

**No.: 216/TRAI/2026-27/ACTO**

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Ref: **ACTO's Response/Counter Comments to TRAI's Consultation Paper dated April 8, 2026 on The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers**

Dear Sir,

With reference to the *Consultation Paper on The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers*, issued by Hon'ble Authority, Association of Competitive Telecom Operators (ACTO), is pleased to provide our comments/counter comments.

We hope that our comments (enclosed as Annexure – I) will merit consideration of the Hon'ble Authority.

Thanking you,  
Respectfully submitted

Yours sincerely,  
for **Association of Competitive Telecom Operators**

**Director**

Encl: As above

## Annexure-I

### **ACTO's Comments/Counter Comments on TRAI's Consultation Paper on The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers**

The Association of Competitive Telecom Operators (ACTO) appreciates TRAI for bringing the Consultation Paper on "The Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers" dated 8<sup>th</sup> April, 2026.

#### **Executive Summary:**

ACTO presents the following high-level recommendations for a technology-neutral, competition-friendly framework:

1. **Mandatory Regulatory Separation:** SCN Authorisation must be strictly ring-fenced for network establishment/wholesale SCNaaS provision, kept distinct from end-user service authorisation to ensure clear accountability (security, LI) and regulatory symmetry.
2. **Open Access & VNO Parity:** SCNaaS must be offered wholesale and non-discriminatory to all duly authorized service providers, including VNOs, without imposing additional financial or regulatory burdens based on the delivery medium.
3. **Wholesale Tariff Forbearance:** Wholesale charges and SLA parameters between SCN and service entities are B2B commercial terms and must not be tariff-regulated. Existing non-discrimination rules are sufficient to prevent abuse.
4. **Avoid Double Taxation:** SCNaaS payments must be treated as a mandatory pass-through deduction from the service provider's ApGR to calculate AGR, preventing the double levy of License/Authorisation Fees.
5. **Mandate Operational Control:** The SCN entity must be required to extend necessary control, visibility, and resource management capabilities to the partnering service provider for seamless regulatory compliance and customer management.
6. **Administrative Spectrum Assignment:** Spectrum charging for FSS and MSS must be based on an administrative assignment model, consistent with previous TRAI recommendations, to ensure service affordability.

However, our response to some specific questions in brief is given below:

#### **ACTO's response to the specific questions raised in the consultation paper:**

- Q1. What should be the eligibility conditions, area of operation, validity period of authorisation and the scope of the proposed Satellite Communication Network (SCN) authorisation under Section 3(1)(b) of the**

**Telecommunications Act, 2023? Kindly provide a detailed response with justification.**

**ACTO's response:**

**SCN Authorization (Network Layer Only):** Authorisation must be strictly for SCN establishment/operation (including SESGs) and wholesale SCNaaS provision. It must be ring-fenced from end-user service delivery to ensure regulatory clarity and security compliance. A single, unified SCN license covering both SCN and SESG operation is advocated.

**Q2. What should be the terms and conditions (general, technical, operating, security related etc.) that should be made applicable for the proposed Satellite Communication Network authorisation? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Flexible Market Structure (NSO & VNO):** The framework must permit both Network Service Operators (NSO) and Virtual Network Operators (VNO) to foster a competitive ecosystem, accelerate market reach, and expand deployment in remote areas.

**Q3. Which type of authorised entities should be permitted to seek Satellite Communication Network as a Service (SCNaaS) from the entities holding the proposed Satellite Communication Network authorisation? Whether virtual network operators (VNOs) should also be permitted to seek SCNaaS? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Universal Access for Service Providers (VNO Parity):** All service-authorized entities (Access, Internet, Long-Distance) must be eligible to procure SCNaaS. VNO parity with NSOs is essential to facilitate wider service delivery, especially in enterprise and underserved segments. Eligibility must flow from the underlying service license, without separate gating, additional fees, or financial hurdles.

**Q4 Whether the SCN authorised entity establishing, operating, maintaining, or expanding the baseband system along with SCN should be mandated to extend control, visibility, resource allocation and management of the telecommunication services, being provisioned using SCN to users, to the partnering entity on mutually agreed terms and conditions? Please provide a detailed response with justification.**

**ACTO's response:**

**Operational Control:** Yes, the SCN entity must be mandated to extend the necessary control, visibility, and resource allocation capabilities (e.g., service mandate provisioning,

fault detection, usage data) to the partnering service-authorized entity. This is essential for the service provider to meet its regulatory obligations and manage customer service.

**Q5. What provisions should be included in the terms and conditions of Satellite Communication Network (SCN) authorisation considering the policy/ Act in the Space sector? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Space Policy Alignment:** SCN T&Cs must align with the Indian Space Policy 2023, requiring IN-SPACE authorization for satellite resources. However, IN-SPACE authorization is *not* required for gateways (SESGs), as these are covered by existing telecom licenses. Roles between DoT/TRAI and IN-SPACE must be coherent to avoid conflicting compliance requirements.

**Q6. Whether there is any need for mandating a reference agreement between the entities holding the proposed Satellite Communication Network authorisation and the authorised entities providing telecommunication service? If yes, what should be the salient features of the reference agreement between such entities? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Oppose Mandatory Reference Agreement:** A mandatory reference agreement is too rigid for the evolving market. Instead, prescribe high-level minimum principles (e.g., compliance obligations, responsibilities split, non-discrimination) while leaving commercial terms (charges, SLAs) to B2B negotiation. A non-binding model agreement can be considered to assist smaller service providers

**Q7. With respect to the interconnection with the proposed Satellite Communication Network Authorised Entities, whether there are any other issues in addition to those raised in TRAI's consultation paper on 'Review of existing TRAI Regulations on Interconnection matters' dated 10.11.2025, which require to be addressed in this consultation process? Please provide a detailed response with justification.**

**ACTO's response:**

**Regulate Conduct, Not Tariffs:** Interconnection regulation should focus on outcomes, fair access and non-discrimination. Avoid prescribing charges or detailed SLA parameters. Existing high-level conduct obligations and inter-licensee dispute mechanisms are sufficient for addressing potential abuse.

**Q8. Any other inputs or suggestions relevant to the proposed Satellite Communication Network authorization may kindly provided with detailed justification.**

**ACTO's response:**

**Avoid Double Levies and Incremental Compliance:** Financial and compliance obligations must prevent double levy of taxation (fees/spectrum charges). The service provider's obligations should not increase solely because of the satellite delivery medium. Performance Bank Guarantees must only be linked to actual roll-out obligations imposed on the entity concerned.

**Q9. Which of the following services should be permitted to be provided by using the SCNs established by the proposed SCN authorised entities:**  
**(a) Fixed Satellite Service (FSS);**  
**(b) Mobile Satellite Service (MSS);**  
**(c) Direct-to-Device (D2D) Service via satellite by using MSS spectrum;**  
**(d) Direct-to-Device (D2D) Service via satellite by using IMT spectrum?**  
**Kindly provide a detailed response with justification**

**ACTO's response:**

**Permitted Services (FSS & MSS):** ACTO supports for SCN-based provisioning for Fixed Satellite Services (FSS) and Mobile Satellite Services (MSS). D2D services require a phased approach and careful assessment, including clear distinction from GMPCS.

**Q10. Whether D2D Service via satellite by using IMT spectrum should be permitted at this stage itself, or should this matter be examined after considering the outcome of WRC-2027? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Defer D2D via IMT Spectrum:** Permitting D2D using IMT spectrum at this stage is premature and risks regulatory asymmetry. This should be reviewed after considering international developments, including the outcomes of WRC-2027.

**Q11 From the perspective of holding spectrum for the feeder link and the user link on SCNs, which of the following combinations should be permitted at the SCNs established by the proposed SCN authorised entities:**

<u>Combination No.</u>	<u>Spectrum for the feeder link held by -</u>	<u>Spectrum for the user link held by -</u>
1	SCN authorised entity	SCN authorised entity

2	SCN authorised entity	Partnering entity (service provider)
3	Partnering entity (service provider)	SCN authorised entity
4	Partnering entity (service provider)	Partnering entity (service provider)

Kindly provide a detailed response with justification.

**ACTO's response:** No Comments

**Q12. Which of the following types of spectrum should be assigned to the proposed SCN authorised entities:**

- (a) Spectrum in the frequency bands allocated for FSS
- (b) Spectrum in the frequency bands allocated for MSS
- (c) Any other?

Kindly provide a detailed response with justification.

**ACTO's response:** No Comments

**Q13. What should be the broad policy and regulatory framework for the assignment of FSS spectrum and/ or MSS spectrum to the proposed SCN authorised entities? Specifically, -**

- (a) **NGSO-based FSS and GSO/ NGSO-based MSS: Whether in respect of NGSO-based FSS and GSO/ NGSO-based MSS, TRAI's recommendations dated 09.05.2025 on 'Terms and Conditions for the Assignment of Spectrum for Certain Satellite-Based Commercial Communication Services' to DoT (read with the TRAI's response dated 08.12.2025 to DoT's back-reference dated 12.11.2025) should be made applicable to SCN authorised entities with necessary modifications? If yes, what modifications would be required in the terms and conditions for the assignment of spectrum for NGSO-based FSS and GSO/ NGSO-based MSS? If no what should be the terms and conditions for this purpose?**
- (b) **GSO-based FSS: Whether the terms and conditions for the assignment of spectrum to SCN authorised entities for GSO-based FSS should be analogous to those recommended by TRAI for NGSO-based FSS and GSO/ NGSO-based MSS through its recommendations on 'Terms and Conditions for the Assignment of Spectrum for Certain Satellite-Based Commercial Communication Services' dated 09.05.2025 (read with the TRAI's response dated 08.12.2025 to DoT's back-reference dated 12.11.2025) with necessary modifications? If yes, what modifications would be required for GSO-based FSS? If no, what should be the terms and conditions for this purpose?**

Kindly provide a detailed response with justification.

**ACTO's response:** No Comments

**Q14. What should be the eligibility conditions for seeking administrative assignment of FSS spectrum and/or MSS spectrum by the proposed SCN authorised entities? Kindly provide a detailed response with justification.**

**ACTO's response:**

**Administrative Spectrum Assignment:** The spectrum charging for FSS/MSS must be based on an administrative assignment model, consistent with established TRAI recommendations, to ensure service affordability and rapid deployment.

**Q15. Whether there are any other inputs or suggestions relevant to the assignment of FSS spectrum and/ or MSS spectrum to the entities holding the proposed SCN authorisation? Kindly provide a detailed response with justification.**

**ACTO's response:** No Comments

**Q16. In case it is decided to permit the proposed SCN authorised entity to utilize the FSS spectrum and/ or MSS spectrum assigned to a service authorised entity ("partnering entity") for the purpose of providing SCNaas to the partnering entity – whether there is a need to establish a policy and regulatory framework for enabling the SCN authorised entity to enter into an agreement/ arrangement with the partnering entity to utilize FSS spectrum and/ or MSS spectrum assigned to such partnering entity for the purpose of providing SCNaas to the partnering entity?**

- (i) If yes, what should be the terms and conditions under such a framework?
- (ii) If no, in what manner such agreements/ arrangements should be enabled and regulated?

**Kindly provide a detailed response with justification.**

**ACTO's response:** No Comments

**Q17. Whether there are any other inputs or suggestions relevant to the agreement/ arrangement between the proposed SCN authorised entities and service authorised entities ("partnering entities") to utilize the FSS spectrum and/ or MSS spectrum assigned to such partnering entities? Kindly provide a detailed response with justification.**

**ACTO's response:** No Comments

**Q18. In case it is decided to permit D2D service via satellite by using the spectrum in the frequency bands allocated for MSS such as L-band and S-**

band, whether there is a need to establish a policy and regulatory framework for enabling and regulating such a service? If yes, kindly suggest a broad framework for this purpose and the key terms and conditions to be included under such a framework? Kindly provide a detailed response with justification.

**ACTO's response:**

**MSS D2D Framework:** If MSS D2D is permitted, a clear policy and regulatory framework is needed to distinguish it from other uses of MSS spectrum and ensure appropriate technical and compliance requirements.

- Q19.** In case with a view to enable D2D service via satellite using IMT spectrum, it is decided to permit the proposed SCN authorised entity to utilize IMT spectrum assigned to a service authorised entity (“partnering entity”) for the purpose of providing SCNaaS to the partnering entity, -
- (a) whether there is a need to establish a policy and regulatory framework for enabling the SCN authorised entity to enter into an agreement/ arrangement with the partnering entity to utilize IMT spectrum assigned to such partnering entity for the purpose of providing SCNaaS to the partnering entity? If yes, what should be the terms and conditions under such a framework? If no, in what manner such arrangements should be enabled and regulated?
  - (b) Which frequency bands identified for IMT should be considered for this purpose? Specifically, whether only FDD-based frequency bands should be considered?
  - (c) For the frequency bands identified for IMT where D2D is decided to be permitted, whether the National Frequency Allocation Plan (NFAP) should be modified to include MSS on a secondary basis? If yes, kindly furnish your suggestion for the proposed modification(s).
  - (d) To mitigate the issues related to cross-border interference, whether any other condition in addition to Article 4.4 of the ITU-Radio Regulations is required to be made applicable?
  - (e) What regulatory framework should be established for ensuring interference-free operation of D2D service via satellite by using IMT spectrum within the country? Specifically, which of the following methods should be followed:
    - (i) The SCNs established by SCN authorised entities should be permitted to be used to provide D2D service via satellite by using IMT spectrum only if a single partnering entity (access service provider) holds the relevant IMT frequency channel in all the 22 LSAs of the country and agrees to permit the usage of its IMT frequency channel by the SCN authorised entity at its SCN for the purpose of providing SCNaaS; or
    - (ii) The SCNs established by SCN authorised entities should be permitted to be used to provide D2D service via satellite by using IMT spectrum if one or more access service providers – together holding the assignment of the

relevant IMT frequency channel across all 22 licensed service areas of the country – agree to allow the usage of their IMT frequency channel by the SCN authorised entity at its SCN for the purpose of providing SCNaas; or  
(iii) Any other method?  
Kindly provide a detailed response with justification.

**ACTO's response:**

**D2D via IMT Framework Requirements:** If D2D via IMT is eventually permitted, the framework must mandate agreements covering all relevant IMT spectrum assignments to ensure non-interference with other IMT assignees, and restrict services only to unmodified/existing user equipment. SCN entities must adhere to regulatory power limits near international borders.

**Q20. Whether there are any other inputs or suggestions with respect to the delivery of D2D services via satellite through SCNs established by the proposed SCN authorised entities? Kindly provide a detailed response with justification.**

**ACTO's response:** No Comments

**Q21. Any other inputs or suggestions related to the use of spectrum on SCNs established by the proposed SCN authorised entities may be submitted with proper explanation and justification.**

**ACTO's response:**

**Reflect Shared Spectrum:** The Spectrum charging should acknowledge and reflect the shared-use nature of satellite spectrum, differentiating costs from those associated with exclusive terrestrial mobile use.

**Q22. Regarding the agreement between SCN Authorised entity and a Service Authorised entity providing FSS/ MSS to the end user, for provision of SCNaas to the Service Authorised entity, which may or may not include provisions for utilisation of FSS/ MSS spectrum assigned to the Service entity, is there a need to regulate charges exchanged between the two entities under such an agreement? If yes, what would be the possible parameters, including SLA parameters, Spectrum utilisation etc., which would form the basis of regulation? Please provide your response with justification.**

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**Q23. In case of an agreement between an SCN Authorised entity and a Service Authorised entity providing D2D services using MSS spectrum, for**

provision of SCNaaS to the Service Authorised entity, which may or may not include provisions for utilisation of MSS spectrum assigned to the Service entity amongst other possible spectrum utilisation arrangements, is there a need to regulate charges exchanged between the two entities under such an agreement? If yes, what would be the possible parameters, including SLA parameters, Spectrum utilisation etc., which would form the basis of regulation? Please provide your response with justification.

**ACTO's response:**

**No Regulation of Wholesale Charges (Q22, Q23):** Charges and SLA parameters exchanged under SCNaaS arrangements are commercial B2B dealings. Tariff regulation at this wholesale layer is strongly opposed as it would distort investment, impede deployment, and lacks regulatory benefit. Wholesale arrangements must operate under forbearance.

**Q24.** In case of an agreement between an SCN Authorised entity and a Service Authorised entity providing D2D services using IMT spectrum, for provision of SCNaaS to the Service Authorised entity, which may or may not include utilising spectrum for feeder link assigned to the service entity, besides utilising IMT spectrum assigned to the Service Authorised entity, is there a need to regulate charges exchanged between the two entities under such an agreement? If yes, what would be the possible parameters, including SLA parameters, Spectrum utilisation etc., which would form the basis of such regulation? Please provide your response with detailed justification.

**ACTO's response:**

**No Regulation of Wholesale Charges (Q24):** Wholesale charges for SCNaaS, even when utilizing IMT spectrum, should not be regulated. These are B2B commercial negotiations as the existing non-discrimination and dispute mechanisms are sufficient to prevent market abuse.

**Q25.** Should the charges paid by the Service Authorised entity (providing either FSS, MSS or D2D service to the end user) to SCN Authorised entity for provisioning of Satellite Communication Network as a Service (SCNaaS), be permitted to be deducted from ApGR of the Service Authorised entity for the purpose of arriving at AGR for levy of License/ Authorisation Fees and Spectrum charges? Please provide your response with justification.

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**Q26.** If the answer to the above question is no, please suggest the methodology for considering such charges in determination of AGR of both the service authorised and SCN authorised entities, for purposes of levying Authorisation/ License fees & Spectrum Charges? Please provide your response with justification.

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**Q27. What should be the appropriate definition of GR, AGR, and ApGR for SCN Authorisation, including the relevant items of revenue, exclusions and deductions? Additionally, are there any operational or non-operational revenue elements specific to SCN Authorised entities that should be considered within the scope of definitions of GR, AGR and ApGR? Please provide detailed response with specific line items of revenue, exemptions and deductions, and specific definitions for GR/ApGR/AGR.**

**ACTO's response:**

**Mandatory SCNaas Deduction from AGR (Q25, Q26, Q27):** SCNaas charges paid by the service provider are a permissible pass-through network procurement cost and *must* be deductible from the service provider's ApGR to calculate AGR. This prevents double levy of license fees on the same revenue, aligns with long-standing telecom practices, and ensures the commercial viability of satellite connectivity. ACTO advocates for the application of the 4% AGR model for SCN Authorisation.

**Q28. In case FSS/MSS or any other spectrum is assigned to the Satellite Communication Network (SCN) authorised entities for provisioning of SCNaas to Service authorised entities, what should be the broad financial terms & conditions of such an assignment?**

**ACTO's response:** No Comments

**Q29. Should the spectrum charges for Satellite Communication Network (SCN) authorised entities be based on the spectrum charging framework as per the Recommendations dated 09.05.2025 applicable for Satellite based commercial communications services? Accordingly, what should be the appropriate spectrum charging framework and spectrum charges applicable for a SCN Authorised entity? Please provide your response with detailed justification.**

**ACTO's response:** No Comments

**Q30. If spectrum charges are to be levied on the basis of AGR of the SCN Authorised entity, are there any specific operational/ non-operational revenue items that should be excluded from AGR for the purpose of determination of spectrum charges? Please provide your response with detailed justification.**

**ACTO's response:** No Comments

**Q31. If the spectrum charges are not to be levied on basis of AGR of the SCN Authorised entity, what should be the appropriate spectrum charging mechanism and the corresponding level of spectrum charges applicable to**

**Satellite Communication Network (SCN) authorised entities? Please provide your response with detailed justification.**

**ACTO's response:** No Comments

**Q32. In case D2D services are permitted to be provided using the MSS frequency bands such as L & S bands, what should be the appropriate spectrum charging framework for such bands when utilised for provision of D2D satellite based services? Please provide detailed justification for your response, including the methodology for determination of such spectrum charges, if required.**

**ACTO's response:** No Comments

**Q33. In case D2D services are permitted to be provided using the IMT spectrum assigned to the Service Authorised entity ('partnering entity') providing D2D satellite-based telecommunication services, should any additional spectrum charges be levied on the Service Authorised entity ('partnering entity') for use of IMT spectrum in the provision of satellite based D2D services? If yes, what should be the basis and quantum of such additional spectrum charges payable by the Service Authorised entity to the Government? In either case, please provide detailed justification for your response, including the detailed methodology for determination of such spectrum charges.**

**ACTO's response:** No Comments

**Q34. In case spectrum is assigned to Satellite Communication Network (SCN) authorised entities, what should be the appropriate payment terms for spectrum charges payable by Satellite Communication Network (SCN) authorised entities? Please provide your response with justification.**

**ACTO's response:** No Comments

**Q35. In case Minimum Spectrum Charges are to be applicable for SCN authorised entities, what should be the payment terms for the minimum spectrum charges for SCN authorised entities? Please provide your response with detailed justification.**

**ACTO's response:** No Comments

**Q36. What should be the minimum equity and minimum networth requirements for a Satellite Communication Network (SCN) authorised entity? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q37. What should be the entry fee for proposed Satellite Communication Network (SCN) authorisation? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q38. What should be the rate of Authorisation Fee for a Satellite Communication Network (SCN) authorised entity? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q39. Should a Minimum Authorisation Fee be applicable for the proposed SCN Authorisation? If yes, what should be the Minimum Authorisation Fee be for the proposed SCN Authorisation? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q40. What should be the appropriate payment terms & conditions for Authorisation Fees? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q41. What should be the terms and conditions for Bank Guarantees, including both Performance Bank Guarantee (PBG) and Financial Bank Guarantee (FBG), for SCN authorised entities? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q42. What should be the application processing fee for Satellite Communication Network (SCN) authorised entity? Please provide detailed justification in support of your response.**

**ACTO's response:** No Comments

**Q43. Apart from the financial provisions discussed earlier, are there any other financial terms and conditions that should be made applicable for the proposed Satellite Communication Network authorisation? Kindly provide a detailed response with justifications.**

**ACTO's response:** No Comments

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