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| U.S. Radiocommunications SectorFact Sheet |
| **Working Party:** ITU-R WP 5B | **Document No:** USWP5B32-02 |
| **Ref:** WRC-27 AI 1.7 | **Date:** March 7, 2024 |
| **Document Title:** Proposed draft liaison statement to Working Party 5D |
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| **Purpose/Objective:** This contribution proposes a draft liaison statement to WP 5D regarding AI 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 (WRC-23)**. This contribution provides an initial response which will allow WP 5D to proceed with its planning. |
| **Abstract:** Pursuant to Resolution **256 (WRC-23)**, in preparation for Agenda Item 1.7 (**WRC-27**), this contribution proposes a draft reply liaison statement to WP 5D with relevant technical information of the systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.7. |

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| **Radiocommunication Study Groups** |  |
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| United States of America |
| proposed draft reply liaison statement to Working party 5D**Relevant technical information for sharing studies under WRC-27 Agenda Item 1.7** |
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**Introduction**

WRC-27 Agenda Item 1.7 considers 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 (WRC-23)**. This contribution proposes a draft reply liaison statement to WP 5D with relevant technical information of the systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.7.

Attachment: 1

ATTACHMENT

# Working Party 5B

PROPOSAL DRAFT REPLY LIAISON STATEMENT TO WORKING PARTY 5D

**Relevant technical information for sharing studies under WRC-27 Agenda Item 1.7**

Working Party (WP) 5B thanks WP 5D for its liaison statement in Document 5B/4, requesting the characteristics and protection criteria of the systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz under WRC-27 AI 1.7, for sharing and compatibility studies.

WP 5B notes that the adjacent frequency band 4 200-4 400 MHz is allocated to the primary aeronautical mobile (R) service (AM(R)S) for use of wireless avionics intra-communication system (WAICS) under RR No. 5.436, and to the primary aeronautical radionavigation service (ARNS) for use of radio altimeters onboard aircraft and associated transponders on ground under RR No. 5.438. The frequency band 4 400-4 900 MHz is allocated to the primary aeronautical mobile service. The frequency band 14.5-15.35 GHz is allocated to the primary aeronautical mobile service.

WP 5B also notes that the adjacent frequency band 15.35-15.4 GHz is subject to RR No. 5.340 where all emissions are prohibited.

WP 5B highlights the following ITU-R Recommendations and Reports that provide relevant technical information to conduct the sharing and compatibility studies:

**Recommendation ITU-R M.2059-0** Operational and technical characteristics and protection criteria of radio altimeters utilizing the band 4 200-4 400 MHz (02/2014)

**Recommendation ITU-R M.2067-0** Technical characteristics and protection criteria for Wireless Avionics Intra-Communication systems (02/2015)

This recommendation provides the technical and operational characteristics and protection criteria for wireless avionics intra-communication (WAIC) systems operating in the frequency band 4 200-4 400 MHz, as described in its Annex.

**Report ITU-R M.2319-0** Compatibility analysis between wireless avionic intra-communication systems and systems in the existing services in the frequency band 4 200-4 400 MHz (11/2014)

This report contains compatibility studies between radio altimeters and WAIC systems on board separate aircraft in the 4 200-4 400 MHz band.

**Recommendation ITU-R M.2116-0** Technical characteristics and protection criteria for the aeronautical mobile service systems operating within the 4 400-4 990 MHz frequency range

This recommendation is being revised in ITU-R WP 5B. The latest information can be found in Annex XX of the Chairman’s Report (5B/XXX).

**Recommendation ITU-R M.2089-0** Technical characteristics and protection criteria for aeronautical mobile service systems in the frequency range 14.5-15.35 GHz

This recommendation is being revised in ITU-R WP 5B. The latest information can be found in Annex XX of the Chairman’s Report (5B/XXX).

WP 5B requests to be kept informed on the progress of the studies under WRC-27 agenda item 1.7 and will provide to WP 5D any relevant updated/additional information, before 31 December 2024 deadline, for studies under this WRC-27 agenda item.

Status: action

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