

GUIDANCE FOR RESPONSES

Q1-Q10: Framework and Services (including D2D)

Overall Guidance for Responses

- Support a unified and flexible SCN framework
- Promote a technology-neutral approach (satellite and hybrid models)
- Enable FSS, MSS, and D2D services
- Support a hybrid MSS-IMT approach
- Recognize MSS for early deployment
- Enable flexible partnerships with mobile operators
- Support standard/unmodified devices
- Align with 3GPP standards
- Align with existing frameworks, where relevant
- Avoid complexity that could delay deployment

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.

BSNL being a public sector telecommunication service provider should be given priority for SCN authorisation & SCN Service Provider authorisation.

- ITU allocation priority should be followed for all MSS D2D allocations
- D2D services only to base on standardized 3GPP protocols. Support existing and future generations should be a must
- Strictly follow NFAP allocation plan and allocation should be made in accordance with NFAP and ITU guidelines to eliminate interference to existing and future systems
- Partnership with Indian entity for providing the MSS D2D services
- Area of operation should support pan-India SCN authorization, avoiding LSA-based restrictions
- Ensure long-term validity (e.g. aligned with satellite lifecycles) to support investment as per the existing terrestrial allocations (20 years)
- Allow satellite-only and hybrid (satellite + mobile) models
- Cover FSS, MSS, and D2D services under a single authorization
- Align with existing telecom frameworks (e.g. licensing, security, lawful interception), where relevant
- Avoid regulatory complexity (e.g. multiple approvals or overlapping requirements) that could delay deployment

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

- Keep terms balanced and not overly prescriptive, avoiding unnecessary technical constraints
- Keep requirements which hamper security like data residency, ground station and core networks. TT&C and other spacecraft operations can be done centrally anywhere in the Indian Geographical boundaries with adequate redundancy.
- Ensure compliance with security and lawful interception requirements
- Support 3GPP standards to enable interoperability and device compatibility seamless experience for end users with all MNOs
- Allow flexibility for different technical models (including hybrid satellite-terrestrial architectures)
- Align with existing telecom frameworks (e.g. licensing, security, network management), where relevant
- Avoid requirements (e.g. duplicative approvals or technical constraints) that could delay deployment (Eg: TEC, NOCC)

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.

- BSNL being a public sector telecommunication service provider should be given priority for SCN authorisation & SCN Service Provider authorisation.
- Permit a broad range of authorized entities to access SCNaaS
- Companies having tie-up with satellite constellation companies to provide service as a primary SCN in India. Such SCN can appoint SCNaaS to distribute services to smaller companies and drive innovation
- Primary SCN responsible for all compliance
- Allow VNOs to access SCNaaS to support competition and service innovation
- Maintain a flexible framework for partnerships and service delivery models (e.g. wholesale, hybrid satellite-terrestrial)

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.

- Yes, should be mandated to extend control, visibility, resource allocation and management of the telecommunication services, being provisioned using SCN to users on mutually agreed T&C.
- Allow control, visibility, and resource management to be commercially agreed between parties based on license, traffic and market requirement
- Ensure the service provider has sufficient visibility to manage customers and service quality, provisioning and support
- Maintain flexibility across different partnership and operating models: wholesale, hybrid satellite-terrestrial.
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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.

- Align SCN authorization with space sector frameworks, avoiding duplication with telecom licensing
- Continue administrative allocation of spectrum resources to SCN with priority to BSNL being a public sector telecommunication service provider as per the First Schedule, sub-section 4 of Section 4 of the Telecommunication Act 2023.
- Ensure compliance with national security, licensing, and regulatory requirements
- Allow flexibility for satellite operations and architectures
- Support integration with terrestrial networks and new age IoT applications
- Avoid overlapping or duplicative conditions between space and telecom frameworks that could delay deployment

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.

- Do not mandate a standard or reference agreement between SCN and service providers

- If introduced, keep any reference framework non-binding and indicative, without restricting commercial flexibility
- Allow parties to commercially agree on terms (pricing, service levels, resource allocation) as the technology is nascent and developing
- Ensure flexibility for different partnership and operating models (wholesale, hybrid satellite-terrestrial)

Q7- With respect to the interconnection with the proposed Satellite Communication Network Authorised Entities, whether there are any other consultation paper on 'Re Interconnect addressed in this consultation process? Please provide a detailed response with justification.

- Ensure interconnection with existing/all mobile and fixed networks and across all SCN entities and SCN Service provider entities.
- Define clear interconnection responsibilities between SCN and service providers (e.g. traffic routing, QoS, fault management)
- Support standards-based interconnection (3GPP, IP-based interfaces) to ensure interoperability
- Avoid additional interconnection requirements beyond existing TRAI frameworks that could delay deployment
- Continue the existing zero IUC (Interconnect usage charges) regime
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Q8- Any other inputs or suggestions relevant to the proposed Satellite Communication Network authorisation may kindly provided with detailed justification.

- Support a simple and unified SCN framework, avoiding fragmentation across multiple authorizations
- Single license for Pan India
- Spectrum allocation on Pan India basis including land and territorial waters
- Ensure regulatory certainty and predictability (e.g. clear timelines, stable licensing conditions) to support investment
- Enable early deployment by minimizing approval timelines and regulatory bottlenecks
- Align with international standards and practices (ITU, 3GPP, 3GPP spectrum bands)
- Support integration with mobile networks -hybrid satellite-terrestrial and D2D models

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);
MSS	(c)	Direct-to-Device (D2D)	Service	via satellite	by using spectrum;
IMT	(d)	Direct-to-Device (D2D)	Service	via satellite	by using spectrum?

Kindly provide a detailed response with justification.

- Support (a) FSS and (b) MSS as core services under the SCN framework
- Support (c) D2D using MSS spectrum, enabling early deployment using existing L-band and S-band allocations
- Support (d) D2D using IMT spectrum, with the partnering MNO using its assigned spectrum
- Enable a hybrid MSS-IMT approach, treating D2D as an extension of terrestrial mobile networks
- Avoid unnecessary delays in enabling D2D services, while allowing consideration of evolving international frameworks such as WRC-2027
- Above suggestions are based on available devices with consumers and eliminate cost barriers to use D2D services

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.

- Support enabling D2D via satellite using IMT spectrum, subject to an appropriate regulatory framework
- Support a hybrid MSS-IMT approach, treating satellite D2D as an extension of terrestrial mobile networks
- Enable the use of IMT spectrum by partnering MNOs using their assigned spectrum
- Avoid unnecessary delays, while allowing consideration of WRC-2027 outcomes as needed
- Apply appropriate coordination and interference management measures
- Spectrum harmonisation can be supported by Spectrum allocation authorities so as to facilitate the SCNaas on pan-India basis

Q11-Q21: Spectrum / Architecture

Overall Guidance for Responses

- *Prefer administrative spectrum assignment*
- *Avoid approaches that could delay deployment*
- *Recognize MSS as a globally harmonized resource*
- *Support a hybrid MSS-IMT approach*
- *Ensure efficient and flexible spectrum use*
- *Align with ITU frameworks*
- *Avoid regulatory fragmentation*

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:

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.

- Support flexibility across spectrum holding models, allowing different combinations depending on service type
- Allow partnering entities -MNOs- to hold user link spectrum, particularly for IMT-based and D2D services
- Allow SCN entities to hold and manage feeder link spectrum, to ensure efficient satellite network operation
- Enable models where user link spectrum is held by service providers and feeder links by SCN entities
- Avoid rigid approaches that could limit hybrid MSS-IMT models or delay deployment

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.

- Any allocation should be based on ITU filing priority
- Support assignment of (a) FSS and (b) MSS spectrum to SCN entities, based on service requirements
- Support MSS spectrum for mobile-integrated and D2D use cases (e.g. L-band and S-band for early deployment)
- Allow (c) other spectrum bands, where technically justified and aligned with service needs
- Maintain a flexible, technology-neutral approach, enabling both satellite-only and hybrid MSS-IMT models

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 recommenda
for the Assignment of Spectrum for Certain Satellite-Based Commer
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 recommenda
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of Spectrum for Certain Satellite-Based Commercial Commu
Commu
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.

- Build on existing TRAI recommendations with targeted adaptations for SCN-specific use cases - SCNaas, hybrid models
- Maintain a consistent framework across NGSO-based FSS and GSO/NGSO-based MSS, with flexibility for different system architectures
- For GSO-based FSS, apply a similar approach, with adjustments to reflect capacity-based and service-specific characteristics
- Ensure the framework supports evolving models -hybrid MSS-IMT, partnership-based services
- Avoid additional complexity or duplicative conditions that could delay deployment

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.

- Allocation based on ITU filing priority for MSS allocation
- Standardized 3GPP protocol adherence
- Keep eligibility clear and technology-neutral, without favoring specific satellite systems or architectures
- Allow SCN entities to access FSS and MSS spectrum, subject to applicable regulatory approvals

- Base eligibility on objective criteria - technical capability, regulatory compliance, coordination requirements
- Avoid restrictive conditions such as excessive entry barriers or procedural requirements, that could delay 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.

- Support the administrative assignment of FSS and MSS spectrum, consistent with global satellite practices
- Keep the framework flexible and service-driven, allowing spectrum use based on actual service requirements
- Ensure alignment with international practices and ITU frameworks, like Radio Regulations and coordination procedures
- Avoid conditions -restrictive usage rules or additional approvals- that could delay rollout or limit future evolution

**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 ser 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.**

- Yes - Establish a flexible framework enabling SCN entities to use the spectrum assigned to partnering entities for SCNaas provision
- Allow terms to be commercially agreed - spectrum use, service levels, capacity allocation- subject to regulatory compliance
- Ensure clear allocation of responsibilities between parties - e.g. spectrum rights, interference management, regulatory obligations
- Avoid overly prescriptive rules or approval requirements that could delay deployment or limit partnership models

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

- Keep agreements commercially negotiated and flexible, allowing parties to define terms based on service needs
- Ensure clear roles and responsibilities for spectrum use, service delivery and regulatory compliance
- Address interference management and coordination requirements, including alignment with applicable regulatory frameworks
- Avoid additional approval requirements or prescriptive conditions that could delay implementation

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 it? Kindly provide a detailed response with justification.

- Establish a clear and flexible framework for D2D using MSS spectrum, aligned with existing MSS regulatory approaches
- Support the use of MSS L-band and S-band for early D2D deployment, leveraging existing allocations
- Ensure alignment with 3GPP NTN specification, and existing MSS licensing frameworks
- Apply proportionate conditions, avoiding additional licensing burdens or requirements beyond traditional MSS frameworks
- At present, the State-owned company - BSNL provides GSO-based MSS by using INMARSAT (currently, a subsidiary of VIASAT Inc.) in India. The policy and regulatory framework for MSS provided by BSNL should be revised as per this in future.

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 author

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.

- Enable D2D using IMT spectrum through partnering MNOs using their assigned spectrum
- Treat satellite D2D as an extension of terrestrial mobile networks, rather than a standalone service
- Establish a light-touch regulatory framework, enabling commercial arrangements between SCN and service providers
- Allow use of IMT bands (including FDD bands, where appropriate) based on service and deployment requirements, preferably mid band range which allows device manufacturers to optimize antenna characteristics for both MSS and IMT for NTN purpose
- Prefer allowing one or more partnering entities across service areas
- Avoid additional licensing burdens or spectrum charges for SCN entities in IMT-based D2D
- Ensure appropriate interference management and coordination, aligned with national and ITU frameworks

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 services may be treated as the extension of terrestrial mobile networks.
- Additional financial burdens or duplication of charges be avoided

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.

- Maintain a flexible and technology-neutral approach supporting both satellite-only and hybrid MSS-IMT models
- Ensure alignment with international frameworks - ITU Radio Regulations, coordination procedures
- Support efficient and shared spectrum use, particularly in partnership-based and hybrid deployments
- Avoid additional regulatory conditions or constraints that could delay deployment or limit service evolution

Q22-Q26: Commercial Arrangements

Overall Guidance for Responses

- *Keep arrangements commercially negotiated between parties*
- *Avoid direct regulation of pricing and commercial terms, where possible*
- *Ensure flexibility across different partnership models*
- *Support clear and transparent agreements*
- *Avoid overly prescriptive requirements that could limit partnerships or delay deployment*
- *Ensure a simple and consistent approach to revenue treatment (AGR)*

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.

- NO- Avoid direct regulation of charges between SCN and service providers for SCNaas
- Allow charges to be commercially agreed upon, such as pricing, SLAs, capacity, and usage arrangements

- If needed, apply a light-touch framework, limited to transparency and basic service parameters
- Avoid prescriptive pricing controls or approval requirements that could delay deployment or limit commercial flexibility

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.

- Avoid direct regulation of charges for D2D services using MSS spectrum
- Allow charges to be commercially agreed such as pricing, service levels, and capacity arrangements
- Maintain flexibility across different service and partnership models for MSS-based D2D and integrated mobile services
- Avoid additional regulatory or pricing requirements that could delay rollout or limit scalability

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.

- Avoid direct regulation of charges for D2D services using IMT spectrum
- Allow charges to be commercially agreed between SCN entities and partnering MNOs (e.g. pricing, service levels, capacity arrangements)
- Maintain flexibility to support hybrid MSS-IMT models, with D2D treated as an extension of terrestrial mobile networks
- Avoid additional pricing controls or regulatory requirements that could limit scalability or delay deployment

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.

- Allow SCNaaS charges paid by service providers to be deducted from ApGR, to avoid double-counting in AGR calculations
- Ensure no duplication of revenue recognition between SCN and service providers
- Establish a clear and consistent approach to AGR treatment, aligned with partnership-based models
- Support efficient commercial arrangements, particularly for hybrid and SCNaaS-based service delivery

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.

- Establish a clear and consistent methodology to allocate revenues between SCN and service providers
- Ensure no double-counting of revenues, with distinct treatment of SCNaaS and end-user service revenues
- Clearly define revenue attribution principles (e.g. wholesale vs retail, pass-through treatment)
- Keep the approach simple, transparent, and aligned with existing AGR frameworks

Q27: Revenue (GR/AGR)

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.

- Align definitions of GR, ApGR, and AGR with existing telecom frameworks, while adapting for SCN-specific models

- Ensure a clear and consistent approach to revenue classification, distinguishing between SCNaas (wholesale) and end-user (retail) revenues
- Exclude pass-through charges and revenues already accounted for at another level, to avoid double counting
- Ensure treatment reflects the partnership-based nature of SCNaas (e.g. SCN as wholesale provider to service entities)
- Keep the framework simple, transparent, and aligned with existing AGR principles

Q28–Q33: Spectrum Charging

Overall Guidance for Responses

- *Ensure spectrum charges are predictable, transparent, and proportionate*
- *Avoid approaches that could create excessive financial burden*
- *Support pricing frameworks that enable investment and sustainable deployment*
- *Ensure consistency with international practices, where relevant*
- *Avoid introducing additional charges that could impact emerging services (e.g. D2D)*
- *Keep the framework simple and clear*

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?

- SCN is bridging the digital divide hence no additional burden of spectrum charges should be levied. Consider compensation by the govt through USO (DBN) fund
- Keep financial terms clear and proportionate, reflecting SCN's role as a wholesale/enabement layer
- Ensure conditions support investment and long-term deployment (e.g. predictable payment obligations)
- Avoid excessive upfront or recurring charges that could affect the business case
- Maintain consistency with existing satellite frameworks (e.g. FSS/MSS practices)

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.

- Build on TRAI's 09.05.2025 recommendations, with adjustments for SCN-specific models
- Ensure the charging framework is predictable and proportionate to SCN's role
- Reflect the intermediate/wholesale nature of SCNaas in the value chain
- Avoid approaches that could distort investment incentives or delay deployment

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.

- Exclude pass-through revenues and wholesale SCNaas components from AGR calculations
- Ensure no double counting of revenues across SCN and service providers
- Reflect the partnership-based nature of SCNaas (wholesale vs retail separation)
- Keep AGR treatment clear, consistent, and aligned with existing frameworks
- Only AGR based and no fixed charges per device

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.

- If not AGR-based, adopt a simple and predictable charging mechanism (e.g. flat or capacity-based per MHz)
- Ensure charges remain proportionate and investment-friendly
- Avoid complex or uncertain methodologies that could impact deployment decisions
- Align the approach with long-term sustainability of SCN deployments

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.

- Avoid additional financial burden on MSS spectrum used for D2D services

- Ensure charging supports early deployment (e.g. L-band, S-band use cases)
- Apply a proportionate and simple charging approach, aligned with traditional MSS frameworks
- Avoid pricing structures that could slow adoption of emerging D2D services
- Avoid pricing structure which makes services unaffordable to end user as it is a cost sensitive market

Q33- In case D2D services are permitted to be provided using the IMT spectrum assigned to the Service Authorised entity (partnering MNOs for IMT spectrum used in D2D), should any additional spectrum charges be levied on partnering MNOs for IMT spectrum used in D2D 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.

- Avoid additional spectrum charges on partnering MNOs for IMT spectrum used in D2D
- Treat D2D via IMT as an extension of terrestrial networks, not a new spectrum use case
- Ensure any charging approach is clear, proportionate, and justified
- Avoid additional charges that could delay rollout or limit scalability of hybrid MSS-IMT models

Q34-Q43: Financial Conditions

Overall Guidance for Responses

- *Ensure financial conditions are reasonable and proportional*
- *Avoid requirements that could create barriers to entry or participation*
- *Support a framework that encourages investment and long-term sustainability*
- *Keep financial obligations clear, predictable, and transparent*
- *Avoid excessive guarantees or upfront requirements that could impact deployment*
- *Ensure consistency with existing frameworks, where relevant, without duplication*

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.

- Keep payment terms clear and predictable (e.g. defined timelines, periodic payments)
- Align payment structure with cash flow realities of satellite deployment cycles
- Avoid front-loaded payment obligations that could impact rollout
- Adopt a simple and predictable charging mechanism (e.g. flat or capacity-based per MHz)

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.

- If minimum spectrum charges apply, ensure they are reasonable and proportionate to actual usage
- Avoid high fixed charges that could create barriers for early-stage deployment
- Maintain predictable and simple payment structures

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.

- Keep minimum equity and net worth requirements proportionate to SCN business models
- Avoid thresholds that could exclude new or emerging players
- Ensure requirements reflect capital intensity and phased deployment nature of satellite systems

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

- Keep entry fees reasonable and aligned with market entry objectives
- Avoid high upfront costs that could delay participation
- Support a framework that encourages competition and investment

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.

- Keep authorization fees proportionate and predictable
- Reflect SCN's role as a wholesale/enabement layer in the value chain

- Avoid fee levels that could impact investment or deployment incentives

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

- If a minimum authorization fee is applied, keep it modest and proportionate
- Avoid fixed fee burdens that do not reflect actual scale or usage
- Ensure consistency with partnership-based and evolving business models

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

- Keep payment terms simple and predictable (e.g. periodic payments, clear obligations)
- Avoid complex payment structures or conditional triggers
- Align terms with long-term deployment timelines

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.

- Keep bank guarantee requirements proportionate and risk-based
- Avoid excessive PBG/FBG levels that could create barriers to entry
- Ensure guarantees are linked to actual obligations and phased deployment milestones

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

- Keep application processing fees low and administrative in nature
- Avoid using fees as a barrier to participation
- Ensure fees remain transparent and cost-based

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.

- Avoid introducing additional financial conditions unless clearly justified

- Keep the framework simple, proportionate, and predictable
- Ensure financial conditions support investment, scalability, and timely deployment
- The payment should not be upfront loaded and should be distributed over the later part of license tenure to encourage early deployment