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| **The 5th Meeting of the APT Conference Preparatory**  **Group for WRC-23 (APG23-5)** | **APG23-5/OUT-05** |
| 20 – 25 February 2023, Busan, Republic of Korea | 25 February 2023 |

Working Party 1

**PRELIMINARY VIEWs on WRC-23 agenda item 1.2**

**Agenda Item 1.2:**

*To consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***245 (WRC-19)****.*

**1. Background**

WRC-23 agenda item 1.2 is to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **245 (WRC-19)** “*Studies on frequency-related matters for the terrestrial component of International Mobile Telecommunications identification in the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz, and 10.0-10.5 GHz*”.

Resolution **245 (WRC-19)** calls for studies of technical, operational and regulatory issues pertaining to the possible use of the terrestrial component of IMT in the frequency bands, as well as sharing and compatibility studies[[1]](#footnote-1)1, with a view to ensuring the protection of services to which the frequency band is allocated on a primary basis, without imposing additional regulatory or technical constraints on those services, and also, as appropriate, on services in adjacent bands, for the frequency bands:

* 3 600-3 800 MHz and 3 300-3 400 MHz (Region 2);
* 3 300-3 400 MHz (amend footnote in Region 1);
* 7 025-7 125 MHz (globally);
* 6 425-7 025 MHz (Region 1);
* 10 000-10 500 MHz (Region 2).

In light of *considering j)* of Resolution **245 (WRC-19)**, APT Members will benefit from economies of scale and global/regional harmonisation of IMT eco-system.

The draft CPM text of this agenda item was finalized at ITU-R WP 5D and contained in the draft CPM Report (Document [CPM23-2/1](https://www.itu.int/md/R19-CPM23.2-C-0001/en)).

**2. Documents**

* Input Documents: APG23-5/[INP-08](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-08_Thailand-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.4_and_9.1_TOPIC_C.docx) (THA), [14](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-14_Japan-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_9.1C_and_RR_NO.21.5.docx) (J), [26](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-26_India_WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.2_1.3_1.4_1.5_9.1Topic_c_and_RR_No.21.5.docx) (IND), [32](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-32_Bangladesh_WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.2_1.3_1.4_and_9.1_Topic_c.docx) (BGD), [36](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-36_Iran-WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_and_9.1Topic_c.docx) (IRN), [46](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-46_Singapore-WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.1_1.2_9.1Topic_c_and_RR_No.21.5.docx) (SNG), [52](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-52_Viet_Nam-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_and_1.5.docx) (VTN), [56](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-56_Australia-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_9.1Topic_c_and_RR_No.21.5.docx) (AUS), [63](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-63_Rep_of_Korea-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.4_9.1Topic_c_and_RR_No.21.5.docx) (KOR), [72](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-72_Sri_Lanka-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx) (CLN), [73(Rev.1)](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-73Rev.1_New_Zealand-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.5_9.1Topic_c_and_RR_No._21.5.docx) (NZL), [88](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-88_China-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_and_RR_No.21.5.docx) (CHN), [100](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-100_Multicountry-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx) (BRU, INS, MLA, SNG), [101](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-101_Mongolia-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx) (MNG), [102](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-102_Lao_PDR-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx) (LAO), [104](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-104_Samoa_AI1.2.docx) (SMO).
* Information Documents: APG23-5/[INF-01](https://www.apt.int/sites/default/files/2023/01/APG23-5-INF-01_WMO_Position_on_WRC-23_Agenda.docx) (WMO), [09](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-09_Brief_on_AI1.2.docx) (DG Chair), [19](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-19_Wi-Fi_Industry_Views_on_WRC-23_Agenda_Item_1.2.docx) (Wireless Industry Collaboration Co., Ltd.), [21](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-21_IARU_Views_on_WRC-23_Agenda_Items_1.2_1.12_1.14_1.18_and_9.1Topics_a_and_b.docx) (IARU), [24](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-24_Views_on_WRC-23_for_mobile.docx) (GSMA), [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), [43](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-43_CITEL_preparation_for_WRC-23.pdf) (CITEL), [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 (Kingdom of)** - **Document APG23-5/INP-**[**08**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-08_Thailand-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.4_and_9.1_TOPIC_C.docx)

Thailand supports the possible global IMT identification in the frequency band 7 025 – 7 125 MHz under the condition that the existing services should be protected, in particular the fixed service in 6 425 – 7 125 MHz band.

**3.1.2 Japan** - **Document APG23-5/INP-**[**14**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-14_Japan-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_9.1C_and_RR_NO.21.5.docx)

Japan is of the view that for the band:

**7 025-7 125 MHz (globally)**

Taking into account the results of sharing and compatibility studies in ITU-R for the frequency band 7 025-7 125 MHz for the terrestrial component of IMT, Japan considers sharing and compatibility between IMT and existing services to which the frequency band is allocated on a primary basis require appropriate conditions to be established in each country, based on the results in WRC-23.

Japan supports any methods that would enable global identification of the frequency band 7 025-7 125 MHz for the terrestrial component of IMT, provided that the protection of primary incumbent services is ensured without imposing additional regulatory or technical constraints on those services and that practical operation of IMT stations is also ensured.

**3 300-3 400 MHz (Region 2 and amend footnote in Region 1)**

Japan supports any methods that would ensure the protection of primary incumbent services, taking into account the results of sharing and compatibility studies in ITU-R.

**3 600-3 800 MHz (Region 2)**

Japan supports any methods that would enable identification of the frequency band 3 600-3 800 MHz in Region 2, ensuring the protection of primary incumbent services, to facilitate IMT usage in the frequency band, taking into account the results of sharing and compatibility studies in ITU-R.

**6 425-7 025 MHz (Region 1)**

Taking into account the results of sharing and compatibility studies in ITU-R, Japan supports any method that would enable identification of the frequency band 6 425-7 025 MHz in Region 1 for the terrestrial component of IMT, from the viewpoint of economies of scale, provided that the protection of primary incumbent services is ensured without imposing additional regulatory or technical constraints on those services and that practical operation of IMT stations is also ensured.

**10 000-10 500 MHz (Region 2)**

Japan supports any methods that would ensure the protection of primary incumbent services, taking into account the results of sharing and compatibility studies in ITU-R.

**3.1.3 India (Republic of) - Document APG23-5/INP-**[**26**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-26_India_WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.2_1.3_1.4_1.5_9.1Topic_c_and_RR_No.21.5.docx)

* 3 300-3 400 MHz (amend footnote in Region 1, and Region 2):

India has identified 3 300 – 3 670 MHz for IMT usages while providing geographical separation to existing radiocommunications services in band 3 400 – 3 425 MHz at few locations and by shifting few in-band assignments.

India supports the band for IMT identification as it would lead towards global harmonization of band, bringing in economies of scale; subject to ensuring protection to services in adjacent band based upon studies.

Considering above India supports following methods with a view that any actions being decided at WRC-23 shall not affect existing primary services operating in the same frequency bands in Region 3

Band 1 – 3 300-3 400 MHz (amend footnote in Region 1):

Method 1D: Primary allocation to the mobile (except aeronautical mobile) service in the frequency band 3 300-3 400 MHz in interested Region 1 countries and identification of IMT.

Band 2 – 3 300-3 400 MHz (Region 2)

Method 2C: Allocation of the frequency band 3 300-3 400 MHz to the mobile (except aeronautical) service on a primary basis and identification of IMT in Region 2.

In Band 5 - 7 025-7 125 MHz (globally), India supports Method 5B: Identification of the frequency band 7 025-7 125 MHz for IMT without any conditions.

**3.1.4 Bangladesh (People's Republic of) - Document APG23-5/INP-**[**32**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-32_Bangladesh_WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.2_1.3_1.4_and_9.1_Topic_c.docx)

**Band 1 – 3 300-3 400 MHz (amend footnote in Region 1)**

Bangladesh administration supports to allocate the frequency band 3300-3400 MHz to the mobile service (except aeronautical mobile) in region 1 countries on a primary basis and to identify it for IMT in those countries based on the results of sharing and compatibility studies in ITU-R. In that case Bangladesh prefers method 1C of the draft CPM report to WRC-2023.

**Band 2 – 3 300-3 400 MHz (Region 2).**

Bangladesh administration prefers method 2B of the draft CPM report to WRC-2023 subject to the conditions of ensuring the protection of primary services, taking into account the results of sharing and compatibility studies in ITU-R.

**Band 3 – 3 600-3 800 MHz (Region 2)**

In order to dentification of the frequency band 3 600-3 800 MHz for IMT in Region 2, Bangladesh administration prefers method 3B of the draft CPM report to WRC-2023 subject to the conditions of ensuring the protection of primary services, taking into account the results of sharing and compatibility studies in ITU-R.

**Band 4 – 6 425-7 025 MHz (Region 1)**

In order to dentification of the frequency band 6425 - 7025 MHz for IMT in Region 1, Bangladesh administration prefers method 4C of the draft CPM report to WRC-2023 subject to the conditions of ensuring the protection of primary services, taking into account the results of sharing and compatibility studies in ITU-R.

**Band 5 – 7 025-7 125 MHz (globally)**

Bangladesh administration supports global identification of the frequency band 7 025-7 125 MHz for the terrestrial component of IMT, subject to the conditions that the protection of incumbent services is ensured, In that case Bangladesh prefers method 5D of the draft CPM report to WRC-2023.

**Band 6 – 10.0-10.5 GHz (Region 2)**

Bangladesh administration prefers method 6C subject to the conditions that the protection of incumbent services is ensured.

**3.1.5 Iran (Islamic Republic of)** - **Document APG23-5/INP-**[**36**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-36_Iran-WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_and_9.1Topic_c.docx)

* The Islamic Republic of Iran is of the preliminary view that the protection of existing services in all frequency bands subject to this agenda item including the AP30B uplink in the 7 025-7 125 MHz band as well as other services operating in the adjacent bands shall be ensured in such way that the services shall in no way be adversely affected by any potential decisions made at WRC-23.
* Due to long border to Region 1 countries, in 3 sides of the country, this Administration is of the view that:

1. any possible IMT identification in WRC-23 in the frequency band 6 425 – 7 025 MHz shall protect Region 3 services within this frequency band and shall in no way be adversely affected by any potential decisions made at WRC-23.
2. the amendment of Radio Regulations Article 5 footnotes under the frequency band 3 300 – 3 400 MHz should not undermine and reduce the degree of protection and relax the conditions of the protection of these services within this frequency band;

* Moreover, the protection of C band uplink of Appendix **30B** as a worldwide treaty shall be fully ensured;
* Having an additional allocation to the fixed and mobile services in the frequency band 3 300 – 3 400 MHz due to RR No. **5.429**, this administration would like to inform that it considers identification of 3 360 – 3 400 MHz for IMT by inclusion of its name in RR No. **5.429F**, under Resolution **26 (Rev.WRC‑19)**;

This administration does not have any position on any of methods provided in the draft CPM text at this stage due to the fact that these methods are subject to further discussion and refinement at the CPM23-2. However, any Method proposed for identification of any band subject to this agenda item shall be conditioned to fully protect the existing services operating and/ or to be operated in the future in these bands.

**3.1.6 Singapore (Republic of)** - **Document APG23-5/INP-**[**46**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-46_Singapore-WP1-Preliminary_Views_on_WRC_23_Agenda_Items_1.1_1.2_9.1Topic_c_and_RR_No.21.5.docx)

Singapore would like to share its preliminary views for the bands under this agenda item as follows:

**3 300-3 400 MHz (Region 2 and amend footnote in Region 1)**

Singapore is of the view that potential IMT identification in the frequency band 3 300-3 400 MHz in Region 1 and Region 2 should ensure the protection of existing services in accordance with Resolution 245 (WRC-19).

**6 425-7 025 MHz (Region 1)**

Singapore is of the view that potential IMT identification in the frequency band 6 425-7 025 MHz, or parts thereof, in Region 1 should ensure the protection of existing services in accordance with Resolution 245 (WRC-19).

**3.1.7 Viet Nam (Socialist Republic of) - Document APG23-5/INP-**[**52**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-52_Viet_Nam-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_and_1.5.docx)

Viet Nam is of the views that for the following bands:

***3 300−3 400 MHz*** *(in Region 2 and amend footnote in Region 1)*

Taking into account relevant ITU-R studies as well as the interest of global harmonization and economies of scale, Viet Nam supports identification of the frequency bands 3 300-3 400 MHz for IMT in Region 1 and Region 2. Therefore methods other than 1A and 2A could be supported.

***3 600−3 800 MHz*** *(in Region 2)*

Taking into account relevant ITU-R studies as well as the interest of global harmonization and economies of scale, Viet Nam supports identification of the frequency bands 3 600-3 800 MHz for IMT in Region 2. Therefore methods 3B, 3C, 3D are preferred.

***6425−7025 MHz*** *(in Region 1)*

Viet Nam will monitor the regulatory activity and implementation from other Administrations in this band to formulate our view at later stage.

***7025−7125 MHz*** *(globally)*

Viet Nam will monitor the regulatory activity and implementation from other Administrations in this band to formulate our view at later stage.

***10 000 −10 500 MHz*** *(in Region 2)*

Viet Nam supports appropriate action at WRC-23 with a view that any possible IMT identification in the band 10.0-10.5 GHz in Region 2 shall protect the services to which the frequency band is allocated on a primary basis (and in adjacent bands, as appropriate) in Region 3 so that these services shall in no way be adversely affected.

**3.1.8 Australia - Document APG23-5/INP-**[**56**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-56_Australia-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_9.1Topic_c_and_RR_No.21.5.docx)

Australia’s objective is to encourage improvements in IMT capabilities and economies of scale through increased spectrum efficiency and harmonisation, subject to coexistence with other services to which the frequency bands are allocated on a primary basis (and in adjacent bands, as appropriate), being technically feasible. Australia will consider the outcome of studies in developing its position on this agenda item. Australia supports the protection of existing primary services and to allow for their future development.

Australia supports the APT Preliminary View as agreed at APG23-4, which includes support for the potential identification of IMT in the 7 025–7 125 MHz band. This support remains contingent on ITU-R studies showing that coexistence is technically feasible and subject to appropriate regulatory and technical conditions being in place to protect existing primary services in this band (and in adjacent bands, as appropriate) now and into the future.

**3.1.9 Korea (Republic of)** - **Document APG23-5/INP-**[**63**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-63_Rep_of_Korea-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.4_9.1Topic_c_and_RR_No.21.5.docx)

The Republic of Korea is of the view on the frequency band 7 025-7 125 MHz as follows:

**7 025-7 125 MHz (globally)**

After careful investigation of five Methods on the frequency band 7 025-7 125MHz in the draft CPM Report, the Republic of Korea considers Methods 5A and 5C for the next review. The Republic of Korea would thoughtfully examine to find the more appropriate one among these two Methods before the APG23-6 meeting. The Republic of Korea supports the deletion of Method 5E with the inclusion of launch dates of IMT-2030 due to the uncertainty by 2030.

In addition to this frequency band, the Republic of Korea supports the same views on other frequency bands submitted to the APG23-4 meeting. (See Document [APG23-4/INP-34](https://www.apt.int/sites/default/files/2022/08/APG23-4-INP-34_KOR_WP1_Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4__9.1Topic_c_and_No.21.5.docx))

**3.1.10 Sri Lanka (Democratic Socialist Republic of)** - **Document APG23-5/INP-**[**72**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-72_Sri_Lanka-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx)

Sri Lanka has the following preliminary views on AI 1.2:

**7 025-7 125 MHz (globally)**

Sri Lanka supports global IMT identification in the frequency band 7 025-7 125 MHz.

**6 425-7 025 MHz (Region 1)**

Sri Lanka supports IMT identification in the frequency band 6 425-7 025 MHz in Region 1, considering that Region 3 countries would take benefits of economies of scale and global harmonized IMT eco-systems.

**3.1.11 New Zealand - Document APG23-5/INP-**[**73(Rev.1)**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-73Rev.1_New_Zealand-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.5_9.1Topic_c_and_RR_No._21.5.docx)

New Zealand has an interest in the development of IMT use in the bands being studied under this Agenda Item, noting that only the 7 025 – 7 125 MHz frequency band is applicable for Region 3 (on a global identification basis). New Zealand supports the ongoing work on this Agenda Item with a view to enable new developments of IMT systems through identification of new frequency bands, where appropriate. New Zealand has the following views on the different bands:

**Band 1 – 3 300-3 400 MHz (amend footnote in Region 1):**

Region 3 is not on scope for this frequency band therefore, New Zealand does not have a position or a view on appropriate method(s) at this at this stage.

**Band 2 – 3 300-3 400 MHz (Region 2)**

Region 3 is not on scope for this frequency band therefore, New Zealand does not have a position or a view on appropriate method(s) at this at this stage.

**Band 3 – 3 600-3 800 MHz (Region 2):**

Region 3 is not on scope for this frequency band therefore, New Zealand does not have a position at this stage. New Zealand has no concern with an IMT identification under the existing primary mobile allocation in Region 2. New Zealand notes that it has deployed mobile systems in this frequency band nationally and further global harmonisation could be beneficial.

**Band 4 – 6 425-7 025 MHz (Region 1):**

Region 3 is not on scope for this frequency band therefore, New Zealand does not have a position at this stage. However, New Zealand has no concern with an IMT identification under the existing primary mobile allocation in Region 1.

**Band 5 – 7 025-7 125 MHz (globally):**

New Zealand could support possible IMT identification in this band and may support Method 5C: ‘Identification of the frequency band 7 025-7 125 MHz for IMT by creating a new RR footnote with conditions contained in a draft new WRC Resolution’. New Zealand is still to consider what conditions may be appropriate in a WRC Resolution.

**Band 6 – 10.0-10.5 GHz (Region 2):**

Region 3 is not on scope for this frequency band therefore, New Zealand does not have a position or a view on appropriate method(s) at this stage.

**3.1.12 China (People’s Republic of) - Document APG23-5/INP-**[**88**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-88_China-WP1-Preliminary_Views_on_WRC-23_Agenda_Items_1.1_1.2_1.3_1.4_1.5_and_RR_No.21.5.docx)

The global demand for mid-band frequencies for IMT will increase significantly in near future. The 6 425-7 125 GHz frequency band enables a better balance of capacity and coverage, which can leverage the existing economies of scale globally or regionally and harmonize mid-band IMT eco-system. The sharing and compatibility studies of the band 6 425-7 125 GHz conducted by ITU-R WP5D has been finalized. Based on the study results, China is of the views that the coexistence of IMT and incumbent services is feasible. The preliminary views of China for the specific frequency bands are as follows:

**7 025-7 125 MHz (globally)**

China supports global identification of 7 025-7 125 MHz for IMT.

**6 425-7 025 MHz (Region 1)**

China supports identification of 6 425-7 025 MHz for IMT in Region 1.

China’s preliminary views for other bands are as follows (not updated):

**3 300-3 400 MHz (Region 2 and amend footnote in Region 1)**

In light of Region 3 countries benefiting from the economics of scale and global harmonized IMT eco-system, APT supports ITU-R studies in accordance with Resolution **245 (WRC-19)** while ensuring protection of services.

**3 600-3 800 MHz (Region 2)**

In light of Region 3 countries benefiting from the economics of scale and global harmonized IMT eco-system, APT supports ITU-R studies in accordance with Resolution **245 (WRC-19)** while ensuring protection of services.

**10 000-10 500 MHz (Region 2)**

In light of Region 3 countries benefiting from the economics of scale and global harmonized IMT eco-system, APT supports ITU-R studies in accordance with Resolution **245 (WRC-19)** while ensuring protection of services.

**3.1.13 Brunei Darussalam, Indonesia (Republic of), Malaysia and Singapore (Republic of) - Document APG23-5/INP-**[**100**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-100_Multicountry-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx)

Brunei Darussalam, Indonesia, Malaysia and Singapore support the **potential IMT identification** in the 7 025-7 125 MHz frequency band to achieve globally harmonised utilisation for IMT **with required regulatory and technical conditions**, where applicable, taking into account the results of studies to ensure the protection of services to which the frequency band is allocated on a primary basis and in adjacent frequency bands, as appropriate.

**3.1.14 Mongolia - Document APG23-5/INP-**[**101**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-101_Mongolia-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx)

Mongolia has the following preliminary views for AI 1.2:

**3 300-3400 MHz (amend footnote in Region 1)**

Mongolia supports amendments to existing footnotes to add interested countries of ITU Region 1 in band 3 300 - 3 400 MHz to identify it for IMT in those countries. Mongolia supports methods 1B and 1C.

**7 025-7 125 MHz (globally)**

Mongolia supports global harmonization of IMT identification in the frequency band 7025 - 7125 MHz while ensuring the protection of incumbent services within the framework of ITU-R.

**6 425-7 025 MHz (Region 1)**

Mongolia supports studies in accordance with Resolution 245 (WRC-19) in the band 6 425- 7 025 MHz in Region 1, considering that Region 3 countries would be beneficial from economies of scale with a globally harmonized IMT eco-system.

**3 600-3 800 MHz (Region 2)**

Mongolia supports studies of IMT identification in band 3 600-3 800 MHz in Region 2, considering that Region 1, and 3 countries would be beneficial from economies of scale with a globally harmonized IMT eco-system

**3.1.15 Lao People’s Democratic Republic - Document APG23-5/INP-**[**102**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-102_Lao_PDR-WP1-Preliminary_View_on_WRC-23_Agenda_Item_1.2.docx)

Lao PDR supports any Methods that identify the frequency band 7 025-7 125 MHz for the terrestrial component of IMT globally.

**3.1.16 Samoa (Independent State of) - Document APG23-5/INP-**[**104**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INP-104_Samoa_AI1.2.docx)

C-band satellites continue to be a vital component of the telecommunication infrastructure for SIDS of the Pacific now and for years to come. The unique characteristics of the C-band, resistance to rain fade, and continental reach make it ideal for Administrations in the Pacific.

This Administration believes that co-frequency sharing between satellite services and IMT is neither feasible nor practical. At the same time, countries that plan to deploy mobile services in the 6 GHz must implement specific measures to ensure the protection of satellite services in the adjacent band.

This Administration opposes the identification of IMT within 6 GHz, especially the band 6 425 to 7 025 MHz.

This Administration, in formulating its preliminary view, has taken into consideration the followings:

1. There is flexibility to find alternative mid-bands for use by IMT through examining current utilization, re-farming, and evolutionary deployment of IMT in the medium to long term.

2. That there is a strong demand by multiple stakeholders for 1200 MHz of contiguous bandwidth from 5 925 to 7 125 MHz to support the next generation of Internet services utilizing AR/VAR applications with the development and availability of Wi-Fi 7 router technology;

3. That there is a strong desire from this Administration to preserve the sanctity of AP30B for the use of national satellite programs and to bridge the digital divide and

4. to preserve the provisioning of existing safety-related services utilizing both C and L bands for national emergencies /disasters, maritime and aeronautical services in compliance with IMO & ICAO requirements, as well as for National and Regional Rescue Coordination operations (RCC).

5. This Administration aim to maximize the social and economic benefits of utilizing this 6 GHz spectrum band as a matter of national and regional policy to bridge the digital divide.

6. The previous ITU-R studies in Report S.2367 in the adjacent band below 6 425 MHz and the findings from some of the latest studies conducted on the band 6 425-7 025 MHz.

7. The only potential for globally harmonized use of the upper 6 GHz bands by terrestrial mobile systems is with RLAN/WiFi systems, sharing the spectrum with the FS and FSS.

Based on the considerations above, this Administration is of the view that there should be no change to the allocations in the frequency band 6 425-7 025 MHz and therefore supports Method 4A of the draft CPM report.

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

**Status of sharing and compatibility studies in ITU-R for AI 1.2**

There was a discussion regarding the current status of sharing and compatibility studies in the ITU-R for this agenda item. Some APT Members consider that the study has been finalized at 42nd meeting of WP 5D according to the work plan of AI 1.2. Future discussion should focus on subsequent development and improvement of CPM methods. Some other APT Members believe that the sharing and compatibility studies are continuing for the better preparation of WRC-23 and may last until WRC-23.

**Consideration on CPM Methods for Band 5**

Some APT Members generally support to make an APT PV for potential IMT identification in the frequency band 7 025-7 125 MHz. However, there are different views on the preferred CPM Method, noting that these Methods and their associated regulatory texts will be finalized at CPM23-2.

**Consideration** **of APT PV text relevant to CPM Methods for the frequency bands other than Band 5**

Following the guidance of the Plenary, an objective of APG23-5 is to update APT Preliminary Views, which may include positions on the various Methods to satisfy Agenda Items identified in the draft CPM Report. Some input contributions from APT Members to this meeting also presented their options for CPM methods, not only to Band 5 (7 025-7 125MHz) but also to other frequency bands studied for Regions 1 and 2.

The DG 1.2 meeting discussed whether it is necessary to develop APT PV text relevant to CPM Methods for the frequency bands other than Band 5. Some APT Members believe that as for frequency bands studied for other Regions, it is inappropriate to have positions regarding the selection of Methods from Region 3. The meeting agreed to have general preliminary views for those frequency bands on the basis that there should not be any impact on Region 3 country’s operations.

**4. APT Preliminary View(s)**

APT Members are of the view that for the frequency band:

**Band 5 - 7 025-7 125 MHz (globally)**

APT Members support potential IMT identification in the frequency band 7 025-7 125 MHz to achieve globally harmonized utilization with appropriate regulatory and technical conditions, taking into account the results of studies to ensure the protection of services to which the frequency band is allocated on a primary basis and in adjacent bands.

**Band 1 - 3 300-3 400 MHz (amend footnote in Region 1)**

APT Members are of the view that any possible IMT identification in the frequency band 3 300-3 400 MHz in Region 1 shall protect the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3 so that these services shall in no way be adversely affected.

**Band 2 - 3 300-3 400 MHz (Region 2)**

APT Members are of the view that any possible IMT identification in the frequency band 3 300-3 400 MHz in Region 2 shall protect the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3 so that these services shall in no way be adversely affected.

**Band 3 - 3 600-3 800 MHz (Region 2)**

APT Members are of the view that any possible IMT identification in the frequency band 3 600-3 800 MHz in Region 2 shall not impact the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3 so that these services shall in no way be adversely affected.

**Band 4 - 6 425-7 025 MHz (Region 1)**

APT Members are of the view that any possible IMT identification in the frequency band 6 425-7 025 MHz in Region 1 shall protect the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3, in particular, the uplink of Appendix **30B** bands so that these services shall in no way be adversely affected.

**Band 6 - 10 000-10 500 MHz (Region 2)**

APT Members are of the view that any possible IMT identification in the frequency band 10.0-10.5 GHz in Region 2 shall protect the services to which the frequency band is allocated on a primary basis and in adjacent bands in Region 3 so that these services shall in no way be adversely affected.

**5. Other View(s) from APT Members**

Some APT Members are also of the view that any IMT identification in the frequency band 3 600-3 800 MHz in Region 2, while ensuring the protection of primary incumbent services, may broaden harmonization and economies of scale, which leads to more benefits for some APT Members who are seeking to use the band for mobile, subject to protection of other services to which the band is allocated on a primary basis and in adjacent bands in Region 3.

**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) with a view to contribute to the APG 23-6 meeting on these matters.

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

**7.1 Regional Groups**

**7.1.1 ASMG** - **Document** [**WRC-23-IRW-22/5**](https://www.itu.int/md/R19-2WSHWRC23-C-0005/en)

* Reviewing the regulatory conditions attached to the footnote (**5.429b**), and then identifying the frequency band 3300-3400MHz for the IMT systems of countries wishing to do so within the current footnote or the possibility of considering a new footnote with an emphasis on protecting existing services and systems and not affecting them.
* Follow-up studies with regard to identifying the frequency range 6425-7125 MHz while emphasizing on the protection of existing services and systems and not affecting them, and then determining the Arab position on identifying the range for IMT systems in the last meeting.

**7.1.2 ATU- Document** [**WRC-23-IRW-22/3**](https://www.itu.int/md/R19-2WSHWRC23-C-0003/en)

For the frequency band 3 300 - 3 400 MHz:

a) **Support** removal of stringent conditions through amendment of footnotes **5.429A** and **5.429B** or adopting a new footnote, as appropriate;

b) **Encourage** African countries not yet listed in footnote **5.429B** to consider adding their names to the footnote at WRC-23, in order to achieve harmonization;

c) **not support** any method that will result in maintaining the current regulatory situation.

For the frequency band 6 425-7 125 MHz:

a) **Preliminarily support** identification of the frequency band 6 425 - 7 125 MHz for IMT;

b) **Support** consideration of appropriate measures to ensure the protection of the existing services, taking into account the result of the coexistence studies in ITU-R.

**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)

**3300-3400 MHz (Amend Footnote in Region 1)**

CEPT does not support amendments to footnotes **5.429A** and **5.429B** which could extend them to countries north of 30° parallel north. Thus, CEPT does not support an IMT identification for the entire Region 1. Furthermore, CEPT opposes amending the footnote to change the regulatory provisions applicable to IMT stations in the band. In particular, IMT stations shall not cause harmful interference to, or claim protection from, systems in the radiolocation service in various national and international operational environments and shall meet unwanted emission levels specified in the relevant ITU-R Recommendations. In addition, protection of FSS in the frequency band 3400-3800 MHz should also be ensured, as appropriate.

**3300-3400 MHz (Region 2)**

CEPT supports maintaining the regulatory provisions in the footnotes Nos. **5.429C** and **5.429D** applicable to IMT stations in this band. In particular, IMT stations shall not cause harmful interference to, nor claim protection from, systems in the radiolocation service in various national and international operational environments, and shall meet unwanted emission levels specified in the relevant ITU-R Recommendations.

**3600-3800 MHz (Region 2)**

To be developed

**6425-7025 MHz (Region 1) and 7025-7125 MHz (Globally)**

• CEPT is considering different future wireless broadband usages in the frequency band 6425-7125 MHz i.e. IMT or WAS/RLAN or a shared framework between IMT and WAS/RLAN, while taking into account the coexistence with incumbent services.

• CEPT recognises that some countries and/or regions outside CEPT may propose an IMT identification in the band 6425-7125 MHz and whilst not advocating for it or proactively supporting it, CEPT is considering the conditions for potentially accepting an IMT identification in this band or parts thereof.

• CEPT is of the view that the protection of incumbent primary services and applications in the band 6425-7125 MHz should be ensured through relevant RR provisions if this band or parts thereof are identified for IMT. Due consideration should also be given to the continued operation of other services (i.e. RR Nos. **5.458** and **5.149**).

• CEPT emphasises that any potential IMT identification does not preclude the use of this frequency band by any application of the services to which it is allocated and does not establish priority in the Radio Regulations. Additional provisions should clearly outline opportunities for other broadband applications in the mobile services (i.e. WAS/RLAN).

• CEPT is discussing further conditions including in relation to potential candidate IMT bands for WRC-27.

**10000-10500 MHz (Region 2)**

CEPT is of the view that the result of a possible identification of the frequency band 10-10.5 GHz in Region 2 under this agenda item has a global impact on EESS (active) in the band 10.0-10.4 GHz and may have a global impact on EESS (passive) in the band 10.6-10.7 GHz due to the required protection of these services on a global basis. Moreover, interference would be detrimental to airborne and shipborne radars operating in 10-10.5 GHz under the radiolocation service operated by some CEPT countries in all Regions at 10-10.5 GHz. Sharing and compatibility studies between IMT and EESS (active) show that sharing between IMT and those services is not possible. Therefore, CEPT is of the view that the band 10-10.4 GHz should not be identified for IMT in Region 2 in order to ensure the protection of the radiolocation and the globally operating EESS (active) systems and in order to not impose any additional regulatory or technical constraints to these services.

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

* **3 300-3 400 MHz**

**Inter- American Proposal**

Identification of the mid-band frequency spectrum for IMT in Region 2 in the band 3 300-3 400 MHz by modification of **5.429C**, **5.429D** and the addition of **5.12AI**:

**5.12AI** Stations in the mobile service operating in the frequency band 3 300-3 400 MHz in Region 2 shall not cause harmful interference to, or claim protection from, stations operating in the radiolocation service. (**WRC 19**)

* **3 600-3 800 MHz**

**Draft Inter-American Proposals**

Some Administrations propose the modification of **5.434** to remove the list of countries and to extend the existing IMT footnote(s) to the entire Region 2 for the identification of the frequency band 3 600-3 800 MHz for IMT, removing existing conditions.

Other Administrations propose the modification of **5.434** to add new countries in the identification of the frequency band 3 600-3 700 MHz for IMT while maintaining all existing conditions.

**Preliminary Proposals**

An Administration proposes the modification of **5.434** to remove the list of countries and to extend the existing IMT footnote(s) to the entire Region 2 for the identification of the frequency band 3 600-3 700 MHz for IMT.

An Administration proposes the modification of **5.434** to remove the list of countries and to extend the existing IMT footnote(s) to the entire Region 2 for the identification of the frequency band 3 600-3 800 MHz for IMT

* **6 425-7 125 MHz**

**Draft Inter-American Proposal**

Some Administrations propose NOC for the identification of the frequency band 6 425-7 125 MHz for IMT.

* **10-10.5 GHz**

**Draft Inter-American Proposal**

Several Administrations propose allocation to the mobile service and identification of IMT in Region 2 in the band 10-10.5 GHz by amending **5.480**, **5.481**, and adding **5.A12E** and Resolution **A12 10 GHz** (WRC-23) “Studies on frequency-related matters for the terrestrial component of International Mobile Telecommunications identification in the frequency band 10.0-10.5 GHz”, still TBD.

**Preliminary Proposal**

An Administration proposes NOC for the identification of the frequency band 10-10.5 GHz for IMT.

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

***3300−3400 MHz (Regions 1 and 2)***

**Region 1**

No objection for the extension of country name list in the footnotes 5.429, 5.429A, 5.429B, 5.429C, 5.429D, 5.429E, 5.429F but advocate for the protection of the RLS in-band and FSS / EESS (active) in adjacent band (i.e. above 3400 MHz and below 3300 MHz).

Protection of RLS, FSS and EESS (active) should be based on ITU-R Reports ITU-R M.2481 and S.2368.

**Region 2**

No objection for identification of the band 3300-3400 MHz in Region 2 for IMT but advocate for the protection of RLS of Region 1 in-band, FSS / EESS (active) of Region 1 taking into account ITU-R Reports ITU-R M.2481 and S.2368 and results of studies be carried out by ITU-R in preparation for WRC-23.

Method 1A or 1B from the draft CPM Report

***3600−3800 MHz (Region 2)***

If this frequency band is identified for IMT in Region2, it is necessary to adopt relevant provisions to the RR ensuring protection of FSS and FS of Region 1.

Protection should be provided based on the results of studies carried out in ITU-R in preparation for WRC-07, WRC-12 and WRC-15 (i.e. ITU-R Report F.2328, M.2109, S.2199, S.2368 and M.2111).

Method 3A or 3D from the draft CPM Report

***6425−6525 MHz (Region 1)***

No objection to the identification of the frequency band 6425-6525 MHz or parts of it for IMT. Protection of FSS (E-s) and FS should be ensured by regulatory and technical conditions developed based on the results of ITU-R studies.

***6525−7025 MHz (Region 1), 7025−7100 MHz (Global)***

Support identification of the frequency band 6525-7100 MHz for IMT systems under the following conditions:

* insure compatibility of IMT stations with non-GSO MSS (s-E) feeder links in the band 6700-7075 MHz;
* insure compatibility of IMT stations with FSS (E-s) stations on GSO and HEO in the band 6725-7025 MHz;
* insure protection of SOS / SRS stations in the band 7100-7250 MHz from unwanted emissions of IMT stations operating in the band 6525-7100 MHz;
* not imposing regulatory or technical constrains for SOS / SRS stations operating in the band 7100-7250 MHz and keep possibility for the further use of the EESS (passive) in the 7075-7250 MHz.

***7100−7125 MHz (Global)***

Protect existing radio services from interference in considered and adjacent bands (including space stations of SOS, SRS and EESS (passive)).

Methods 4D and 5D from the draft CPM Report

***10.0 −10.5 GHz (Region 2)***

If this band is allocated to the MS and identified for IMT in Region 2:

* protection of services for which the band 10-10.5 GHz is allocated in Region 1, as well as protection of EESS (passive) in the 10.6-10.7 GHz should be ensured.
* no additional regulatory and technical constrains should be imposed on radio services in Region 1 operating in accordance with the RR.

Method 6A or 6C from the draft CPM Report

**7.2 International Organisations**

**7.2.1 IARU - Document APG23-5/INF-**[**21**](https://www.apt.int/sites/default/files/2023/02/APG23-5-INF-21_IARU_Views_on_WRC-23_Agenda_Items_1.2_1.12_1.14_1.18_and_9.1Topics_a_and_b.docx)

The IARU opposes the identification of the band 10.0-10.5 GHz for IMT in Region 2 as well as the introduction of a mobile service allocation in the region, which would be a necessary precursor to its identification for IMT. Spectrum sharing with a mass market deployment of mobile systems can be challenging and experiences have shown that the legal implications of national IMT licensing processes and service provider requirements tend to result in removal of national amateur service assignments which can severely affect the development of amateur radio.

*Considering j)* of Resolution 245 (WRC-19) notes that harmonized worldwide arrangements for IMT are “highly desirable;” it logically follows that an undesirable regional identification for IMT must be weighed against the continuing requirements of incumbent services. While studies are only invited with regard to the protection of primary services, *considering k) and l)* and *recognizing c)* of the resolution make no distinction between primary and secondary allocations with regard to the need to protect existing services.

The use and evolving needs of the amateur and amateur-satellite services must not be overlooked as an undesirable regional arrangement for IMT is being considered. The IARU requests that the special status of 10.45-10.5 GHz as a worldwide amateur-satellite allocation with no mobile allocation be respected.

According to above view, IARU supports Method 6A (No change) for the band 10.0-10.5 GHz in a draft CPM Report.

**7.2.2 WMO - Document APG23-5/INF-**[**01**](https://www.apt.int/sites/default/files/2023/01/APG23-5-INF-01_WMO_Position_on_WRC-23_Agenda.docx)

WMO is not in favour of an IMT identification in any of the 6 425-7 025 MHz, 7 025-7 125 MHz, or 10.0-10.5 GHz frequency bands. If an identification is made, WMO would support:

* the continued use of EESS (passive) in the 6 425-7 075 MHz and 7 075-7 250 MHz frequency bands. WMO understands that footnote RR **No 5.458** does not provide an allocation to this service. Nevertheless, due to prime importance of sea-surface temperature measurements made in these frequency bands, WMO encourages administrations to bear in mind the needs of the EESS (passive) service in their future planning of the bands 6 425-7 075 MHz and 7 075-7 250 MHz when considering identification for IMT in these frequency bands,
* the application of appropriate regulatory provisions in the 10.6-10.7 GHz frequency band, with necessary limits to protect EESS (passive) operations from unwanted emissions from IMT operating within the 10.0-10.5 GHz band,

the application of appropriate regulatory provisions to protect EESS (active) operations in the band 10-10.4 GHz band.

**7.2.3 ICAO - Document APG23-3/INF-**[**15**](https://www.apt.int/sites/default/files/2021/10/APG23-3-INF-15_ICAO-Position_for_ITU_WRC-23.docx)

To oppose any proposal in the frequency band 6 425-7 025 MHz in Region 1 that would reduce the level of protection below an acceptable level and hence compromise flight test operations.

To oppose any proposal in the frequency bands 3 600-3 800 MHz and 6 425-7 025 MHz that could lead to harmful interference or could constrain the use of these bands by the FSS for the provision of aeronautical services or GSO MSS feeder links.

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1. 1 Including studies with respect to services in adjacent bands, as appropriate. [↑](#footnote-ref-1)