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| U.S. Radiocommunications Sector  Fact Sheet | |
| **Working Party:** ITU-R WP 4C | **Document No:** USWP4C-12 |
| **Ref:** N/A | **Date:** 22 Mar 2024 |
| Document Title: Draft Liaison Statement [AI 1.13 sharing and compatibility studies] | |
| **Author(s)/Contributors(s):**  Jameson Dempsey  SpaceX  Zahid Islam  SpaceX  Brett Tarnutzer  SpaceX  Pascale Dumit  T-Mobile | Email: [Jameson.Dempsey@spacex.com](mailto:Jameson.Dempsey@spacex.com)  Phone:  Email: [km.islam@spacex.com](mailto:km.islam@spacex.com)  Phone:  Email: [brett.tarnutzer@spacex.com](mailto:brett.tarnutzer@spacex.com)  Phone:  Email: [Pascale.Dumit@T-Mobile.com](mailto:Pascale.Dumit@T-Mobile.com)  Phone: |
| **Purpose/Objective:**  Draft liaison statements to the contributing groups for the technical and operational characteristics including propagation models, as appropriate, for the sharing and compatibility studies under WRC-27 Agenda item 1.13. | |
| **Abstract:** The proposed contribution contains proposed liaison statements to be sent to all contributing groups to WRC-27 Agenda Item 1.13. | |

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| Source: -  Subject: WRC-27 agenda item 1.13 | **Document 4C/TBD** |
| **TBD May 2024** |
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| Draft LIAISON STATEMENTS TO WORKING PARTies 3L, 3M, 4A, 4B, 5A, 5B, 5C, 5D, 6A, 7B, 7C   |  | | --- | |  |   **WRC-27 agenda item 1.13** | |

Attachment: 3

**Attachment 1**

Draft LIAISON STATEMENT TO WORKING PARTies 4A, 4B, 5A, 5B, 5C, 5D, 6A, 7B, 7C

**WRC-27 Agenda Item 1.13**

Agenda item 1.13 calls for studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage.

Working Party 4C is looking at conducting sharing and compatibility studies in bands between 694 - 2 700 MHz identified for IMT in the Radio Regulations and reflected in Recommendation ITU-R M.1036.

Therefore, the contributing Working Parties identified by CPM 27-1 are requested to provide relevant information, including technical and operational characteristics and protection criteria for the respective primary and secondary services allocated in, or adjacent to, these frequency bands identified for IMT.

Working Party 4C will keep all the contributing Working Parties informed of developments regarding this agenda item.

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| **Status:** For action | |
| **Deadline:** Preferably by [] | |
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**Attachment 2**

Draft LIAISON STATEMENT TO WORKING PARTies 3L, 3M

**WRC-27 Agenda Item 1.13**

Agenda item 1.13 calls for studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage.

Working Party 4C is looking at conducting sharing and compatibility studies in bands between 694 - 2 700 MHz identified for IMT in the Radio Regulations and in conformance with the directionalities of the terrestrial frequency arrangements in Recommendation ITU-R M.1036.

Therefore, Working Parties 3L and 3M are requested to provide relevant information on radio wave propagation models and provisions of their application for use in conducting sharing and compatibility studies under WRC-27 agenda item 1.13.

Working Party 4C would like to note different possible propagations paths including space-to-ground and space to aircraft.

Working Party 4C notes that the uplink direction is still being analyzed therefore Working Party 4C will keep Working Parties 3L and 3M informed if studies for this direction are necessary and if so, Working Party 4C will indicate the additional possible propagations paths for which to provide the radio wave propagation models.

Working Party 4C will keep all the contributing Working Parties informed of developments regarding this agenda item.

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| **Status:** For action | |
| **Deadline:** Preferably by [] | |
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**Attachment 3**

Draft REPLY LIAISON STATEMENT TO WORKING PARTY 5D

**WRC-27 Agenda Item 1.13**

In February 2024, Working Party 5D sent a liaison statement to Working Party 4C (see [Doc 4C/3](https://www.itu.int/md/R23-WP4C-C-0003/en)) seeking information on the “system description and functionality, including frequency bands considered for Earth-space and space-Earth operation” to enable Working Party 5D to provide Working Party 4C information on the sharing scenarios necessary for assessing the impact to IMT terrestrial systems”.

Working Party 5D is also seeking confirmation that planned “operations would conform to the directionality of the terrestrial frequency arrangements as defined in Recommendation ITU-R M.1036”.

In response to the liaison statement from Working Party 5D, Working Party 4C is pleased to confirm that the envisaged operations for these types of satellite networks would conform to the directionalities of the terrestrial frequency arrangements as defined in Recommendation ITU-R M.1036 for the paired arrangements frequency division duplex (FDD) frequency bands, noting that neighboring administrations may operate different frequency arrangements (e.g. FDD and/or TDD) for the terrestrial component of IMT. This will be taken into account when performing the sharing and compatibility studies to protect the terrestrial component of IMT.

The use of TDD frequency arrangements for these types of satellite networks is still under discussion and Working Party 4C will update Working Party 5D as discussions progress.

With respect to the envisaged system description and characteristics for these types of satellite networks, Working Party 4C will provide the corresponding information at the second Working Party 4C in October 2024.

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| **Status:** For action | |
| **Deadline:** Preferably by [] | |
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