remove certain restrictions in Resolution **553 (Rev.WRC-15)** which leads to the following results:
* An administration without a notified network in the relevant frequency band, will be still eligible to apply the Resolution if they fail to bring into use a previous request under this Resolution until they can benefit from the Resolution.
* An administration is allowed to apply the special procedure of Resolution **553 (Rev.WRC-15)** if it has at maximum one network under the normal procedure successfully examined under RR No. 9.34 and published under RR No. 9.38 in the relevant frequency band and at the same orbital position as the network to which the special procedure is to be applied.
* This administration is of the view that the modifications proposed to satisfy Topic K will enhance equitable access to the frequency band 21.4-22 GHz.
* Based on the result of the studies, this administration is of the view that the proposed modifications will not adversely affect existing allocations and services due to the following reasons:
* According to the current provisions, an administration can notify a maximum of one network under the special procedure and this limitation will remain.
* According to the current provisions, administrations with notified networks in the relevant frequency band are not eligible to apply the Resolution and this limitation will remain.

3.1.5 Australia - Document APG23-5/[INP-59](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-59_Australia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* Australia can accept additional flexibility in access to Resolution 553 procedure for administrations that have not completed the procedure successfully, provided that care is taken to avoid unintentional consequences.

3.1.6 Korea (Republic of) - Document APG23-5/[INP-66](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-66_Rep_of_Korea-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_and_7.docx)

* As the Republic of Korea supports modifications to Resolution **553 (Rev. WRC-15)** to remove certain restrictions that prevent administrations from taking effective advantage of the Resolution, among the methods presented in the draft CPM Report, Method K2 is supported.

3.1.7 China (People’s Republic of) - Document APG23-5/[INP-91](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-91_China-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.17_1.18_1.19_and_7.docx)

* China supports studies to modify Resolution **553 (Rev.WRC-15)** to ensure equitable access to the 21.4-22 GHz frequency band.

3.1.8 Malaysia - Document APG23-5/[INP-98](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-98_Malaysia-WP4-Preliminary_Views_on_WRC-23_Agenda_Items_1.15_1.16_1.19_and_7.docx)

* Malaysia supports the modification of the Attachment to Resolution **553 (Rev.WRC-15)** to remove certain restrictions in the Resolution that could prevent administrations from effectively using the Resolution, under **Method K2**.

3.2 Summary of issues raised during the meeting

* None.

4. APT Preliminary View(s)

* APT Members supports Method K2 in the draft CPM Report to address this topic.

5. Other View(s) from APT Members

* None.

6. Issues for Consideration at Next APG Meeting

* APT Members are encouraged to provide views to the Methods to address this topic as identified in the CPM Report developed by CPM23-2, in order to formulate Preliminary APT Common Proposal (PACP) at the next APG23-6 meeting.

7. Views from Other Organisations

7.1 Regional Groups

7.1.1 ASMG – Document WRC-23-IRW-22/[5](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0005) (as of December 2022)

* Follow-up studies to modify Resolution **553 (Rev.WRC-15)** to ensure equitable access to the 22- 21.4 GHz frequency band.

7.1.2 ATU – Document WRC-23-IRW-22/[2](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0002) (as of December 2022)

* Support the proposals mentioned in the current working document.
* Examine the Resolution 553 (Rev. WRC-15) with a view of finding any other modification which can help African countries to benefit from the Resolution.

7.1.3 CEPT – Document APG23-5/[INF-39](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-39_Status_of_CEPT_preparation_for_WRC-23_and_RA-23.pdf)

* CEPT supports the possibility to apply the special procedure of Resolution 553 (Rev. WRC-15) again if the requesting administration fails to bring into use a network even if the special procedure of Resolution 553 (Rev. WRC-15) was previously requested.
* CEPT supports the possibility to also apply the special procedure of Resolution 553 (Rev. WRC-15) once if the requesting administration has at maximum one network successfully examined under No. 9.34 and published under No. 9.38 for the frequency band 21.4-22 GHz and at the same orbital position(s) as the network to which the special procedure is to be applied.

7.1.4 CITEL – Document WRC-23- IRW-22/[22](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0022) (as of December 2022)

* None.

7.1.5 RCC – Document WRC-23-IRW-22/[7 A1](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0007) (as of December 2022)

* None.

## 7.2. Position of International Organizations (if available)

7.2.1 IARU R3 (as of February 2023)

* None.

7.2.2 ICAO – Document WRC-23-IRW-22/[8](https://www.itu.int/md/meetingdoc.asp?lang=en&parent=R19-2WSHWRC23-C-0008) (as of December 2022)

* None.

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# Proposed New Topic: Modification of Annex 4 to Appendix 30 of the Radio Regulation to protect broadcasting satellite service of Appendix 30 in Regions 1 & 3 from high PFD values stemming from the operation of FSS in Region 2 in the frequency band 11.7-12.2 GHz

1. Background

* A proposal for a new Topic under WRC-23 agenda item 7 was provided with the explanations as follows:
* The band 11.7-12.7 GHz is allocated to BSS Plan, FSS and other services as indicated in the table of frequency allocation in Article 5 of the Radio Regulations.
* In Regions 1 and 3 the frequency band 11.7-12.2 GHz is allocated to BSS on a primary basis which is governed by the provisions of Appendix **30** to the Radio Regulations.
* When a frequency band is allocated to planned BSS in a Region, this band is not allocated to FSS in that Region therefore sharing between FSS and planned BSS is an inter-regional sharing. Currently, this sharing is based on a coordination procedure and the coordination criteria are described in Annex 4 to Appendix **30**.
* On the other hand for sharing between assignments in the BSS Plan, in addition to the coordination procedure, the maximum PFD limit of −103.6 dB(W/(m2 · 27 MHz)) must also be observed, which is mentioned in Annex 1 to Appendix **30**.
* In Regions 1 and 3 the frequency band 11.7-12.2 GHz is not allocated to FSS. Therefore, it is expected that Region 2 FSS creates a low value of power flux density in these Regions. However, based on Annex 4 of Appendix **30**, it is possible for Region 2 FSS networks to create high PFD values in Regions 1 and 3 through the successful completion of the coordination requirements set out in this Annex or without obtaining the agreement and through the application of 11.41, whereas it is not possible for BSS.
* These high PFD values that stem from the operation of FSS in Region 2 in the frequency band 11.7-12.2 GHz can even be greater than the maximum allowable PFD value of −103.6 dB(W/(m2 · 27 MHz)) which is a hard limit for BSS networks in Regions 1 and 3.

2. Documents

* Input Document APG23-5/[INP-45(IRN)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-45_Iran-WP4-Proposed_new_topic_to_be_considered_under_WRC-23_Agenda_Item_7.docx)

3. Summary of discussions

3.1 Summary of APT Members’ views

3.1.1 Iran (Islamic Republic of) - Document APG23-5/INP-45

* The Islamic Republic of Iran is of the view that Annex 4 to Appendix **30** shall be modified to protect the broadcasting satellite service of Appendix **30** in Regions 1 & 3 from high PFD values stemming from the operation of FSS in Region 2 in the frequency band 11.7-12.2 GHz.
* I.R. of Iran is of the view that in order to address the above-mentioned issue, CPM23-2 should be invited to adopt a new Topic under WRC-23 agenda item 7 if the required CPM text is provided.
* I.R. of Iran is of the view that the possible methods to address the issue are as follows:
* through the adoption of provisions for requiring non-planned services to align the coverage area with the service area.
* to establish an appropriate PFD mask in Annex 4 to Appendix **30** to be as a hard limit instead of the current PFD mask which acts as a coordination trigger.

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

* Some APT Members raised their concerns on this proposal since the opportunity to include new Topics under WRC-23 Agenda Item 7 has lapsed, based on the Work Plan of WP 4A ([Annex 42 to Doc 4A/691](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21N42%21MSW-E.docx)) and the Chairman’s Report for the May 2022 meeting (Section 4.3 of [Doc 4A/691](https://www.itu.int/dms_ties/itu-r/md/19/wp4a/c/R19-WP4A-C-0691%21%21MSW-E.docx)).
* Some APT Members confirmed that based on the current provisions a new topic under agenda item 7 can be submitted to CPM23-2 even WRC-23 and there is no restriction preventing administrations or regional organisations in this regard.
* Some APT Members supported the proposed subject to be converted to a new Topic under agenda item 7, considering the followings:

a) The sensitivity of the issue which is regarding the protection of the assignments in BSS Plan in Region 3 stemming from the operation of space services of Region 2 FSS

b) The straightforward method that has been proposed to satisfy this new Topic

## 4. APT Preliminary View(s)

* APT Members are invited to consider this proposal with a view for it to be converted into a new Topic under WRC-23 Agenda Item 7.

5. Other View(s) from APT Members

* None.

## 6. Issues for Consideration at Next APG Meeting

* APT Members are invited to follow the progress of CPM23-2 meeting and ITU-R studies and are encouraged to submit their contributions for further considerations at the next APG meeting.

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1. See WRC-19 Document [CMR19/571 (10th Plenary Minutes)](https://www.itu.int/md/R16-WRC19-C-0571/en), Section 10.5, paragraph 2. [↑](#footnote-ref-1)
2. a new provision in RR Article **22** extending the application of the concept of provisions of RR No. **22.2** for the protection of GSO satellite networks operating in the MSS in the frequency bands [↑](#footnote-ref-2)
3. modification of RR No. **5.461** and the addition of two new footnotes in RR Article **5** extending the application of the concept of provisions of RR No. **22.2** for the protection for GSO satellite networks operating in the MSS in the frequency bands [↑](#footnote-ref-3)
4. 6*bis* The administration responsible for the assignment may request to relocate the downlink test points from the excluded territory to a new location within the remaining part of its service area.     (WRC‑19) [↑](#footnote-ref-4)