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New Delhi, India

**GSMA's Response to the TRAI Consultation Paper on "Consultation Paper on
the Framework for Satellite Communication Network
Authorisation, and Assignment of Spectrum to Satellite
Communication Network Providers"**

Dear Mr. Trivedi,

The GSMA is pleased to submit its response to the Telecom Regulatory Authority of India's (TRAI's) Consultation Paper on the *Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Provider*.

We trust that this submission will assist TRAI in its deliberations and remain available for any further information or discussion the Authority may require.

Yours sincerely,

Jeanette Whyte
Head of Public Policy, APAC
GSMA



GSMA's Response to TRAI Consultation Paper on the Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers

Direct-to-Device (D2D) satellite connectivity describes the ability of satellites to communicate directly with standard unmodified or modified mobile handsets. When deployed in partnership with mobile network operators (MNO), D2D can serve as a valuable supplementary layer to India's terrestrial mobile networks — extending mobile coverage to sparsely populated areas or inaccessible locations.

1. Regulatory Terms and conditions for Satellite

India has consistently been at the forefront of recognising technological advancements, with satellite communications being a key example. The GSMA appreciates India's efforts in recognising the need to have a framework that not only reflects the evolving satellite business models and need to give an enabling framework to innovative technologies but also supports innovation and fair market access that promotes broader public benefits of satellite connectivity, while balancing current market dynamics with existing operators.

To help guide the development of regulatory frameworks in cases where new LEO services are offered directly to end users, the GSMA published a position paper on Regulatory Preparedness for Satellite Services¹.

Among the five core principles outlined in the paper, the principle of regulatory parity is the most critical. To promote fair competition and support consistent market conditions, regulatory and legal frameworks should set comparable requirements for mobile and satellite service providers when they deliver similar types of services. Where similar services are subject to different regulatory treatment, this may result in uneven levels of consumer protection, gaps in service reliability, and inconsistencies in areas such as lawful access and security.

Where satellite operators offer direct-to-user services (without partnerships with mobile operators) like satellite broadband and potentially D2D (in some future forms), equivalent obligations should apply, notwithstanding differences in network architecture. A consistent approach is essential to support fair competition, regulatory clarity and sustained investment across an increasingly diverse connectivity ecosystem. Therefore, we request that all the terms and conditions (equivalent to existing services) should be considered, including areas like regulatory fees, data privacy and protection, equipment approvals, foreign ownership, among others. This would not only ensure accountability within the market and amongst its participants but also helps to build trust and confidence amongst consumers.

¹ <https://www.gsma.com/solutions-and-impact/connectivity-for-good/public-policy/wp-content/uploads/2026/02/Regulatory-Preparedness-for-Satellite.pdf>

2. D2D and its Scope

Terrestrial mobile operators have made huge investments in acquiring spectrum and establishing nation-wide networks. India has achieved remarkable mobile broadband coverage; and mobile services are today the backbone of the digital economy of the country. As D2D is still an emerging technology, any deployment must ensure coexistence with, and avoid interference to, India's heavily relied upon mobile networks.

TRAI may allow mobile operators to offer D2D services in partnership with satellite operators to help connect people outside mobile broadband coverage areas (the coverage gap). However, D2D alone cannot address the larger usage gap, where people within network coverage still do not use mobile internet due to various factors such as the digital literacy, or device related constraints.

The GSMA's paper 'The Limits of D2D'² published in February 2026 models D2D capacity across a range of constellation sizes and spectrum scenarios.

3. ITU WRC-27 Considerations

The World Radiocommunication Conference 2027 (WRC-27) should agree international regulatory conditions for D2D services in IMT bands (694 MHz–2.7 GHz) under Agenda Item 1.13. A successful outcome would provide globally harmonised regulatory, technical and interference parameters, reducing risk for cross-border interference.

As mentioned by the TRAI in the consultation paper, several jurisdictions have established national D2D frameworks ahead of WRC-27 and GSMA recognises that the decision to introduce a national framework rests with TRAI and the Government of India.

4. Spectrum Policy Framework for D2D in MSS bands

The GSMA recommends that in case use of MSS spectrum for D2D services is permitted, the framework should include that:

- While there are no interference concerns in existing MSS bands (L-band and S-band) at present, future services using bands under discussion at WRC-27 must not cause harmful interference to terrestrial mobile networks.
- In case the MSS-based service providers offer service directly to the end user without entering into partnership with the terrestrial MNO, it needs to comply with the same set of licensing, security and consumer-protection obligations, including, lawful interception, KYC, etc., as the terrestrial mobile operators.

² [The-Limits-of-D2D-v2.pdf](#)

5. Spectrum Policy Framework for D2D in IMT bands

A robust policy framework should be in place to enable D2D services in IMT bands . Such a framework must consider how D2D can coexist with terrestrial mobile networks, which serve 5.8 billion³ users globally.

The GSMA recommends that the framework for use of IMT spectrum for D2D services should include that:

- D2D in IMT bands can only be enabled through the spectrum licence of the MNO, in partnership with a satellite operator.
- The use of IMT spectrum through satellite, should be on the basis of no-interference, no-protection (secondary) basis.
- The MNO will retain the responsibility for interference management and compliance with applicable licence conditions.
- Commercial terms between MNOs and satellite operators should remain subject to bilateral negotiation between the parties and not be prescribed by the regulator.
- MNOs should not be subject to additional spectrum charges for using their IMT spectrum for enabling D2D services. Imposing incremental charges would disincentivize D2D deployment, contrary to the objective of expanding connectivity in underserved areas.
- Given that spectrum licences in India are assigned at 22 Licensed Service Area (LSA) level, spectrum harmonisation needs to be considered to enable a clean, interference-free rollout at the initial stage itself.

The GSMA's Spectrum for D2D public policy paper⁴ provides further details on how to make the most of this emerging technology without disrupting the terrestrial mobile services.

GSMA hopes the above submission will merit your kind consideration and we remain available for any questions or additional information that may be required on our submissions.

³ [The Mobile Economy 2026 - The Mobile Economy](#)

⁴ [Spectrum for D2D Public Policy Paper - Spectrum](#)