INDIAN SPACE ASSOCIATION

ISpA

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To,
The Advisor (Networks, Spectrum and Licensing),
Telecom Regulatory Authority of India,
World Trade Centre, Nauroji Nagar,
New Delhi – 110029

Date: May 17, 2026

Subject: ISpA key inputs and comments on the "Framework for Satellite Communication Network Authorisation, and Assignment of Spectrum to Satellite Communication Network Providers."

Reference: TRAI's Consultation Paper No. 6/2026 dated 8th April 2026

Respected Sir,

We thank the Telecom Regulatory Authority of India for providing an opportunity to submit our recommendation on TRAI's Consultation Paper No. 06/2026 dated April 8, 2026. The Indian Space Association (ISpA) appreciates the Authority's consultative efforts to structure the newly introduced Satellite Communication Network (SCN) Authorisation under the Telecommunications Act, 2023.

As India seeks to consolidate its position in the global SATCOM ecosystem, our regulatory mechanisms must evolve with technological and international benchmarks. Satellite networks cross geographical boundaries seamlessly. To maximize the utilization of these capital-intensive investments, the industry requires an enabling regulatory architecture.

ISpA therefore recommends that the regulatory framework should prioritise operational flexibility, commercial practicality, and ease of doing business, while ensuring national security and appropriate regulatory oversight.

We urge the Authority to establish a clear legal demarcation between network-layer enablers (SCNaaS) and retail service providers to prevent overlapping financial and security liabilities. ISpA's detailed submissions emphasize administrative spectrum assignment continuity, and fair pass-through deductions to ensure a level playing field.

In particular, ISpA recommends that implementing mutually agreeable administrative spectrum allocation, simple payment terms, and clear ApGR pass-through deductions to avoid double-taxation on network infrastructure. Avoiding impractical mandates regarding the tracking or reporting of foreign end-user terminal locations.

We believe a supportive regulatory environment will protect critical capital investments, foster technological growth, and support the government's vision for digital connectivity.

Our detailed, point-by-point responses to the issues raised in the Consultation Paper are enclosed herewith for your kind consideration. ISpA remains committed to supporting the Authority and looks forward to contributing to further discussions.

ISpA Recommendations are as follows:

Question	ISpA Recommendation
Q1. What should be the eligibility conditions, area of operation, validity period of authorization and the scope of the proposed Satellite Communication Network (SCN) authorization under Section 3(1)(b) of the Telecommunications Act, 2023? Kindly provide a detailed response with justification.	Eligibility conditions • SCN authorisation should follow the same eligibility norms as the proposed SESG authorisation: the applicant must be an Indian incorporated company that is either (i) an IN SPACe authorised space segment provider, (ii) its subsidiary, or (iii) a company having an agreement with such a space segment provider. • This ensures assured access to satellite capacity and adequate regulatory oversight, while keeping the criteria simple and already tested. **Area of Operation** The area of operation for SCN authorisation should be National service area, consistent with Commercial VSAT CUG, GMPCS and the proposed SESG authorisation, and better aligned with the large beam sizes and inherent pan regional nature of satellite networks. **Validity Period of SCN Authorisation** Recommended Validity: 20 years, with provision for extension in blocks of 10 years. The SCN authorisation should have a validity of 20 years, in line with other service/network authorisations under the Telecom Act, to provide consistency and long-term regulatory certainty for capital intensive satellite infrastructure investments. **Scope of authorization** • SCN licensees should be allowed to establish, operate, maintain and expand SESGs/SNPs and associated baseband systems for satellite networks, and to obtain feeder link spectrum needed to run these gateways.
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	The terms and conditions for the proposed Satellite Communication Network Authorisation should be secure, robust, and forward-looking, while remaining flexible, technology-neutral, and proportionate to the network-only role of SCN entities. By focusing on outcome-based regulation, alignment with international standards, and avoidance of unnecessary duplication, TRAI can enable rapid deployment of advanced satellite networks and hybrid services while safeguarding national security, spectrum integrity, and service reliability. **General Conditions** The general terms and conditions applicable to the proposed Satellite Communication Network (SCN) authorisation should recognise that SCN is a network-layer authorisation under Section 3(1)(b) of the Telecommunications Act, 2023, distinct from service authorisations under Section 3(1)(a). SCN Authorised entities should provide Satellite Communication Network as a Service (SCNaaS) to authorised service providers on non-discriminatory and commercially negotiated terms.

	Clear demarcation between network and service roles avoids regulatory overlap, preserves a level playing field among service providers, and aligns with modern telecom unbundling principles. **Technical Conditions** The technical conditions for SCN Authorisation should be technology-neutral, standards-based, and non-prescriptive. Key technical principles should include: • Compliance with ITU Radio Regulations, National Frequency Allocation Plan (NFAP), and applicable WPC / NOCC coordination processes. • Support and alignment with 3GPP standards, including Non-Terrestrial Networks (NTN), to ensure interoperability and enable use of standard, unmodified consumer and enterprise devices. • Spectrum use strictly in accordance with the allocated service (FSS, MSS, etc.). **Operating Conditions** Key operating requirements should include: • Maintenance of Network Operations Centres (NOCs) and operational systems capable of monitoring, controlling, and managing the satellite communication network, within India • Baseband and Network Control, where SCN entities deploy or manage baseband systems as part of the satellite network for NGSO systems: • Service-authorised entities should be provided appropriate visibility and interfaces to manage service quality, provisioning, and customer experience. Clear demarcation between network and service roles avoids regulatory overlap, preserves a level playing field among service providers, and aligns with modern telecom unbundling principles.
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.	Only entities holding relevant service authorizations under the Unified License (UL) i.e. Commercial VSAT CUG and GMPCS, or equivalent Satcom service authorisations for NSOs under the new authorisation regime, should be permitted to seek SCNaaS from the entities holding the proposed SCN authorisation. VNOs should also be permitted to seek SCNaaS. For D2D services, Access Service authorisation entity providing terrestrial cellular services should be permitted to seeks SCNaaS from such SCN Authorized entity.
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.	SCN and service-authorised entities should operate through commercially negotiated and mutually agreed arrangements rather than rigid prescriptive regulation.
Q5. What provisions should be included in the terms and conditions of Satellite Communication Network (SCN)	The Indian Space Policy 2023 positions India to emerge as a regional SATCOM hub by encouraging Indian entities to provide both domestic and international satellite communication services using self-owned, leased, or procured GSO/NGSO satellites and orbital resources. The policy recognizes the inherently global nature of satellite networks, where the same satellite

authorisation considering the policy/Act in the Space sector? Kindly provide a detailed response with justification.	infrastructure and feeder-link gateways can efficiently serve multiple countries without requiring separate SESGs/SNPs in every jurisdiction. Accordingly, SESGs/SNPs established in India should be permitted to provide feeder-link connectivity not only for Indian customers but also for users across South Asia and other international markets, subject to applicable foreign licensing frameworks. This approach aligns with TRAI's 2024 recommendations and DoT's draft guidelines supporting the use of Indian SESGs/SNPs for international service delivery, while reinforcing India's ambition to become a major regional SATCOM connectivity provider through an enabling and non-onerous regulatory framework.
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.	no mandatory standard or binding reference agreement should be imposed between SCN-authorised entities and service-authorised entities. Instead, SCNaaS arrangements should remain commercially negotiated, flexible, and market-driven, reflecting the diverse technical, operational, and business models across satellite communication networks. Since SCN operators function as wholesale, network-layer infrastructure providers rather than competing retail service providers, traditional concerns around restrictive practices or foreclosure are limited. A light-touch regulatory approach focused on mutual agreements and minimal oversight obligations would better support innovation, scalability, ease of doing business, and efficient rollout of satellite communication services in India.
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.	No additional interconnection issues beyond those already captured in TRAI's consultation dated 10.11.2025 require to be addressed in the present consultation. Existing interconnection principles and regulations are sufficient and appropriate to govern interconnection involving SCN-authorised entities. Interconnection arrangements should remain standards-based, contractually agreed, and commercially flexible, without additional satellite-specific regulatory mandates.
Q8. Any other inputs or suggestions relevant to the proposed Satellite Communication Network authorisation may kindly provided with detailed justification.	The existing VSAT ecosystem plays a foundational role in India's enterprise and mission-critical communications landscape. Over decades, VSAT Service Providers (SPs) have built trusted, resilient, and regulation-compliant networks that continue to serve sectors where reliability, security, and nationwide reach are essential. A balanced policy approach should recognize that existing VSAT Service Providers are not merely legacy operators, but critical ecosystem participants with proven operational capability, regulatory familiarity, and enterprise trust. Leveraging this established ecosystem can accelerate sectoral adoption of satellite connectivity while maintaining service reliability, national security alignment, and continuity for mission-critical users. The current ecosystem supports highly sensitive and uptime-dependent use cases such as ATM connectivity, SCADA systems, oil & gas operations, emergency communications, border and remote-area connectivity. This operational credibility has been built through years of deployment experience in difficult environments.
Q9. Which of the following services should be permitted to be	All satellite communication services that service providers are permitted to offer using their own infrastructure should equally be permitted when using SCNaaS from SCN operators. Any

provided by using the SCNs established by the proposed SCN authorised entities: Fixed Satellite Service (FSS); Mobile Satellite Service (MSS); Direct-to-Device (D2D) Service via satellite by using MSS spectrum; Direct-to-Device (D2D) Service via satellite by using IMT spectrum? Kindly provide a detailed response with justification.	restriction would create level playing field issues, encourage regulatory arbitrage, and defeat the purpose of introducing SCN Authorisation.
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.	D2D Service via satellite by using IMT spectrum should be permitted at this stage itself. There is no need to wait for the outcome of WRC 27. D2D service via satellite using IMT spectrum should be permitted in a calibrated manner, rather than being deferred entirely until after WRC-2027. Alignment with global ecosystem and 3GPP D2D over IMT is part of the mainstream 5G/IMT roadmap, not an experimental side-track. Multiple operators and satellite players abroad are already running D2D/NTN trials in IMT bands, signalling clear ecosystem direction; India should join this trajectory now, with deployments allowed on a no-interference, no-protection basis. Initial IMT-based D2D deployments can be enabled through partnerships with Access Service Providers (ASPs) holding IMT spectrum; with SCN-authorised entities acting strictly as network enablers, not retail service providers. <u>WRC-27 not a precondition</u> ITU/WRC decisions matter for long-term harmonisation, but they are not a legal precondition for India to authorise innovative uses of nationally assigned IMT bands, so long as existing ITU allocations are respected. Gaining early, controlled deployment experience – like US, UK, Australia and Canada are already doing – will put India in a stronger position going into and after WRC-27.
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 authorized entities: Combination No. Spectrum for the feeder link held by - Spectrum for the user link held by - 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.	Spectrum holding framework for feeder-link and user-link spectrum should preserve operational efficiency, regulatory clarity, and the intended separation between network-layer SCN operations and service-layer delivery. ISpA also recognise that the framework must remain flexible enough to accommodate different satellite architectures and commercially viable SCNaaS arrangements between SCN operators and service providers.

Q12. Which of the following types of spectrum should be assigned to the proposed SCN authorised entities: Spectrum in the frequency bands allocated for FSS Spectrum in the frequency bands allocated for MSS Any other? Kindly provide a detailed response with justification.	ISpA agree that the spectrum assignment framework for SCN entities should align with the technical and operational requirements of satellite network architectures and support efficient SCNaaS partnerships with service providers. They also recognise that different satellite service models such as FSS, MSS, GSO, NGSO, and D2D may require differentiated regulatory treatment. operations, while user-link spectrum—including MSS and D2D-related spectrum—should remain with service providers.
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, - 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? 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	ISpA agrees that satellite spectrum for SCN-authorised entities should continue to be assigned on an administrative basis under the Telecommunications Act, 2023, rather than through auctions. ISpA support using TRAI's existing 09.05.2025 spectrum assignment framework as the foundational basis for SCN spectrum assignment in order to maintain regulatory continuity and certainty.

be the terms and conditions for this purpose? Kindly provide a detailed response with justification.	
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.	ISpA agree that spectrum assignment to SCN entities should be carried out through an administrative assignment framework under the Telecommunications Act, 2023, and should comply with India's NFAP and broader regulatory requirements. Both also recognise that feeder-link related spectrum assignment forms a key operational requirement for SCN-based satellite networks.
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.	In addition to the core eligibility and assignment principles, the Respondent submits that certain supplementary policy and regulatory considerations should be incorporated into the framework for assigning FSS and MSS spectrum to Satellite Communication Network (SCN) authorised entities. 1. Long-Term Certainty and Stability of Spectrum Assignments 2. Explicit Recognition of SCNaaS and Shared Use of Spectrum 3. Evolution of use cases without requiring repeated regulatory amendments. 4. Continued reliance on ITU coordination and notification procedures, Clear domestic processes for resolving interference issues 5. Proportionate Compliance and Reporting Obligations 6. SCN-authorised entities do not interact directly with end users. Imposing retail-style reporting or usage obligations could result in duplication and inefficiency without meaningful regulatory benefit. Incorporating these additional considerations will strengthen the SCN framework, ensure efficient spectrum utilisation, and create a regulatory environment conducive to innovation and sustained investment in India's satellite communication ecosystem
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? If yes, what should be the terms and conditions under such a framework?If no, in what manner such agreements/ arrangements should be enabled and regulated? Kindly provide a detailed response with justification.	ISpA support a light-touch and commercially flexible regulatory approach for SCN-related arrangements, while recognising the need for regulatory clarity and operational efficiency in satellite communication services.
Q17. Whether there are any other inputs or suggestions relevant to the agreement/ arrangement between the proposed SCN authorised entities and service	In addition to the enabling framework discussed earlier, the Respondent submits that certain supplementary safeguards and clarifications should guide agreements or arrangements between SCN-authorised entities and service-authorised (partnering) entities for utilisation of FSS and/or MSS spectrum assigned to the partnering entities.

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.	1. Explicit Recognition of Multi-Tenant and Shared-Use 2. Clear Demarcation of Liability and Regulatory Accountability 3. Interference Management and Coordination 4. Interoperability and Standards Compliance 5. Dispute Resolution and Exit Provisions 6. Non-Requirement of Regulatory Approval or Tariff Regulation
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.	ISpA recommends mutually negotiated between SCN operators and service providers, no need to make it part of mandatory T&C.
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, -	If Direct-to-Device (D2D) services via satellite using IMT spectrum are permitted, such services should be enabled through a calibrated, light-touch, and partnership-based regulatory framework that preserves spectrum integrity, ensures coexistence with terrestrial mobile networks, and aligns with international developments, including outcomes of WRC-2027. Under such a framework, IMT spectrum ownership and associated rights should continue to remain exclusively with Access Service Providers (ASPs), while SCN-authorised entities should function only as satellite network enablers providing infrastructure and connectivity through commercially negotiated SCNaaS arrangements. D2D via IMT spectrum should therefore be treated as an extension of terrestrial mobile networks rather than as an independent satellite access service. A policy and regulatory framework may be required because IMT spectrum: is auction-assigned; carries defined service obligations; supports critical national mobile infrastructure; and requires strict interference management and enforcement clarity. Accordingly, the framework should: permit SCN entities to utilise IMT spectrum only through agreements with spectrum-holding ASPs; ensure that all spectrum rights, obligations, QoS requirements, consumer obligations, and regulatory liabilities remain with the partnering ASP; define technical parameters, operational controls, security obligations, interference mitigation responsibilities, and coordination mechanisms through commercial agreements; avoid unnecessary ex-ante approvals, tariff regulation, or overly prescriptive conditions. With respect to frequency bands, initial deployment of IMT-based D2D services may be limited to FDD-based IMT bands, particularly mid-band frequencies such as 1800 MHz and 2100 MHz, which offer: better uplink/downlink separation, more predictable interference characteristics, stronger device ecosystem support, and improved compatibility with NTN architectures.

	TDD bands and highly congested sub-GHz bands may be considered at a later stage after sufficient coexistence studies, operational experience, and international harmonization efforts mature. Regarding NFAP modifications, any changes to include MSS usage on a secondary basis in IMT bands should be approached cautiously and aligned with international developments and WRC-2027 outcomes. While limited enabling provisions may eventually be considered for D2D operations, premature modifications could create regulatory uncertainty and coordination challenges. For cross-border interference mitigation, Article 4.4 of the ITU Radio Regulations may continue to serve as the primary mechanism at this stage, supplemented where necessary by domestic safeguards such as coordination obligations, geo-fencing, power control limits, and operational restrictions in sensitive border regions. To ensure interference-free operation within India, a phased and operationally manageable approach should be adopted. Initially, D2D via IMT spectrum may preferably be enabled where either: a single ASP holds the relevant IMT spectrum nationwide; or multiple ASPs collectively provide nationwide continuity through coordinated arrangements, subject to clearly defined operational and interference-management responsibilities. Overall, IMT-based D2D via satellite should evolve through a cautious, partnership-led, and internationally harmonized framework that balances innovation and early deployment with spectrum protection, regulatory certainty, coexistence with terrestrial networks, and national security considerations. Further expansion and regulatory refinement may be undertaken after greater international clarity emerges through WRC-2027 and subsequent global NTN developments.
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.	D2D satellite services are essential for extending connectivity to rural, remote and maritime regions where terrestrial connectivity is not available. Establishing a regulatory clarity and timely enablement within the existing licensing framework is crucial to bridge the digital divide.
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.	In addition to the specific matters concerning eligibility, assignment, charging, and service enablement, the Respondent submits that certain cross-cutting principles and safeguards should guide the overall use of spectrum on SCNs established by the proposed SCN-authorised entities. These inputs are aimed at ensuring efficient spectrum utilisation, regulatory clarity, investment certainty, and long-term sustainability, while maintaining flexibility to accommodate evolving satellite technologies and use cases.
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	There is no need to regulate charges exchanged between the two entities under an agreement between SCN Authorised entity and a Service Authorised entity providing FSS/MSS/D2D services (using IMT spectrum) to the end user, for provision of SCNaaS to the Service Authorised entity. As mentioned in our response to Q4 above, SCNaaS arrangements will vary widely in architecture, operational roles and use cases, so a uniform regulated charging framework would be too rigid and unable to reflect deal specific nuances; prices are better set through commercial negotiation, and there is currently no evidence of market failure that would justify intervention. Other network layer and B2B constructs (IP I, DCIP, CTN, IXP, NSO–VNO, IFMC–UL arrangements, spectrum sharing/trading, infrastructure sharing) also operate on freely negotiated charges, with at most an intimation requirement to DoT for oversight.

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.	
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.	There is no need to regulate the charges exchanged between an SCN-Authorised Entity and a Service-Authorised Entity for provision of SCNaaS using MSS spectrum. Pricing should remain market-driven, based on commercial negotiation, with only light-touch ex-post regulatory oversight to ensure compliance with licence obligations, spectrum conditions, and security requirements. The Respondent therefore recommends that: • No tariff or charge regulation should be imposed on SCNaaS agreements for MSS-based D2D services. • Charges should be entirely commercially negotiated between the SCN-Authorised Entity and the Service-Authorised Entity. • SLAs, spectrum-use rules, and operational parameters should be addressed contractually, not through regulatory price control. • Ex-post, issue-based oversight is sufficient for ensuring compliance and preventing anti-competitive harm.
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.	The Feeder-link network operations remain unchanged and operates irrespective of whether the user-link spectrum is MSS- or IMTbased. Since, SCN authorised entity's role remains network-oriented hence there is no justification for modifying or regulating SCNaaS charges.
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/	Yes,The charges paid by a Service-Authorised entity (providing FSS, MSS, or D2D services) to an SCN-Authorised entity for provisioning of Satellite Communication Network as a Service (SCNaaS) should be permitted to be deducted from the Adjusted Pass-through Gross Revenue (ApGR) of the Service-Authorised entity for the purpose of arriving at AGR for levy of licence/authorisation fees and spectrum charges. 1. Rationale for Permitting Deduction from ApGR 2. Safeguards to Ensure Correct Application of Deduction 3. Applicability Across Service Types (FSS, MSS, D2D) In conclusion, the Respondent recommends that:

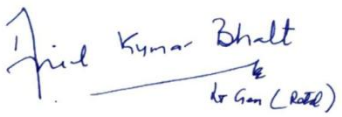
Authorisation Fees and Spectrum charges? Please provide your response with justification.	• SCNaaS charges paid by a Service-Authorised entity be permitted as deductible pass-through charges from ApGR for AGR determination; • This treatment is necessary to: Avoid double counting of revenue, Preserve the network–service separation under the SCN framework, Ensure consistency with ApGR principles, and Promote sustainable deployment of satellite-enabled services; • Adequate safeguards can be ensured through documentation and audit, without denying deductibility. Permitting such deductions is essential for a coherent, equitable, and investment-friendly implementation of the SCN framework and the broader objectives of the Telecommunications Act, 2023.
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.	SCNaaS charges should be deductible from ApGR of the Service-Authorised entity.
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.	Following submissions in respect of the definitions of GR, AGR and ApGR – applicable across all licenses/authorisations, including the proposed SCN Authorisation: • The scope of revenue should be limited to revenue from licensed activities only. The activities that do not require authorisation under the Act should be excluded from the ambit of LF/SUC. • The scope of deduction should be increased to make it effective and should include charges paid by one operator to another operator to avoid the cascading effect of LF/SUC. • Co-existence of licensed telecom services with non-licensed services/products should not attract levy on composite products/services. DoT can protect its legitimate revenue by adopting a fair valuation approach.
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?	The terms and conditions, including the broad financial terms and conditions, as recommended for spectrum assignment to service providers, should apply mutatis mutandis to SCN operators.
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	Yes, the spectrum charges for SCN authorised entities should be based on the spectrum charging framework as per the Recommendations dated 09.05.2025 applicable for Satellite based commercial communications services. The recommendations were arrived at after detailed consultations, already cover feeder-link spectrum, and extending the same framework to SCN operators will ensure continuity, regulatory certainty, and avoid reopening issues that have been thoroughly debated and settled. Using the same charging principles for SCN operators and service providers will also maintain a level playing field between operators that deploy their own satellite infrastructure and those that

charging framework and spectrum charges applicable for a SCN Authorised entity? Please provide your response with detailed justification.	rely on SCNaaS, so that functionally similar services face comparable spectrum costs. From an implementation standpoint, the 2025 framework can be applied to SCN entities with minimal tailoring, mainly to reflect that SCN operators hold only feeder-link spectrum in FSS bands, while user-link spectrum remain with service providers.
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.	Yes. If spectrum charges are to be levied on the basis of AGR of the SCN-Authorised entity, it is essential that specific operational and non-operational revenue items be expressly excluded from the AGR base used for determining spectrum charges. Such exclusions are necessary to: • Prevent double counting and cascading levies, • Reflect the network-only, wholesale nature of SCN Authorisation, and • Ensure that spectrum charges are levied only on true value addition at the SCN layer.
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.	The spectrum charging framework, as recommended for service providers, should apply to SCN operators – with necessary modifications to reflect that SCN operators hold only feeder link spectrum in FSS bands.
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. 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	No additional spectrum charges should be levied on the Service Authorised entity ('partnering entity') for use of IMT spectrum in the provision of satellite based D2D services. Technology neutral use of auctioned spectrum • IMT spectrum is already acquired via auctions on a liberalised, technology and service neutral basis and is used across 2G-5G (and future 6G) without incremental SUC for specific applications. • Treating D2D as a special, surchargeable use would effectively re price already paid for rights, undermine regulatory predictability, and constrain operators' ability to choose the most efficient terrestrial–satellite mix within their existing IMT holdings. Avoiding double charging and supporting coverage • D2D over IMT does not involve additional spectrum; it uses the same licensed carriers in the same geography, so extra charges would amount to double charging and would deter adoption of innovations that improve rural, remote and disaster area connectivity. • A charge neutral framework avoids distorting technology choices and promotes efficient, high value use of scarce IMT spectrum in the public interest.

determination of such spectrum charges.	
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. 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.	The payment terms for spectrum charges applicable to SCN-authorised entities should be simple, predictable, non-front-loaded, investment-friendly, and aligned with the long-term capital and deployment profile of satellite infrastructure. Since SCN authorisations are network-layer and wholesale in nature, the payment framework should support sustained infrastructure investment, efficient spectrum utilisation, and orderly rollout of satellite-enabled services.
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. Q37 What should be the minimum equity and minimum net worth requirements for a Satellite Communication Network (SCN) authorised entity?	ISpA recommends appropriate amounts for minimum equity, minimum networth requirements and entry fee for proposed SCN Authorisation – based on corresponding requirements for service providers, while taking into account the restricted scope of SCN Authorisation being merely a network-layer authorisation. The recommended levels should be such that only serious players enter the market, ensuring financial viability, deterring speculative applications, and protecting the efficient allocation of scarce spectrum resources. Given the high upfront and ongoing capital demands of SESG/SNP infrastructure, baseband systems, PoP connectivity and operations, it is important to keep the requirements meaningful enough to ensure that only financially credible players enter the market – thereby reducing the risk of non-deployment, spectrum hoarding or project failure. At the same time, appropriately scaled thresholds will protect the integrity of the wholesale market, give service providers confidence that their SCNaaS partners are stable long-term capacity providers, and avoid artificially favouring or penalising outsourced versus vertically integrated models
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 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. Q40. What should be the appropriate payment terms & conditions for Authorisation Fees? Please provide detailed justification in support of your response.	The rate of Authorisation Fee, Minimum Authorisation Fee and payment terms & conditions for Authorisation Fees for an SCN authorised entity should be at par with service licensees. Why SCN should be at par with service licensees • SCN operators are network layer entities that establish and operate SESGs/SNPs to provide SCNaaS, performing essentially the same network infrastructure functions as the network arm of vertically integrated satellite service providers. • Since they manage the same type of spectrum and face similar coordination and interference management obligations, the LF regime on their network operations should mirror that on service providers' network operations, avoiding artificial advantages or penalties for either integrated or outsourced models. Technology and business model neutrality • Telecom policy in India aims for technology and business model neutral levies; applying the same percentage of AGR LF (currently 8% including 4% USOF) to SCN operators and service providers ensures that the decision to build in house SCN capabilities or buy SCNaaS is driven by efficiency, not by tax arbitrage. Rationalisation, if any, must be uniform

	• While the industry continues to seek overall rationalisation of LF/USOF, any reduction should apply uniformly to both service providers and SCN operators to preserve a level playing field and stable investment incentives.
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.	At the outset, ISpA recommends that the requirement for a BG should be done away with – for the entire telecom industry. The industry has matured over the last 30 years and the existing players have ably demonstrated their performance and experience. What they now expect from policymakers are less onerous financial obligations and the freeing up of precious capital/funds to be deployed into networks and services. To that extent, the 2021 Cabinet reforms already recognised this fact and reduced the BGs requirement. The amount blocked in BGs benefits no one (neither TSPs nor the DoT), except perhaps the lenders. Rather, if such securities are released, it will free up the working capital flow for the TSPs and remove the infructuous payment of charges and generate value for the TSPs. On the aspect of securitising Government dues, the risk to government dues is actually emerging more due to the high levels of recurring and sector-specific levies, i.e., LF/USOF levy/SUC rather than the failure of TSPs to pay the same. The time has come to substantially rationalise these levies and recover only the cost of administration of license. Moreover, the imposition of such BGs to securitise dues is not consistent with other statutory dues like tax dues – there is no requirement for BGs under the Income Tax Act or under GST laws to securitise such due payments. However, in case the Government still believes that the requirement of BG cannot be dispensed with, an appropriate amount may be recommended by the Authority – based on corresponding requirement for service providers, while taking into account the restricted scope of SCN Authorisation being merely a network-layer authorisation. In summary, ISpA recommends the following: (i) The requirement for BGs (both PBG and FBG) should be done away with. (ii) However, if the requirement of BGs is to be retained, an appropriate amount should be recommended by the Authority based on the corresponding requirements for service providers, while taking into account the restricted scope of the SCN Authorisation being merely a network-layer authorisation.
Q42. What should be the application processing fee for Satellite Communication Network (SCN) authorised entity? Please provide detailed justification in support of your response.	The application processing fee for SCN authorised entity should be benchmarked to the corresponding requirement for service providers – while factoring in the restricted network-layer scope of SCN Authorisation. This approach recognises that DoT/WPC will still incur meaningful administrative effort in assessing technical and financial eligibility and proposed SESG/SNP infrastructure, while avoiding a fee level that assumes full service-layer scope and compliances.

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?	Apart from the financial provisions already discussed (entry fee, authorisation fee, spectrum charges, bank guarantees, and application processing fee), the Respondent submits that no additional or extraordinary financial terms and conditions should be imposed for the proposed Satellite Communication Network (SCN) authorisation.



Regards

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