



Key topics under
mobile satellite
communications
(MSS)

SUMMARY OF WRC-27 AGENDA ITEMS 1.11–1.14: MOBILE SATELLITE ISSUES



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WRC-27 Agenda Items 1.11–1.14

WRC-27 MSS Agenda Overview

WRC-27 agenda items 1.11 to 1.14 focus on Mobile Satellite Service issues derived from WRC-23 decisions and ITU-R resolutions.

Space-to-Space Satellite Links (AI 1.11)

Agenda 1.11 introduces space-to-space links enabling satellite communication in L-band frequencies.

Low-Data-Rate MSS for IoT (AI 1.12)

Agenda 1.12 targets low-data-rate Mobile Satellite Service (LDR MSS) to enhance Internet of Things and machine-to-machine communications.

MSS Integration with Terrestrial Mobile

Agenda 1.13 and 1.14 explore MSS use within IMT bands and new 2 GHz allocations to boost satellite-mobile integration.

General Overview

Space-to-Space Satellite Links

Agenda 1.11 focuses on NGSO and GSO satellite communications coexisting in the L-band with existing services.

Low-Data-Rate MSS for IoT

Agenda 1.12 studies MSS applications supporting massive IoT and M2M communications with minimal bandwidth in low-data-rate scenarios.

MSS Direct-to-Device in IMT Bands

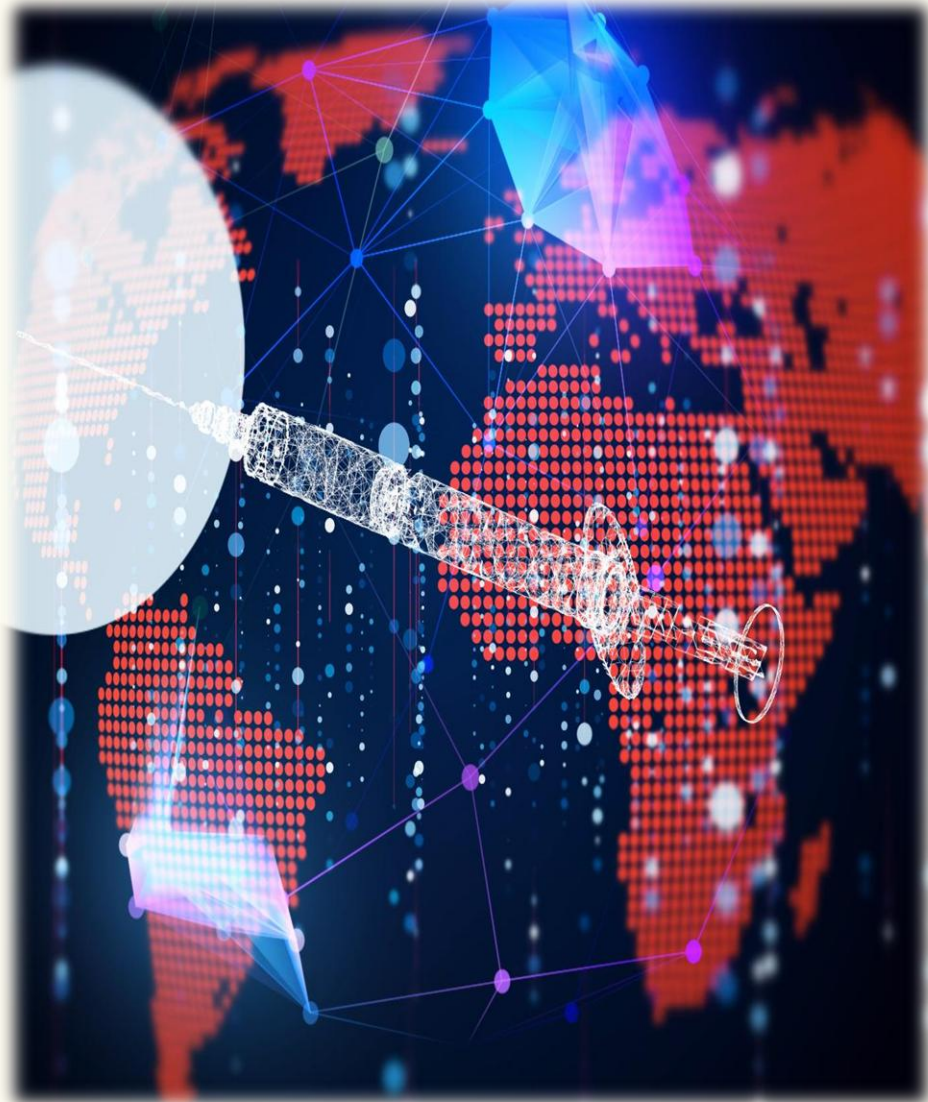
Agenda 1.13 explores mobile-satellite service (MSS) for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment (UE) in IMT bands (DC-MSS-IMT) to complement terrestrial networks while protecting terrestrial IMTs.

New MSS Allocations in 2 GHz Band

Agenda 1.14 evaluates potential MSS allocations in the congested 2 GHz band overlapping with IMT and other services.



Objectives of the Agenda Items 1.11–1.14



Space-to-Space Satellite Links

Agenda Item 1.11 supports inter-satellite communication using L-band frequencies while protecting existing services.

Low-Data-Rate MSS for IoT

Agenda Item 1.12 enables low-data-rate mobile satellite systems to efficiently support IoT and M2M applications.

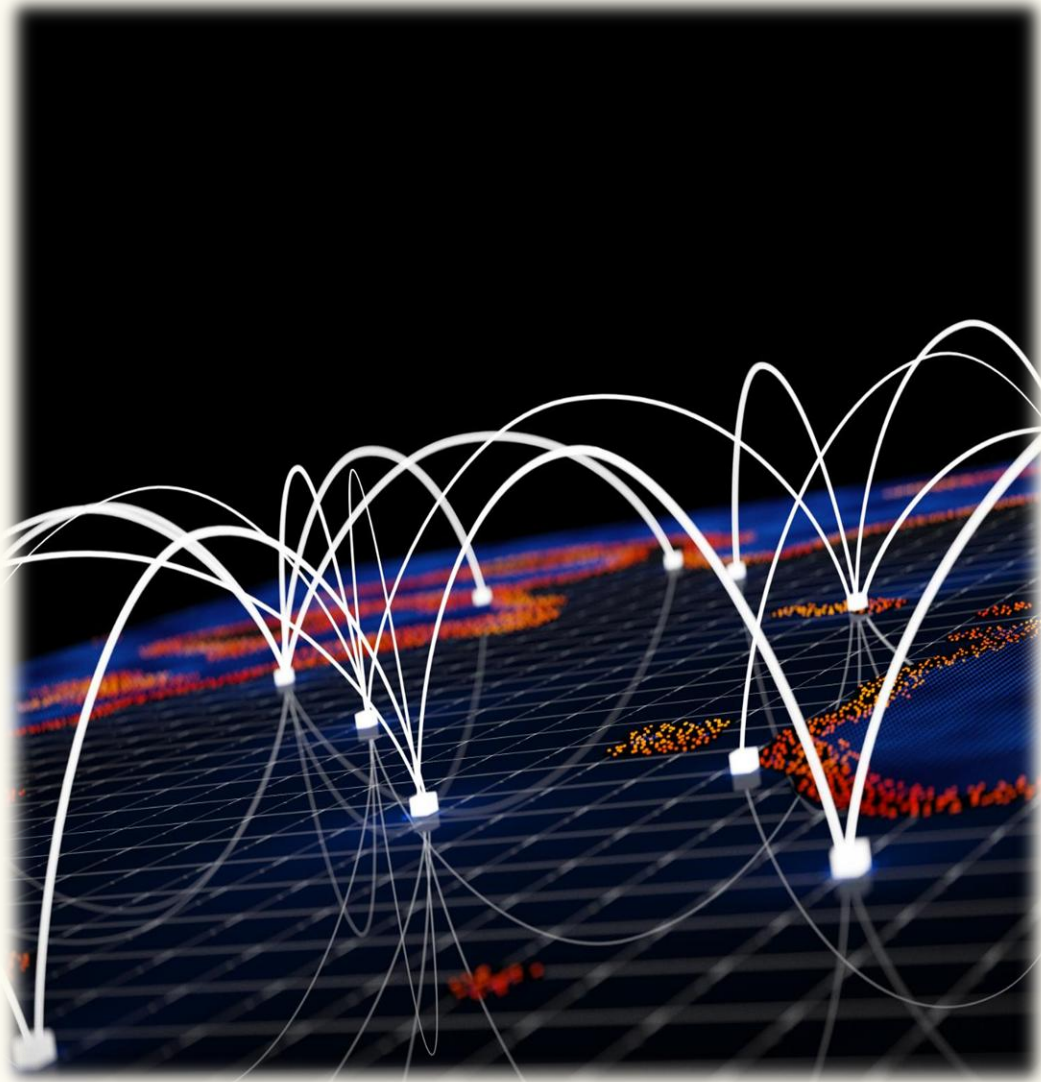
Direct-connectivity MSS-IMT

Agenda Item 1.13 allows MSS connectivity to smartphones and IoT devices in IMT bands maintaining service priority.

New MSS Allocations in 2 GHz Bands

Agenda Item 1.14 evaluates new mobile satellite system allocations while protecting existing IMT services.

Status of Studies for AI 1.11–1.14 (Mid-2026)



Agenda Item 1.11 Studies

Ongoing studies focus on satellite network topologies, power levels, antenna characteristics, and sharing with existing services.

Agenda Item 1.12 Assessment

Evaluating spectrum needs and coexistence for low-data-rate MSS systems, refining protection criteria and methodologies.

Agenda Item 1.13 Compatibility

Studying sharing between MSS direct-to-device connectivity and IMT networks, with MSS as a secondary and non-exclusive service.

Agenda Item 1.14 Coexistence

Focusing on coexistence in the 2 GHz band with overlaps from other agenda items, using a no-change regulatory baseline.

Key Takeaways and Outlook Towards the Conference

Ongoing Study and Uncertainty

All agenda items remain under study with no predetermined outcomes, hence requiring significant technical work.

Major Challenges

Challenges include harmonizing study methodologies, managing overlapping frequencies, and protecting incumbent services.

Regulatory Positions

Many administrations favor a 'No Change' position unless studies show no harmful interference from new applications.

Outlook Toward WRC-27

Final decisions depend on study outcomes and negotiations; technical engagement and coordination are vital.

*Thank
You!*



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