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| U.S. Radiocommunications Sector  Fact Sheet | | |
| **Working Party:** ITU-R WP 5D | **Document No:** USWP5D\_50/14 ctia01 | |
| **Ref:** Resolution **256 (WRC-23)**, Annex 4.9 to Document 5D/792 | **Date:** July 13, 2025 | |
| **Document Title:** Elements of a working document towards preliminary draft CPM text for WRC-27 agenda item 1.7 | | |
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| **Purpose/Objective:** This contribution advances the preliminary efforts towards developing draft CPM text for WRC-27 agenda item 1.7. | | |
| **Abstract:** As designated by CPM27-1, Working Party 5D is the responsible Working Party for carrying out the sharing and compatibility studies called for in Resolution 256 (WRC-23) as well as developing the draft CPM text for WRC-27 agenda item 1.7. While studies are still under developing in WP 5D, several contributions have considered the early foundation of the draft CPM text. This contribution aims to contribute to that effort. | | |

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| **Radiocommunication Study Groups** |  |
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| **xx, September, 2025** |
| **English only** |
| United States of America | |
| |  | | --- | | ELEMENTS OF A WORKING DOCUMENT TOWARDS PRELIMINARY  DRAFT CPM TEXT FOR WRC-27 AGENDA ITEM 1.7 | |  | | |

# 1 Introduction

At the previous two meetings of WP 5D (February and June 2025), contributions from several members were received that initiated the creation of draft CPM text for WRC-27 agenda item 1.7. Noting the sharing and compatibility studies called for in Resolution **256 (WRC-23)** are ongoing, in the attached, the United States offers suggested edits to Annex 4.9 of the Chair’s Report. All edits are shown in tracked changes and highlighted.

As with previous IMT agenda items, the United States supports the development of the concise summary of studies (Section 3 of the CPM text) conducted this cycle to be developed in each specific drafting group, which can be incorporated and then further considered by members as the draft CPM text is developed.

attachment

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| Annex 4.9 to Working Party 5D Chair’s Report |
| |  | | --- | | ELEMENTS OF A WORKING DOCUMENT TOWARDS PRELIMINARY  DRAFT CPM TEXT FOR WRC-27 AGENDA ITEM 1.7 | |  | |

[Editor’s note: This document was not reviewed nor agreed during the WP 5D meetings in February and June 2025, and thus the tracked changes are kept for the proposals received at those meetings for future review.]

CHAPTER 2

Fixed, mobile and radiolocation issues

(Agenda items 1.7, 1.8, 1.9, 1.10)

Agenda item 1.7

(**WP 5D / WP 3K, WP 3M, WP 4A, WP 4C, WP 5A, WP 5B, WP 5C, WP 7B, WP 7C, WP 7D**)

*1.7 to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution****256 (WRC23)****;*

Resolution **256 (WRC-23)** – *Sharing and compatibility studies and development of technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz for the terrestrial component of IMT*

# 2/1.7/1 Executive summary

*[Text of the executive summary, not more than half a page of text to describe briefly the purpose of the agenda item, summarize the results of the studies carried out and, most importantly, provide a brief description of the method(s) identified that may satisfy the agenda item]*.

# 2/1.7/2 Background

WRC-27 agenda item 1.7 focuses on the identification of additional frequency bands for the terrestrial component of International Mobile Telecommunications (IMT), as outlined in Resolution **265 (WRC-23)**. It calls for studies addressing technical, operational, and regulatory considerations in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz, and 14.8-15.35 GHz. These studies aim to support the growing demand for IMT, particularly in the context of IMT-2030, which emphasizes ultra-low latency and high-data-rate applications.

IMT-2030 requires harmonized spectrum allocations to enable global roaming and economies of scale. As the demand for IMT services grows, contiguous spectrum blocks become essential for supporting emerging applications. The studies would also evaluate sharing and compatibility to ensure IMT’s deployment does not interfere with existing primary services, including those in international waters and airspace, and to protect adjacent bands without adding regulatory burdens.

At WRC-27, based on the results of study, the identification of all or parts of these frequency bands will be considered in different regions. The goal is to address the growing IMT needs while ensuring compatibility with existing services, fostering technological advances, and supporting developing countries.

# 2/1.7/3 Summary and Analysis of the results of ITU-R studies

*[This section should contain a summary of the technical and operational studies performed within ITU-R, including a list of relevant ITU-R Recommendations. Depending on the agenda item, this section could be divided in two parts, one part dealing with the summary and the other part dealing with the analysis.*

*The results of the ITU-R studies should also be analysed with respect to the possible methods of satisfying the agenda item and presented in a concise manner.]*

## 2/1.7/3.1 Relevant ITU-R Recommendations and Reports

Recommendations ITU-R: F.758, M.2059, M.2085, M.2089, M.2101, M.2116, M.2160, P.452, P.528, P.619, P.1411, P.1238, P.1812, P.2001, P.2108, P.2109, S.465, S.1528, SA.514, SA.609, SA.1014, SA.1734, SA.1734, SM.1132-2, [TBD].

Reports ITU-R: M.2109, M.2320, M.2370, M.2376, SA.363, SA.2309, SA.2488, [TBD].

## 2/1.7/3.2 Sharing and compatibility studies

The following subsections present results of the sharing and compatibility studies for each frequency band.

[Note: The United States is of the view that the summary of sharing/compatibility studies conducted this cycle should be developed in a concise manner by the technical drafting group considering the studies. The output of that effort should then be reviewed by members as WP 5D finalizes its work on the draft CPM text.]

### 2/1.7/3.2.1 Frequency range 4 400-4 800 MHz

Within the frequency range 4 400-4 800 MHz, the FS, MS and FSS are allocated on a primary basis. The frequency bands adjacent to this frequency range are allocated to the AM(R)S, ARNS, FS and MS on a primary basis. The details of these allocations and those of the adjacent frequency bands can be found in the Radio Regulations (RR).

It is worth mentioning that RR Appendix **30B** (rev. **WRC-23**) contains worldwide Plans in the 4/6 GHz and 10‑11/13 GHz frequency bands. The Plans and their associated procedures are a worldwide treaty[[1]](#footnote-2). While this agenda item pertains to sharing studies to ensure the protection of the receive FSS earth stations, studies were conducted in advance of WRC-23 on the impact of IMT on the space station (see WRC-23/[03](https://www.itu.int/md/R23-WRC23-C-0003/en), Report of CPM23-2).

### 2/1.7/3.2.2 Frequency range 7 125-8 400 MHz

Within the frequency range 7 125-8 400 MHz, the FS, MS, SRS, EESS, MetSat, FSS, MMSS, MSS (see RR No. **5.461**) and SOS (see RR No. **5.459**) are allocated on a primary basis. The frequency bands adjacent to this frequency range are allocated to the FS, MS and SRS on a primary basis. The details of these allocations and those of the adjacent frequency bands can be found in the Radio Regulations.

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### 2/1.7/3.2.3 Frequency range 14.8-15.35 GHz

Within the frequency range 14.8-15.35 GHz, the FS, MS, and SRS are allocated on a primary basis. The frequency bands adjacent to this frequency range are allocated to the FS, MS, FSS, EESS (passive), RAS and SRS (passive) on a primary basis. The details of these allocations and those of the adjacent frequency bands can be found in the Radio Regulations.

2/1.7/4 Methods to satisfy the agenda item

*[This section should contain the brief description of the Method or Methods to satisfy the agenda item as per section A2.4 of Annex 2 to* [Resolution *ITU-R 2-9*](https://www.itu.int/pub/R-RES-R.2-9-2023)]







2/1.7/4.1 Band 1 – 4 400-4 800 MHz (Regions 1 and 3)

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2/1.7/4.1 Frequency band 1 – 4 400-4 800 MHz

[Brief text describing band 1, if any]

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Brief text describing frequency band 1, if any]

2/1.7/4.1.1 Method 1A: [title of Method 1A, if any]

[Text describing the first method to satisfy the agenda item in band 1]

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[Text describing the first method to satisfy the agenda item in frequency band 1]

2/1.7/4.1.2 Method 1B: [title of Method 1B, if any]

[Text describing the second method to satisfy the agenda item in band 1]

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[Text describing the second method to satisfy the agenda item in frequency band 1]

[Additional sections with text describing other methods to satisfy the agenda item in band 1, if any]

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[Additional sections with text describing other methods to satisfy the agenda item in frequency band 1, if any]

2/1.7/4.2 Band 2 – 7 125-8 400 MHz

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**2/1.7/4.2 Frequency band 2 – 7 125-8 400 MHz**

[Brief text describing Band 2, if any ]

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[Brief text describing frequency band 2, if any ]

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2/1.7/4.2.1 Method 2A: [title of Method B1, if any]

[Text describing the first method to satisfy the agenda item in band 2]

/

[Text describing the first method to satisfy the agenda item in frequency band 2]

2/1.7/4.2.2 Method 2B: [title of Method 2B, if any]

[Text describing the second method to satisfy the agenda item in band 2]

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[Text describing the second method to satisfy the agenda item in frequency band 2]

[Additional sections with text describing other methods to satisfy the agenda item in band 2, if any]

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[Additional sections with text describing other methods to satisfy the agenda item in frequency band 2, if any]

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2/1.7/4.3.1 Method 3A: [title of Method 3A, if any]

[Text describing the first method to satisfy the agenda item in band 3]

/

2/1.7/4.3.2 Method 3B: [title of Method 3B, if any]

[USA Note: This method is unclear as it is not known which band is identified for IMT. Should be presented as an option within an IMT identification method.]

This method proposes that IMT stations shall not claim protection from existing and future earth stations of the space research service and No. **5.43A** does not apply.

[Additional sections with text describing other methods to satisfy the agenda item in band 3, if any]

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2/1.7/4.4.1 Method 4A

[USA Note: No issue providing a “No Change” proposal for all or parts of the band, but it should be contained within frequency range/method 2.]

This method proposes no change to the Radio Regulations in the frequency band 7 900-8 400 MHz. The proponents of this method believe that as reverse / opposite direction compatibility studies from incumbent services and their future developments to incoming IMT were not carried out it will lead to significant additional regulatory and technical constraints on those incumbent services and put burden on administrations as shown in some studies.

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2/1.7/4.4.2 Method 4B

[USA Note: This method is unclear as it is not known which band is identified for IMT. Should be presented as an option within an IMT identification method.]

This method proposes that IMT stations shall not claim protection from existing and future stations of the fixed-satellite and mobile-satellite services and No. **5.43A** does not apply.

[Additional sections with text describing other methods to satisfy the agenda item in band 4, if any]

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2/1.7/4.5 Band 5 – 14.8-15.35 GHz

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2/1.7/4.3 Frequency band 3 – 14.8-15.35 GHz

[Brief text describing band 5, if any]

2/1.7/4.5.1 Method 5A: [title of Method 5A, if any]

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2/1.7/4.3.1 Method 3A: [title of Method 3A, if any]

[Text describing the first method to satisfy the agenda item in band 5]

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[Text describing the first method to satisfy the agenda item in frequency band 3]

2/1.7/4.5.2 Method 5B: [title of Method 5B, if any]

/

2/1.7/4.3.2 Method 3B: [title of Method 3B, if any]

[Text describing the second method to satisfy the agenda item in band 5]

/

[Text describing the second method to satisfy the agenda item in frequency band 3]

[Additional sections with text describing other methods to satisfy the agenda item in band 5, if any]

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[Additional sections with text describing other methods to satisfy the agenda item in frequency band 3, if any]

2/1.7/5 Regulatory and procedural considerations

2/1.7/5.1 Band 1 – 4 400-4 800 MHz (Regions 1 and 3)

**/**

2/1.7/5.1 Frequency band 1 – 4 400-4 800 MHz

2/1.7/5.1.1 For Method 1A: [title of Method 1A]

[Example(s) of regulatory text for the first method to satisfy the agenda item in band 1]

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[Example(s) of regulatory text for the first method to satisfy the agenda item in frequency band 1]

2/1.7/5.1.2 For Method 1B: [title of Method 1B]

[Example(s) of regulatory text for the second method to satisfy the agenda item in band 1]

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[Example(s) of regulatory text for the second method to satisfy the agenda item in frequency band 1]

[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in band 1, if any]

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[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in frequency band 1, if any]

2/1.7/5.2 Band 2 – 7 125-8 400 MHz

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2/1.7/5.2 Frequency bandv2 – 7 125-8 400 MHz

2/1.7/5.2.1 For Method 2A: [title of Method 2A]

[Example(s) of regulatory text for the first method to satisfy the agenda item in band 2]

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[Example(s) of regulatory text for the first method to satisfy the agenda item in frequency band 2]

2/1.7/5.2.2 For Method 2B: [title of Method 2B]

[Example(s) of regulatory text for the second method to satisfy the agenda item in band 2]

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[Example(s) of regulatory text for the second method to satisfy the agenda item in frequency band 2]

[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in band 2, if any]

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[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in frequency band 2, if any]

[USA Note: Since the 7125-7250 MHz band is being considered globally, efforts should be made to harmonize the regulatory examples given the commonality of incumbent services.]

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2/1.7/5.5 Band 5 – 14.8-15.35 GHz

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2/1.7/5.3 Frequency band 3 – 14.8-15.35 GHz

2/1.7/5.5.1 For Method 5A: [title of Method 5A]

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2/1.7/5.3.1 For Method 3A: [title of Method 3A]

[Example(s) of regulatory text for the first method to satisfy the agenda item in band 5]

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[Example(s) of regulatory text for the first method to satisfy the agenda item in frequency band 3]

2/1.7/5.5.2 For Method 5B: [title of Method 5B]

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2/1.7/5.3.2 For Method 3B: [title of Method 3B]

[Example(s) of regulatory text for the second method to satisfy the agenda item in band 5]

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[Example(s) of regulatory text for the second method to satisfy the agenda item in frequency band 3]

[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in band 5, if any]

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[Additional sections with example(s) of regulatory text for the other methods to satisfy the agenda item in frequency band 3, if any]

1. **8.18** No provision of this Appendix shall be considered as modifying the requirements of Article **9** relating to coordination between earth stations in the fixed-satellite service and stations of terrestrial services sharing the planned bands on an equal primary basis.     (WRC‑03) [↑](#footnote-ref-2)