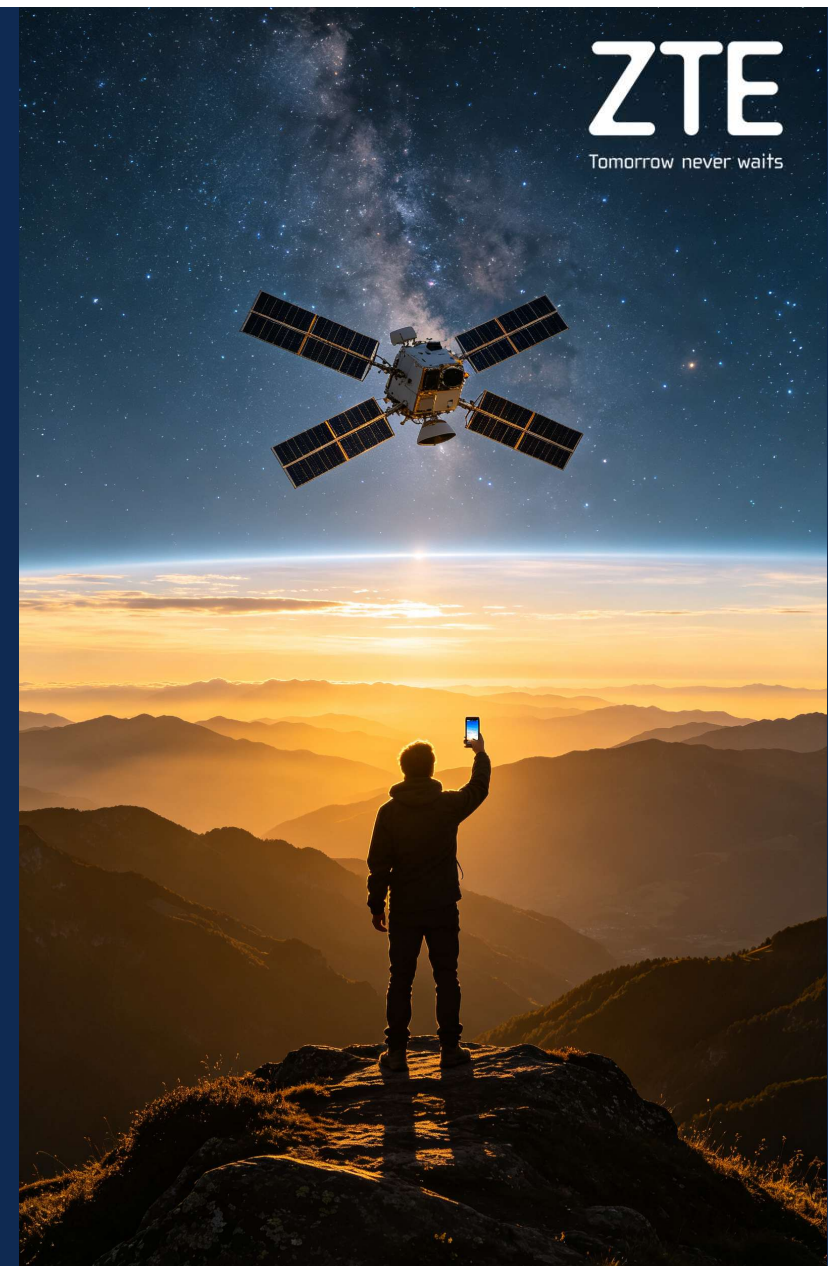


WRC-27 • AGENDA ITEM 1.13

DC-MSS-IMT

September 2026



DC-MSS-IMT

Direct Connectivity between Mobile Satellite Service space stations and IMT user equipment

A technical and regulatory framework that allows satellites to connect directly to standard mobile phones using IMT bands below 2.7GHz in Rec. ITU-R M.1036

Main Benefits

- Remote Access — coverage over oceans, mountains, deserts and so on
- Complementary Service — extends coverage beyond traditional terrestrial network
- Disaster Recovery — emergency communications when ground infrastructure is broken

Responsibility	WP 4C	WP 5D
Description of operational concepts / functionality of DC-MSS-IMT	✓	
Technical & operational characteristics of MSS for DC	✓	
Decision on which frequency bands and arrangements to be studied	✓	
Technical & operational characteristics of terrestrial IMT networks for sharing studies		✓
Sharing & compatibility studies with incumbent services	✓	
Develop regulatory limits to protect terrestrial IMT for draft CPM text		✓
Development of draft CPM text	✓	
Development of Reports / Supporting Materials	✓	

Views on AI 1.13

- 1 Direct connectivity between satellites and IMT UEs complements terrestrial IMT coverage.
- 2 The status of new MSS allocation should be on secondary basis to IMT, and new MSS allocation should ensure the protection to terrestrial IMT.
- 3 Studies should be based on the frequency bands agreed in WP 4C.
- 4 DC-MSS-IMT using mobile spectrum should be provided through MNO license.
- 5 Agreement with MNOs must be in place to use their licensed spectrum in the licensed area.



Protection of terrestrial IMT in an un-authorized area

1

Regulations

Interference issue needs to be addressed through regulations.

2

Appropriate RR metrics

Appropriate protection limits is necessary.

3

Verification methodology

A common calculation methodology as well as compliance process



Regulatory Considerations

01 MNO / SNO Agreement

Required as a prerequisite for any DC-MSS-IMT operation.

02 Roles & Responsibilities

Notifying and authorizing administrations should take responsibility for eliminating harmful interference.

03 Frequency Arrangement Harmonisation

Alignment with IMT band plans and UL/DL directionality, while taking into account regional differences.

04 UE Authorisation & Service Area

Space stations connect only with authorized UEs. National jurisdictional territory must be respected.

Thank you

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Direct Connectivity

MSS $\rightleftharpoons$ IMT UE

September 2026