



VIL/P&O/TRAI/AK/2026/044
May 27, 2026

Advisor (Networks, Spectrum and Licensing)
Telecom Regulatory Authority of India,
Mahanagar Doorsanchar Bhawan,
Jawaharlal Nehru Marg (Old Minto Road),
New Delhi – 110002

Kind Attn: Shri Akhilesh Kumar Trivedi

Subject: Counter-comments on the TRAI's Consultation Paper on the "Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers" dated March 8, 2026.

Dear Sir,

This is in reference to the TRAI's Consultation Paper on Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers" dated March 8, 2026.

In furtherance to the comments submitted by us vide our letter no. VIL/P&O/TRAI/2026/041 dated May 13, 2026, kindly find enclosed herewith counter-comments from Vodafone Idea Limited on the above-said consultation paper.

We hope our submission will merit your kind consideration please.

Thanking you,
Yours sincerely,

For Vodafone Idea Limited

Ambika Khurana
Chief Regulatory & Corporate Affairs Officer

Enclosed: As stated above



VIL Counter Comments to the TRAI Consultation Paper on "The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers"

This is with reference to the TRAI Consultation Paper on "The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers." dated 08.04.2026 and the comments from various stakeholders on this paper, as uploaded on TRAI's website.

Vodafone Idea Limited (VIL) has submitted comments to the questions raised in the above-said consultation paper. Further, we have also gone through the comments of various stakeholders on the above-said consultation paper and would like to submit our counter-comments for Authority's kind consideration, as given below:

1. Standalone License for Satellite (Service + Network) - the Telecommunications Act 2023

- a. One of the stakeholders has mentioned that:

"In view of the above reasons, we recommend that satellite-based communication services — including satellite broadband/internet access, GMPCS, VSAT and satellite-based IoT services— be allowed as a distinct standalone Satellite-based Telecommunication Service Authorisation, rather than being subsumed entirely within terrestrial-focused Access or Internet Service Authorisations. Such an approach would support the orderly growth of India's satcom ecosystem while preserving operational flexibility, encouraging investment and innovation, and complementing 9 terrestrial networks in advancing the shared national objectives of Digital Bharat, universal connectivity, resilience and the growth of India's space economy."

- b. In this regard, we submit that this topic is currently being consulted upon by the DoT. The draft rules issued by the DoT differentiate the service from the medium, proposing an 'Access Authorisation' where entities can use either terrestrial or satellite mediums to provide access services. We view this as a highly appropriate and beneficial long-term approach for the sector.
- c. As this issue is currently subject to an ongoing DoT consultation, addressing it in the present exercise is untenable. Consequently, it would be inappropriate for the Authority to make any recommendations to the DoT in this regard



2. Separation of Network and Service Layers (SCN Authorization)

- a. One of the stakeholders has mentioned that introducing a wholesale Satellite Communication Network (SCN) authorization will create "*regulatory arbitrage*" leading to a "*chaotic regulatory environment*" and that such infrastructure-sharing proposals have "*never benefited a sector*".
- b. Most of the points being expressed by said stakeholder, are deliberate conflation of different topics as well as exaggerated fears, which otherwise also, can be very well addressed and are also being dealt through this comprehensive consultation paper.
- c. Some of the foundational points which gives robustness to the D2D (IMT/MSS) framework and remove any arbitrage, are given as follows:
 - i. **Sharing is beneficial for Capital-intensive sectors:** India's own telecom history invalidates the fear of regulatory chaos. The introduction of the Infrastructure Provider Category-I (IP-1) registration in the year 2000, which featured extremely light-touch regulation, catalysed the fastest and most cost-effective mobile rollout globally. Applying a similar structural separation to the capital-intensive satellite layer will ensure orderly growth and prevent the economically unviable duplication of global gateway infrastructure.
 - ii. The feeder link and user link spectrum (except IMT which should follow existing auction process) should be provided for a shorter-term validity, for it to demonstrate market potential in few years' time and thereafter, it can be suitably reviewed.
 - iii. The SCN entity should not be allowed to give services directly to end consumers and have to mandatorily partner with a Service entity, for the Service entity to provide services to the end consumers.
 - iv. There should be roll-out obligations linked with the spectrum, which should not only be limited to the roll-out of the gateway, but should also extend to the roll-out of services in partnership with a service licensee.
 - v. There should be mandatory guidelines for the SCN entity to extend control, visibility, resource allocation and management to the partnering Service entity, for it to fulfill the compliances linked with the Consumer as well as Security related etc. This has been dealt by the TRAI under Question 4 of the consultation paper.



- vi. The relationship between the SCN entity and the partnering service entity is strictly a Business-to-Business (B2B) arrangement governed by mutually agreed terms and conditions. Should the parties fail to reach an agreement on clear terms, including service continuity, the partnership will simply not materialize. Consequently, this commercial self-regulation inherently mitigates any risk of misuse.
- vii. Allocating satellite feeder link spectrum to an infrastructure entity is the most logical approach, given that this spectrum is designated for shared use.
- viii. User links (except IMT) should only be allocated to a Service entity. IMT spectrum should continue to be assigned through auction process, to access service providers only.

3. Spectrum Assignment Methodology

- a. One of the stakeholders has opposed the administrative assignment of spectrum, arguing that any method other than auctions violates Article 14 of the Constitution (citing the 2G judgment) and disrupts the "Same Service, Same Rules" principle.
- b. We submit that the Parliament of India has enacted the Telecommunications Act, 2023, where Section 4, read with the First Schedule, explicitly provides the legal mandate for the administrative assignment of spectrum for the items mentioned in the said Schedule and it also includes certain satellite-based services.
- c. In the TRAI Recommendations on Terms and Conditions for the Assignment of Spectrum for Certain Satellite-Based Commercial Communication Services (dated 9th May 2025), the Authority explicitly references the Act to confirm the administrative process for certain satellite services.
- d. Similarly, regarding Backhaul spectrum, TRAI highlights official correspondence from the Department of Telecommunications (DoT) which unequivocally confirms this framework in the TRAI Recommendations on Assignment of the Microwave Spectrum (dated 10th December 2025):

"2.While agreeing to the TRAI's observation that Backhaul spectrum is part of First Schedule of the Act, for which the assignment method would be administrative, it is to state that DoT's letter dated 12-08-2022 on the 6/7/13/15/18/21 GHz bands was based upon techno-regulatory state at that point of time. [...]"



It may be noted that current use of 6 GHz (lower)/ 7/ 13/ 15/ 18/ 21 GHz for backhaul purposes continues to be covered under the First Schedule of the Act." (TRAI Recommendations, Dec 2025, pp. 41-43)

- e. Consequently, the administrative assignment of both satellite and backhaul spectrum is part of Authority's considered view and no longer a matter of debate requiring further consultation/examination. It is a fully settled statutory position directly mandated under the Act and explicitly acknowledged by both TRAI and the DoT.
- f. Most importantly, the "Same Service, Same Rules" argument is fundamentally flawed in case of Direct-to-Device (D2D) service through satellite (IMT bands or MSS bands), as the present set of technology cannot compete with or replace high-speed terrestrial mobile networks. Since D2D acts as a supplementary service rather than a true substitute, it does not constitute the "same service" at this stage and therefore, does not warrant the same regulatory rules. Having said that, the concerns should be taken care of by mandating that such services should only be launched in partnership with an access service licensee only.

4. Direct-to-Device (D2D) via IMT Spectrum should wait or not, till WRC-2027

- a. One of the stakeholders has suggested that India must halt any D2D services via IMT spectrum and wait for the outcome of WRC-2027.
- b. We submit that delaying D2D services until after WRC-2027 is a regressive approach that will artificially delay by several years, a life-saving emergency connectivity for India's population living in remote/rural areas or in those areas where it is commercially unviable to provide terrestrial networks.
- c. The interference risks associated with D2D via IMT are highly manageable. Because the IMT spectrum in question is already assigned to the partnering terrestrial operator, who possesses both the technical capability and the commercial imperative to ensure satellite signals do not interfere with the existing terrestrial network. The terrestrial operator will ensure the supremacy and primary right of terrestrial networks, in case of interference risks. Furthermore, Article 4.4 of the ITU Radio Regulations provides a robust international legal basis for immediate implementation.
- d. Global regulatory bodies of the countries, which are early movers and pro-innovation, want to reap in the benefits of such technologies and this, are not waiting for WRC-2027. The US FCC formally adopted the Supplemental Coverage from Space (SCS) framework in March 2024. Regulators in the UK, Canada, and Australia have also advanced similar frameworks, along with many other countries. We strongly urge TRAI



to also recommend a framework now to ensure domestic operators can participate in the early global innovation cycle of D2D technologies and Indian consumers are also benefitted with such connectivity, not after many countries have deployed it but, alongside initial set of countries.

5. Financial Gatekeeping and Regulatory Levies

- a. One of the stakeholders has advocated for steep financial barriers for SCNs, including an 8% Authorization Fee (AGR) matching access service providers, alongside a minimum equity of INR 10 crore, a net worth of INR 25 crore, and an entry fee of INR 1 crore.
- b. We strongly disagree with this proposal, as it artificially inflates the cost of niche D2D satellite services.
- c. Given that SCN entity cannot provide any services to end consumers and all its revenues has to come from the services provided by Partnering service provider to its consumers, there is no case for levying Authorisation fee on SCN entities, as the partnering service entities would anyways be paying 8% of license/authorisation fee. This would be in line with the TRAI recommendations on all other network authorisations under Section 3(1)(b).
- d. Further, SCN entities should operate under a light-touch financial regime to encourage rapid deployment of capital-intensive ground infrastructure, that too for niche services. We recommend no authorization fee and a substantially lower entry barrier (e.g., Rs 10 lakh), analogous to the SESG Authorisation framework.

6. Spectrum for SCN Entities (Restriction to FSS Bands vs. Inclusion of MSS Feeder Bands)

- a. One of the stakeholders has asserted that only feeder-link spectrum specifically in the Fixed Satellite Service (FSS) bands should be assigned to the proposed SCN authorised entities.

“..... only feeder-link spectrum (in FSS bands) should be assigned to SCN operators, while user-link spectrum – including FSS, MSS and IMT bands used for access to end users – should remain with service providers. Further, security and compliance obligations for SCN operators should be calibrated to their network-layer role.”

- b. In this regard, we strongly disagree with this restrictive approach. In our view, there is a clear D2D use case which requires to be implemented in India. For this, the SCN



framework provides an important pillar and as such, it is crucial for SCN entity to have feeder links for D2D services (irrespective of it being provided through MSS or IMT bands).

- c. The assertion that feeder links exclusively be related to FSS band, is technically inaccurate and reflects a fundamental misreading of international telecommunications standards. While it is common practice for satellite networks to utilize FSS bands for feeder links (as permitted under ITU Radio Regulations), it is entirely incorrect to claim that feeder links should not serve D2D services (through IMT or MSS bands).
- d. Artificially locking SCN entities strictly into FSS bands completely ignores the reality of diverse satellite network architectures, which are growingly focussing on D2D services. As VI supports the creation of a robust framework for D2D via IMT/MSS spectrum, it is a technical imperative that the SCN entity providing the backend network-layer connectivity has the regulatory flexibility to utilize feeder links for D2D services as well.

7. Spectrum Holding and Architecture (User- Link Spectrum)

- a. One of the stakeholders has requested that if the SCN model is implemented, the SCN entity should be permitted to hold the spectrum for *both* the feeder link and the user link (Combination 1).

“Without prejudice to the above, if the SCN authorisation framework is nevertheless adopted, Combination 1 (full SCN entity spectrum holding) should be permitted as an alternative when: (a) the SCN entity cannot find a partnering service entity willing to hold spectrum; or (b) the SCN entity's business model requires independent spectrum holding to provide SCNaas to multiple service entities efficiently. This is particularly relevant for NGSO broadband operators who need to optimise spectrum use across their entire constellation without depending on individual service entities' spectrum assignments. Where Combination 1 is used, enhanced conditions should apply, including a formal obligation to offer spectrum access to all eligible service entities, price regulation of SCNaas capacity and enhanced reporting to TRAI.”

- b. In this regard, we strongly disagree with this assertion. We reiterate that while feeder-link spectrum (in both FSS and MSS feeder bands) should be available for assignment to the SCN entities, user-link spectrum must remain exclusively with the access service entities only.



- c. Permitting an SCN entity to hold user-link spectrum entirely defeats the purpose of structural separation between the "network provider" and the "service provider" envisaged under the Telecommunications Act, 2023.
- d. In India, critical consumer-facing obligations including Lawful Interception (LI), devices, KYC norms, Quality of Service (QoS) mandates, and emergency service routing are legally anchored to the entity holding the user-link spectrum and some of them also act as service differentiator between the service entities. Most importantly, in case of D2D services, the spectrum is to be utilised exclusively and not on shared basis.
- e. An SCN entity, operating purely as a wholesale backend network, is neither equipped nor authorised to fulfill these retail-layer national security and consumer obligations. Therefore, granting user-link spectrum to the SCN entity creates an unbridgeable regulatory and security gap and hence, must not be permitted.

8. Mandatory Reference Agreements and Regulated SCNaaS Pricing

- a. One of the stakeholders has demanded strict regulatory oversight, specifically calling for a mandated reference agreement and the regulation of wholesale SCNaaS charges by TRAI, citing the need to protect smaller entities and prevent anti-competitive behaviour.
- b. We outrightly disagree with the said logic and strongly oppose the imposition of mandatory reference agreements or price regulations for SCNaaS.
- c. In telecommunications economic theory, mandatory reference agreements and regulated pricing are utilized to curb Significant Market Power (SMP) between *horizontally* competing entities to prevent the foreclosure of competition. An SCN entity and a service provider are *vertically* related entities. There is currently no market failure or SMP scenario in this nascent sector that warrants heavy-handed ex-ante price regulation. Even RIO was needed for an activity mandated under license i.e. Interconnection, and not for activities driven through commercial factors and market forces like spectrum sharing, trading, passive infra sharing, NSO-VNO relationship, Access - M2M registration relationships etc.
- d. Regulating the reference agreement or the SCNaaS charges, will stifle market forces and thus, also impact investment, that too in the very early stages of deployment and evolution. Commercial arrangements in the satellite sector vary based on proprietary technology (GSO vs. NGSO), bandwidth requirements, geographic risk, service entity's requirements and service level agreements (SLAs). A rigid, uniform regulatory pricing template cannot capture this dynamic technical diversity.



- e. Most importantly, domestic regulatory precedents prove that wholesale infrastructure frameworks flourish under mutual commercial negotiations. The Infrastructure Provider Category-1 (IP-1) regime has driven India's massive tower rollout for over two decades without any mandated RIOs or price caps. Similar case is of the VNO-NSO relationship, where no reference agreement has been mandated.
- f. Therefore, we strongly urge the Authority to neither mandate any reference agreement nor SCNaaS charges; and leave the agreement/charges to be driven by market forces and to be mutually agreed by commercial entities.

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