



By email: advmn@traai.gov.in

August 08, 2024

Mr. Shri Akhilesh Kumar Trivedi
Advisor (Networks, Spectrum and Licensing)
Telecom Regulatory Authority of India (TRAI)

RE: Comments on the Consultation Paper on the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023

Kuiper Systems LLC (**Kuiper**), a wholly owned subsidiary of Amazon.com Services LLC (together, **Amazon**), welcomes the opportunity to submit these comments on the Consultation on the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023 (July 11, 2024) (**Consultation Paper**).

On July 30, 2020, the U.S. Federal Communications Commission (**FCC**) issued an Order and Authorization permitting Kuiper Systems LLC to deploy a constellation of Non-Geostationary Satellite Orbit (**NGSO**) Fixed-Satellite Service (**FSS**) satellites in low Earth orbit (**LEO**) (**Kuiper System**) using Ka-band frequencies.¹ On October 6, 2023, Amazon launched two (2) satellites into space as part of its Protoflight mission of tests to validate the Kuiper System design and network performance. Within 30 days of sending its two (2) prototype satellites into space, we achieved a 100 percent success rate for our Protoflight mission, validating key technologies that underpin the Kuiper network and moving the program another step closer toward our long-term vision of providing fast, affordable broadband to unserved and underserved communities around the world. These tests allowed us to validate the architecture and design of our satellite constellation and we are on track to begin mass satellite production ahead of a full-scale deployment of Project Kuiper later this year.

Project Kuiper's NGSO constellation will bring fast, affordable broadband to unserved and underserved communities around the world, including in remote parts of India. Project Kuiper will provide ubiquitous, high-capacity, high-speed, low latency broadband services to residential customers, schools, businesses, and institutions around the world, and also communications to terrestrial mobile network operators, global enterprise, and government users, among others. Through Project Kuiper, Amazon will enable connectivity where it is lacking, thereby helping to close the digital divide and ensure reliable access to communications.

A. General Comments

Amazon applauds the TRAI on its work to simplify the service authorisations framework in India. Operators rely on stable regulations and policies to commit the necessary financial and operational resources to build networks and provide services that may be designed to operate for decades. This stability benefits consumers and the public that rely on broadband services in many aspects of their daily life. The efforts of the TRAI will ensure regulatory certainty through incremental, informed modifications to the existing framework, and with suitable migration measures, allow authorised entities to come into compliance with the new service authorisation framework. Moreover, harmonising the service authorisation framework with generally applicable laws in India will significantly further the TRAI's goals of improving the ease of doing business.

¹ Kuiper Systems LLC, Order and Authorization, IBFS File No. SAT-LOA-20190704-00057 (rel. July 30, 2020) (FCC 20-102), available online at <https://docs.fcc.gov/public/attachments/FCC-20-102A1.pdf>; Erratum to Kuiper Systems LLC, Order and Authorization, IBFS File No. SAT-LOA-20190704-00057 (rel. September 4, 2020) (FCC 20-102), available online at <https://docs.fcc.gov/public/attachments/DOC-366700A1.pdf>.

Amazon respectfully recommends the TRAI make incremental changes to the scope of services for several authorisations under the United License (**UL**) regime rather than implementing wholesale mergers (clubbing) or changes to the existing authorisation regime. Specifically, Amazon recommends the TRAI change the scope of Global Mobile Personal Communication by Satellite (GMPCS) and Commercial Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Services to (1) simplify the authorisations, (2) modernize the service definition, and (3) remove conflicting scope definitions across different authorisations intended to work together.

Moreover, to facilitate regulatory certainty, Amazon respectfully recommends the TRAI also clarify the migration measures that will be applied for existing license holders or pending applicants. Importantly, there must be equality in effect for like services between new applicants authorized under any new regime and all existing licensees / applicants authorised under the existing regime that will be migrated from the extant framework. Operators and their customers will benefit from the regulatory certainty enabled by license condition parity of licensees under the extant framework and any new framework. Subsequently, the TRAI may consider if it wishes to consider specific migration measures based on the comments and counter comments of this Consultation Paper.

Further, Amazon respectfully submits that the guiding rule for framing the authorisation framework under the Telecommunications Act, 2023 (**Telecom Act**) should be ensuring clarity and regulatory certainty. This may be achieved by, *first*, adopting principle-based regulation which reduces compliance burdens, and *second*, by introducing clear obligation and compliance mechanisms which will be particularly important for aspects such as calculating adjusted gross revenue.

Finally, the terms and conditions for the new authorisation regime will need to be harmonised with compliance obligations across frameworks to reduce the cost and complexity of compliance for Telecom Service Providers (TSPs), as well as enforcement for regulators. These frameworks include (1) the Information Technology Act, 2000 (**IT Act**), (2) the Digital Personal Data Protection Act, 2023 (**DPDPA**), and (3) Content Regulations. In particular, given that service providers process large amounts of user data, it is imperative that the framework under the proposed authorisation framework should be aligned with the requirements under the DPDPA. Currently, the UL imposes separate data localization obligations on service providers. Amazon respectfully submits that it would be prudent to align provisions under the new authorization framework with the provisions on data transfer outside India under the DPDPA.

B. Specific Comments

Q1. For the purpose of granting authorisations under Section 3(1) of the Telecommunications Act, 2023, whether the Central Government should issue an authorisation to the applicant entity, as is the international practice in several countries, in place of the extant practice of the Central Government entering into a license agreement with the applicant entity? In such a case, whether any safeguards are required to protect the reasonable interests of authorised entities? Kindly provide a detailed response with justifications.

Amazon agrees with the proposal that authorisations for future applicants under Section 3(1) of the Telecom Act should be granted in the form of an authorisation document containing only the essential aspects of the authorisation. This aligns with practices in other countries where applicants are permitted to use the radio spectrum for a telecommunication service pursuant to national rules and regulations applicable to that service. Notably, these national rules and regulations must provide a clear definition of roles and responsibilities to ensure applicants understand the operational obligations on their systems sharing radio frequencies with other systems, as well as any procedures that must be applied in the event harmful interference were to occur. In particular, the terms and conditions for each service authorisation category should be provided as part of the rules under the Telecom Act to ensure service providers have a predictable regulatory regime.

Amazon proposes the following safeguards to protect the reasonable interests of the authorised entities:

- (a) The migration framework proposed in relation to such authorisation should ensure that there is no disruption to the business of licensees under the current regime.

- (b) The licensee's spectrum use status and spectrum sharing obligations and / or expectations must be maintained from the extant regime to any new framework.
- (c) Existing applications (for example, those at an advanced stage of consideration by the Department of Telecommunications (**DoT**)) should not be re-evaluated due to the introduction of the new framework. Rather, these should be approved under the existing framework and then subject to migration similar to active licenses.
- (d) To the extent any relaxations are provided under the new framework, including in relation to fees charged, operational conditions, security conditions and revenue sharing, similar relaxations should be provided to licensees under the extant licensing framework. Fair and equal treatment would also reduce the risk of disputes, which may delay implementation of the new licensing framework.
- (e) To the extent that fees payable under the new framework are lower than the fees already paid by existing licensees, such fees should be waived off or pro-rated to account for amounts already paid.

Q2. Whether it will be appropriate to grant authorisations under Section 3(1) of the Telecommunications Act, 2023 in the form of an authorisation document containing the essential aspects of the authorisation, such as service area, period of validity, scope of service, list of applicable rules, authorisation fee etc., and the terms and conditions to be included in the form of rules to be made under the Telecommunications Act, 2023 with suitable safeguards to protect the reasonable interests of the authorised entities in case of any amendment in the rules? Kindly provide a detailed response with justifications.

AND

Q3. In case it is decided to implement the authorisation structure as proposed in the Q2 above, -

- (a) **Which essential aspects of authorisation should be included in authorisation documents?**
- (b) **What should be the broad category of rules, under which, terms and conditions of various authorisations could be prescribed?**
- (c) **Whether it would be appropriate to incorporate the information currently provided through the extant Guidelines for Grant of Unified License and Unified License for VNO, which included, *inter-alia*, the information on the application process for the license, eligibility conditions for obtaining the license, conditions for transfer/ Merger of the license etc., in the General Rules under the Telecommunications Act, 2023?**
- (d) **What could be the broad topics for which the conditions may be required to be prescribed in the form of guidelines under the respective rules?**

Kindly provide a detailed response with justifications.

Amazon agrees that it would be appropriate to grant future applicants' authorisations in the form of a document containing the essential aspects of the authorisation. This approach will make the licensing process more accessible and enhance the ease of doing business which, in turn, will increase competition and benefit consumers by driving higher quality, lower prices, and more choice in services and providers. However, any migration to a new framework should account for the related concerns discussed in our response to Question 1 above.

Additionally, Amazon recommends the following:

- (a) The authorisation documents should include the same material specific to the applicant entity that is currently included in the existing two-page license agreement for a UL (e.g., name of

applicant, nature of service being authorised, effective date, term or validity period, obligation to comply with service-specific guidelines, non-exclusivity, and financial obligation relating to fees).

- (b) The terms and conditions of the authorisations can be prescribed under Section 3(1) read with Section 56(2)(a) of the Telecom Act, either through the general rules notified under the Telecom Act or through application of specific rules notified for this purpose. The terms and conditions issued by way of rules should be principle-based and encourage innovation and collaboration by licensees, without being overly prescriptive. Such terms and conditions should be developed via a public consultation with all stakeholders.
- (c) The information currently provided in the extant Guidelines for Grant of Unified License, such as eligibility criteria, application process, timelines, applicable fee, etc., should be incorporated in the General Rules under the Telecom Act.
- (d) Authorisations should be simplified in scope, but not re-named, to avoid any confusion regarding the ongoing application of the Telecom Act.

Q4. In view of the provisions of the Telecommunications Act, 2023, what safeguards are required to be put in place to ensure the long-term regulatory stability and business continuity of the service providers, while at the same time making the authorisations and associated rules a live document dynamically aligned with the contemporary developments from time to time? Kindly provide a detailed response with justifications.

Regulatory stability, business continuity of service providers, and dynamically aligned rules are balanced through the principles of regulatory certainty and flexibility. Regulatory certainty can be achieved by publishing proposed rule changes for public comment, allowing sufficient time for response by stakeholders, and making the final decision and reasoning behind the decision publicly available, along with all stakeholder comments. The public consultation process ensures transparency and can give rules a reasonable longevity such that regulation keeps up with technological developments while maintaining stability. Likewise, building flexibility into the rules, including by adopting technology neutral regulations, enables rules to accommodate changes in technology over time, reducing the frequency with which significant rule changes become necessary. Allowing sharing studies similarly facilitates regulatory flexibility, as it allows frequency use to evolve as technology evolves. Finally, mechanisms that streamline the administrative process, such as establishing set procedural timelines, identifying a single government agency that serves as the point of contact, and allowing blanket licensing of customer terminals all ensure that the licensing framework can run efficiently and affordably for both the government and service providers.

Several specific safeguards can also ensure the long-term regulatory stability and business continuity of the service providers. First, establishing the authorisations and associated rules in a live document may create confusion, and frequent amendments may be detrimental to long-term regulatory stability and business continuity. A publicly available document reflecting the most up-to-date rules, as established through the most recent rulemaking process, could avoid these challenges.

Second, the TRAI could ensure authorisations continue to have a reasonable term. There are multiple licenses and authorisations in addition to the UL that are required to provide telecommunication services. For example, space-based communications require grant of spectrum and landing rights from the space regulator. A reasonable term for all such authorisations and approvals in addition to the UL could be 20 years—and should be no less than 10 years. Similarly, authorisations should be co-terminus.

Third, establishing a clear framework via the rules for penalties and mitigating actions that telecommunication service providers can take to reduce financial penalties would ensure clarity for licensees and reduce non-compliance, thereby safeguarding business stability and continuity.

Finally, the TRAI could consider recommending a reduction of fees, and other entry barriers such as the minimum net worth conditions for licensees, to improve accessibility by applicants ease of doing business over the long-term.

Q5. In addition to the service-specific authorisations at service area level, whether there is a need for introducing a unified service authorisation at National level for the provision of end-to-end telecommunication services with pan-India service area under the Telecommunications Act, 2023? Kindly justify your response.

AND

Q6. In case it is decided to introduce a unified service authorisation at National level for the provision of end-to-end telecommunication services-

- (a) What should be the scope of service under such an authorisation?**
- (b) What terms and conditions (technical, operational, security related, etc.) should be made applicable to such an authorisation?**
- (c) Would there be a need to retain some of the conditions or obligations to be fulfilled at the telecom circle/ Metro area level for such an authorisation?**
- (d) Should assignment of terrestrial access and backhaul spectrum be continued at the telecom circle/ Metro area level for such an authorisation?**
- (e) Any other suggestion to protect the interest of other authorised entities/ smaller players upon the introduction of such an authorisation.**

Kindly provide a detailed response with justification

In asking whether there is need for a unified service authorisation at the national level, the TRAI rightly focuses on the needs of wireless access service providers, and inquires whether such an authorisation should include satellite-based telecommunication services in its scope.² Amazon believes that including satellite-based telecommunication services in a unified service authorisation would be inappropriate because it would introduce unnecessary ambiguity and complexity within the authorisation framework, in direct conflict with the TRAI's goals in this Consultation Paper. For instance, an amendment to the scope / obligations for any individual authorisation in the future may require determining necessary corresponding amendments to the unified service authorisation also.

Therefore, any unified service authorisation should not include satellite-based telecommunication services. Authorisations should not duplicate functions or purposes of other authorisations. This creates ambiguity for applicants when determining which authorisation path to pursue for a given service. Instead, as discussed in response to Questions 11-12 below, service authorisations for future satellite-based communications applications should be streamlined within the existing GMPCS and VSAT authorisations. This will achieve the TRAI's goals of simplification and modernization of the service authorisations framework as it prepares recommendations to the DoT for successful implementation of the Telecom Act. Moreover, it will allow the TRAI to logically and effectively regulate the distinct characteristics of various technologies and their unique spectrum use profiles, while permitting deployment of new and innovative services in India.

Q7. Within the scope of Internet Service authorisation under the Telecommunications Act, 2023, whether there is a need for including the provision of leased circuits/ Virtual Private Networks within its service area? Kindly provide a detailed response with justifications.

AND

Q8. In case it is decided to enhance the scope of Internet Service authorisation as indicated in the Q7 above, -

- (a) What should be terms and conditions (technical, operational, security related, etc.) that should be made applicable on Internet Service authorisation?**

² Consultation Paper at 2.46-48.

- (b) **Any other suggestion to protect the reasonable interests of other authorised entities upon such an enhancement in the scope of service. Kindly provide a detailed response with justifications.**

As discussed in response to Questions 11-12 below, amending the scope of the VSAT service authorisation to include providing internet access without obtaining a separate ISP license or entering into arrangements with an ISP license holder, will simplify the service authorisation framework, place authorisation holders on an even footing, and align with international practices for VSAT services. Removing the outdated CUG component of VSAT services, would maintain harmony between the VSAT and ISP service authorizations.

Q9. N / A.

Q10. N / A.

Q11. Whether there is need for merging the scopes of the extant GMPCS authorisation and Commercial VSAT CUG Service authorisation into a single authorisation namely Satellite-based Telecommunication Service authorisation under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.

AND

Q12. In case it is decided to merge the scopes of the extant GMPCS authorisation and Commercial VSAT CUG Service authorisation into a single authorisation namely Satellite-based Telecommunication Service authorisation under the Telecommunications Act, 2023, -

- (a) **What should be the scope of service under the proposed Satellite-based Telecommunication Service authorisation?**
- (b) **What should be terms and conditions (technical, operational, security related, etc.) that should be made applicable on the proposed Satellite-based Telecommunication Service authorisation?**
- (c) **Any other suggestion to protect the reasonable interests of other authorised entities upon the introduction of such an authorisation? Kindly provide a detailed response with justifications.**

Amazon commends the TRAI on its efforts to simplify the service authorisation framework and encourages it to carefully balance the objective of reform with critical protection for satellite services under the Telecom Act. The TRAI could strike this balance by revising the scope of Global Mobile Personal Communication by Satellite (GMPCS) and Commercial Very Small Aperture Terminal (VSAT) Closed User Group (CUG) Services to simplify these authorisations, modernizing the service definition, and removing conflicting scope definitions across different authorisations intended to work together. As with other proposals, these changes should be applied only for future applicants. Current licenses and applications should be subject to the migration procedures.

The scope of the GMPCS service could be clarified to apply only to satellite communications under the mobile-satellite service (**MSS**). This will align with international practices and eliminate the need for possible duplicate authorisations that satellite-based telecommunication service providers must pursue today. It also anticipates future international activities by the 2027 World Radiocommunications Conference (WRC-27) that may consider new spectrum allocations to the MSS in existing frequency allocations to the mobile service (**MS**) to extend the coverage of terrestrial networks.³ Finally, this clarification achieves the stated goal of simplification of the authorisations needed by a satellite-based telecommunication service provider like Amazon and removes ambiguity of which authorisation(s) are needed by specifying the radio frequency service in the authorisation scope.

³ See Resolution 253 (WRC-23) (available at https://www.itu.int/dms_pub/itu-r/oth/0c/0a/R0C0A0000100013PDFE.pdf).

Other countries have similarly tailored satellite authorisations according to use by the MSS or the FSS. For example, technical specification IMDA TS GMPCS in Singapore narrowly focuses on use of the 1-3 GHz frequency band to connect satellites directly to end users.⁴ In the United States, the FCC expanded its rules pertaining to the GMPCS transceivers in 2005, establishing rules to connect satellites directly to end-user devices. Finally, the World Administrative Radio Conference 1992 (WARC-92) allocated spectrum to the MSS and, in response, the GMPCS Memorandum of Understanding (GMPCS-MoU) was developed by the 1997 World Telecommunications Policy Forum (WTPF) to facilitate an understanding among Member State signatories that wished to have GMPCS satellite systems and devices operate in their territories.⁵ To this end, these satellites systems and devices all operate in the 1-3 GHz frequency band and in frequencies allocated to the MSS.⁶

In the same spirit, we recommend the TRAI modify the scope of the Commercial VSAT CUG service to apply only to satellite-based telecommunication service providers using the frequencies allocated to the FSS. Further, the scope of the VSAT service authorisation should include providing internet access without obtaining a separate ISP license, or entering into arrangements with an ISP license holder. This, too, will align with international practices for VSAT services. Moreover, we recommend that the TRAI remove the CUG component of this authorization, as closed user groups are a vestige of closed enterprise architectures that do not resemble today's satellite systems and service offerings. This will allow needed flexibility in the scope of the service, while maintaining harmony with the proposed expansion of the Internet Service authorisation to permit VPN services.

Amazon further submits that, in line with the DoT's aim of facilitating ease of doing business, applicability of internet leased line (ILL) obligations to VSAT service providers requires reconsideration. Currently, the UL extends prescriptive obligations relating to ILLs to VSAT service providers (see Clause 7.10, Chapter IX, UL which extends all ILL obligations under the ISP authorization to internet service provided through VSAT). This includes compliances such as period inspection of the premises of ILL customers and maintaining complete network diagrams at the premise of each ILL customer (see Clauses 7.6-7.7, Chapter IX, UL). These obligations increase the operational burden for both consumers and VSAT service providers.

The revised service authorisations should consider adopting similar compliance obligations for satellite broadband services (including VSAT services) as are currently required for other broadband technologies like FTTH and DSL to ensure uniformity and harmonisation between obligations for similarly placed broadband / internet access providers.

Importantly, improving the scope of authorisations for satellite-based telecommunication service without changing the names of the authorisations will maintain regulatory efficiency, stability, and certainty. In particular, it will avoid any confusion (or a superficial amendment) regarding the ongoing application of the Telecom Act and its Schedules to the simplified and modernized authorisations.

Q13. N / A.

Q14. N / A.

Q15. N / A.

Q16. N / A.

⁴ Technical specification IMDA TS GMPCS refers to another useful resource, ITU Recommendation ITU-R M.1343-1, Essential technical requirements of mobile earth stations for global non-geostationary mobile-satellite service systems in the bands 1-3 GHz (available at <https://www.itu.int/rec/R-REC-M.1343/en>).

⁵ ERC Report 60 (TG1 WG2) describes the spectrum allocations to the MSS made at WARC-92 and the development and adoption of the GMPCS-MoU by the 1997 WTPF. See European Radiocommunications Committee (ERC) within the European Conference of Postal and Telecommunications Administrations (CEPT), *Global Circulation of IMT-2000 Terminals* (Sept. 1998), <https://docdb.cept.org/download/2117>.

⁶ More information is available on the ITU's GMPCS-MoU webpage. See *GMPCS-MoU*, IT, <https://www.itu.int/en/gmpcs/Pages/default.aspx> (last visited July 18, 2024).

Q17. N / A.

Q18. In view of the provisions of the Telecommunications Act, 2023 and technological/ market developments, -

(a) What changes (additions, deletions, and modifications) are required to be incorporated in the respective scopes of service for each service authorisation with respect to the corresponding authorisations under the extant Unified License?

As described in response to Questions 11 and 12 above, Amazon recommends that a modified scope of the satellite authorisations could provide the simplification sought by the TRAI without creating additional cost, delay, or confusion.

Specifically, simplifying the VSAT authorisation would enable delivery of (i) internet access, (ii) point-to-point or private network communications services for customers, (iii) backhaul to other service providers (e.g., Access Service providers for cellular mobile connectivity or Wi-Fi hotspots, M2M service providers), (iv) services aggregating traffic from M2M / IoT devices or aggregator devices, etc., and (v) connectivity via Earth Stations in Motion (**ESIM**) using spectrum allocated to the FSS. The VSAT authorisation would no longer be restricted to use by a CUG, and would be renamed simply as "VSAT".

Correspondingly, the GMPCS authorisation could be streamlined to enable delivery of service to customers using frequencies allocated to the MSS. This should include delivery of all types of mobile satellite service, including internet access. This would also facilitate new non-terrestrial network (NTN) services that may be decided by WRC-27 as part of their consideration of the results of studies and possible regulatory and procedural changes to introduce MSS to certain frequencies allocated to the MS. While not a modification, the service area for both these authorisations should continue to be the whole of the Indian territory.

The TRAI could also enable regulatory simplification and flexibility, and encourage innovation, by adopting a neutral position clarifying that licensees are free to offer these services through technologies, commercial arrangements and operations in the manner they deem fit within the ambit of the Telecom Act and rules. The TRAI could drive change expansively and incrementally by identifying guiding principles governing the authorisations, without becoming overly prescriptive or complex. For example, avoiding restrictions on offering Internet access or Internet Telephony based on end points, establishing their transmission links / last-mile linkages, establishing and operating gateway stations and sharing of passive infrastructure, would enable providers to more quickly deploy networks that are tailored to the needs of customers, producing higher quality services at a lower cost for customers.

(b) What changes (additions, deletions, and modifications) are required to be incorporated in the terms and conditions (General, Technical, Operational, Security, etc.) associated with each service authorisation with respect to the corresponding authorisations under the extant Unified License?

Kindly provide a detailed response with justifications

As described in response to Questions 11 and 12 above, the TRAI's goals of simplification would be served by adopting incremental change, keeping the authorisations simple, and prescribing the relevant terms and conditions associated with the service authorisations in the rules pursuant to the Telecom Act. This would also be consistent with the global practices. The rules⁷ could likewise allow service providers / authorisation holders to freely enter into commercial agreements to provide their respective services.

Additionally, Amazon suggests that the terms and conditions be principle-based and encourage innovation and collaboration by licensees, without being overly prescriptive. This would enable the Government to retain its objective of advancing consumer interest, national security and ease of doing business, while maintaining flexibility and enabling innovation by providers.

⁷ For example, such rules could be included in the chapter governing General Conditions.

Q19. In view of the provisions of the Telecommunications Act, 2023 and technological/ market developments, -

- (a) What changes (additions, deletions, and modifications) are required to be incorporated in the respective scopes of service for each service authorisation with respect to the corresponding authorisations under the extant Unified License for VNO?**
- (b) What changes (additions, deletions, and modifications) are required to be incorporated in the terms and conditions (General, Technical, Operational, Security, etc.) associated with each service authorisation with respect to the corresponding authorisations under the extant Unified License for VNO?**

Kindly provide a detailed response with justifications

Amazon re-iterates that in the spirit of facilitating ease of doing business, and establishing a regulatory framework that is conducive to technological innovation and collaboration, the TRAI should adopt a technology neutral approach. This would allow service providers to offer services through any technology permitted under the framework of the Telecom Act. In the context of VNO, this may be done through, for in-stance, allowing VSAT service providers to act as the network service operator for VNOs with ISP authorisation. This would allow satellite broadband to be used by numerous VNOs with ISP authorization who provide services in rural areas, without having to obtain additional UL VNO VSAT authorisation.

Q20. N / A.

Q21. N / A.

Q22. N / A.

Q23. N / A.

Q24. N / A.

Q25. Whether there is a need for introducing any changes in the authorisation framework to improve the ease of doing business? If yes, kindly provide a detailed response with justifications.

Reducing and simplifying the terms and conditions under the authorisation framework will be an important step to balancing compliance burdens, removing regulatory uncertainty, and creating a predictable framework that will allow businesses to successfully offer high quality, affordable services to consumers over the long term. The Satellite Communication Reforms, 2022 (**SatCom Reforms**) took an important first step by creating the Inter-Ministerial Committee Framework for the grant of in-principle and other approvals for establishing space-based communication networks.

To further improve the ease of doing business, the TRAI could adopt a self-certification-based approach to compliance. Currently, the UL prescribes obligations that require demonstration / prior notification from the DoT. This includes (i) demonstrating compliance with the scope of the license and monitoring facility obligations, (ii) giving prior notice before installing new ISP nodes, and (iii) taking approval for additional remote access to network locations. To streamline the compliance framework, the TRAI could use a self-certification-based framework where the authorised entity may affirm that they are acting within prescribed norms. This can also be done by removing certain obligations on satellite service providers that may not be necessary to impose under telecommunication regulations. For example, service providers should not be required to separately obtain carrier plan approval, which are considerations relevant for the underlying satellite operator rather than the telecommunication service provider. Similarly, frequency assignment on a carrier-by-carrier basis could be reconsidered. As long as the carrier equipment is in line with technical specifications, further approvals need not be required because of the amount of carrier equipment utilized or due to any changes in carrier equipment.

Amazon further submits that ease of doing business would be facilitated by considering global norms while prescribing obligations. For example, in the context of user verification, in line with the global principle of data minimisation, service providers should be obligated to collect only the least intrusive personal information, and making biometric authentication mandatory should be reconsidered. Further, currently the UL imposes separate data localization obligations on service providers. Amazon respectfully submits that it would be prudent to have align provisions on this point under the authorisation framework with the provisions on data transfer outside India under the DPDPA. This would ensure consistency with the Government's approach for the DPDPA, which is also based on the principle of data minimization. Harmonising the service authorisation framework with generally applicable laws in India will further the TRAI's goals of improving the ease of doing business.

These simplifications will allow entities to quickly roll-out and expand services while ensuring quality products and customer experience. Adopting a self-certification approach to compliance could also enable regulatory flexibility and dynamism that (1) positions the TRAI to align with global compliance trends it may wish to quickly adopt into the future, and (2) improve the ease of doing business for service providers seeking to harmonise their operations and comply with multiple compliance regimes within India and in other countries.

Q26. N / A

Q27. N / A.

Q28. N / A.

Q29. What amendments are required to be incorporated in the terms and conditions of authorisations for providing telecommunications services using satellite-based resources in light of the policy/ Act in the Space Sector? Kindly provide a detailed response with justifications.

Amazon agrees with the TRAI that it will be important to ensure consistency amongst obligations under the norms, guidelines and procedures for the implementation of the Indian Space Policy, 2023 released by IN-SPACe (**IN-SPACE Guidelines**) and the UL to provide a harmonious regulatory framework for satellite-based services.

One discrepancy that the TRAI could resolve in its terms and conditions governs the surrender of an authorisation. The IN-SPACE Guidelines require an authorised entity to provide a prior notice of 30, 60, or 180 days to IN-SPACE, depending on the type of authorisation, before discontinuing or withdrawing their services. On the other hand, the UL prescribes that in the event that the licensee surrenders the license or a service authorisation under the license, it has to provide a notice of at least 60 days in advance of such surrender.

Moreover, the TRAI / DoT and IN-SPACE could continue to coordinate review of future / new applications so that only one clearance mechanism or approval of an application applies, similar to the approach taken in countries such as the United States when multiple agencies have authority over an applicant. Under this approach, the TRAI and IN-SPACE could designate a single point of contact for applicants or establish review by one Ministry and automatic grant by the other. Adopting this approach for new applications could streamline the process for future authorisation holders, without delaying review of current applications, which may be in different stages before the TRAI / DoT and IN-SPACE pursuant to the extant regime

Additionally, this is an opportune moment to position India as a leader in satellite communication services in the region. Among other things, the Space Policy recognises that Indian non-Governmental entities should be encouraged to use Indian / Non-Indian orbital resources to provide communication services even outside India. Consistent with the policy, regulations should facilitate using infrastructure based in India to be utilized for serving neighboring countries. As an example, this could be done by permitting gateways in India to be utilized for providing services in neighboring countries on a case-to-case basis.

Lastly, the TRAI may wish to conduct a further consultation to simplify compliance obligations in alignment with global practices.

Q30. Whether the provisions of any other Policy/ Act in the related sectors need to be considered while framing terms and conditions for the new authorisation regime? If yes, kindly provide a detailed response with justification.

The TRAI rightly observes that other Policies or Acts may need to be considered when developing the terms and conditions for the new authorisation regime. Harmonising compliance obligations across frameworks will reduce the cost and complexity of compliance for TSPs, as well as enforcement for regulators. It will enable TSPs to expend more resources on improving and providing coverage that otherwise would be required to navigate complex, duplicative, or conflicting compliance regimes. Moreover, harmonisation of compliance obligations across frameworks will improve the balance of the Government's goals to "catalyse Investments and Innovation, and promote Ease of Doing Business"⁸ while regulating entry, resulting in significant foreign investment to the benefit of customers and businesses in India. This would also be in line with the Union Government's vision of expanding the space economy by 5 times in the next 10 years, as emphasized in the Union Budget for the year 2024-2025. Authorisation conditions that may require harmonisation include the IT Act, the DPDPA, Content Regulations, and Foreign Direct Investment norms, as discussed below.

- **Information Technology Act, 2000:** TSPs are regulated under the IT Act and rules under it, by virtue of being intermediaries. The IT Act provides provisions for interception, monitoring, or decryption as well as blocking public access to information. The cyber-security framework under the IT Act -- regulated by CERT-In -- also prescribes obligations regarding data security and breach reporting. Accordingly, the new authorisation conditions should harmonise these obligations and ensure they do not create conflict or duplication.
- **Digital Personal Data Protection Act, 2023:** As entities processing a large quantity of user data, TSPs may be considered Data Fiduciaries under the (DPDPA) for several aspects of their operations. The DPDPA prescribes obligations regarding providing users notice and taking consent, transfer of data outside India, rights of users, etc. Currently, the UL prescribes independent provisions regarding the confidentiality of user information and data localization. To prevent TSPs from being required to comply with divergent regulatory frameworks, the TRAI could align authorisation terms on consent, confidentiality and data locations with the provisions of the DPDPA on issues such as user consent and transfer of data outside of India.
- **Content Regulations:** The UL currently also contains prohibitions on transmissions of certain types of content that do not have parallels in other statutory frameworks. For example, the carriage of "objectionable" content is prohibited, and licensees must provide tracing facilities to trace "nuisance" and "obnoxious" calls. Aligning these provisions with offences and obligations under acts such as the IT Act could ensure regulatory clarity and consistency.

Q31. What conditions should be made applicable for the migration of the existing licensees to the new authorisation regime under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.

AND

Q32. What procedure should be followed for the migration of the existing licensees to the new authorisation regime under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.

Consistent with Section 4(6) of the Telecom Act, the TRAI could clarify that entities that have been authorised to provide UL-based services prior to introduction of updated authorisations under the Telecom Act have the option (but not the obligation) to migrate to the new terms and conditions. Migration may be guided by the principle that entities providing the same services should be regulated in a similar manner.

Amazon respectfully submits that the migration process should also apply to pending applications. Providers whose applications are awaiting approval stand ready to promptly deploy services to

⁸ See Consultation Paper at 1.35 (quoting the strategy of the National Digital Communication Policy 2018).

customers in India, and their businesses will be subject to similar inefficiencies, cost, and unnecessary delay as those of current licensees. Moreover, applying the same migration procedures for pending applications (once granted) as for current license agreements would avoid undue cost and delay in approving applications and deploying much-needed services to customers.

Q33. Do you agree that new guidelines for the transfer/ merger of authorisations under the Telecommunications Act, 2023 should be formulated after putting in place a framework for the authorisations to be granted under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.

Amazon believes that developing guidelines for the transfer / merger of authorisations in parallel with the framework for grant of such authorisations would be beneficial. This would allow stakeholders to comment on the proposed guidelines with a holistic picture of the new framework. However, Amazon understands that simultaneous development may not be feasible, and it recognizes that first establishing the framework may offer clarity by allowing development of guidelines within known parameters.

Under either approach, Amazon recommends that the TRAI provides stakeholders with an opportunity to be involved with the deliberations at the time of formulating the guidelines.

Q34. Whether there is a need to formulate guidelines for deciding on the types of violations of terms and conditions which would fall under each category as defined in the Second Schedule of the Telecommunications Act, 2023? If yes, kindly provide a detailed response with justifications.

Amazon agrees that there is a need for guidelines to categorise the types of violations of terms and conditions in the context of the Second Schedule. While the Telecom Act provides the factors that the Adjudicating Officer must consider while imposing penalties, it may be helpful to obtain guidance on how those factors influence a violation being categorised as severe, major, moderate, etc.

Accordingly, guidelines on how different types of violations should be penalised as per the Second Schedule will provide clarity and reduce ambiguity for both the Adjudicating Officer and authorised entities, creating a predictable adjudicating mechanism.

Q35. Are there any other inputs/ suggestions relevant to the subject? Kindly provide a detailed response with justifications.

Q36. N / A.

Q37. In case it is decided to enhance the scope of Internet Service authorisation as indicated in the Q7 above, what should be the:

- (a) Amount of application processing fees**
- (b) Amount of entry fees**
- (c) Provisions of bank guarantees**
- (d) Definitions of GR, ApGR and AGR**
- (e) Rate of authorisation fee**
- (f) Minimum equity and networth of the Authorised entity**

Please support your response with proper justification.

In the event the ISP authorisation is expanded, Amazon encourages the TRAI to ensure the application processing fee and entry fee remain nominal.

As highlighted in stakeholder comments to the TRAI's 2023 Recommendations on Rationalization of Entry Fee and Bank Guarantees (**2023 Recommendations**),⁹ nominal application processing and entry fees would be consistent with international practice and will attract new entrants and increase competition, innovation and overall growth of the sector. Other obligations under the extant regulatory framework provide sufficient structural and financial requirements to discourage non-serious participants from entering, including the extant license fee. As a practical matter, the high capital necessary to set up a satellite broadband network and ensure compliance also naturally discourages frivolous applications.

In short, keeping the entry fee and processing fee minimal will help improve the growth of the sector as a whole. Moreover, a cost-based approach to fees that calculates fees according to the administrative cost of processing, issuing, or maintaining the license encourages investment in the country and in the rapid provision of services to end users.

Similarly, regarding the bank guarantees, there are sufficient penal provisions in the Telecom Act for breach of terms and conditions of the authorisations (e.g., Section 32 read with the Second Schedule). These may suffice, instead of the two bank guarantees, to ensure that licensees comply with the extant regulations. If the TRAI considers bank guarantees to be essential, Amazon welcomes the 2023 Recommendations that the two bank guarantees (i.e., the Financial Bank Guarantee and the Performance Bank Guarantees) should be merged. The TRAI could also consider further reducing the amounts of the combined bank guarantees (as per recommendation) in light of the penal provisions in the Telecom Act.

Finally, with respect to the definitions of GR, ApGR, AGR, we recommend that the definitions be bolstered to provide greater clarity to service providers in the rules under the Telecom Act. For example, the TRAI could (i) build-in clarifications provided over time by the DoT on various aspects in the terms and conditions themselves (e.g., the comments released in 2023)¹⁰, (ii) expressly exclude any intercompany revenue for support services provided by the authorised service provider to its group companies, and (iii) clarify scope of undefined terms such as "supplementary services", etc.

Q38. N / A.

Q39. In case it is decided to merge the scopes of the extant GMPCS authorisation and Commercial VSAT CUG Service authorisation into a single authorisation namely Satellite-based Telecommunication Service authorisation under the Telecommunications Act, 2023, what should be the: -

- (a) Amount of application processing fees**
- (b) Amount of entry fees**
- (c) Provisions of bank guarantees**
- (d) Definitions of GR, ApGR and AGR**
- (e) Rate of authorisation fee**
- (f) Minimum equity and networth of the Authorised entity**

Please support your response with proper justification.

To re-iterate, as noted in response to Questions 11 and 12 above, Amazon recommends the TRAI does not merge the GMPCS and VSAT CUG authorisations, and should instead change their scope to (1) simplify the authorisations, (2) modernize the service definition, and (3) remove conflicting scope definitions across different authorisations intended to work together. With respect to the fees, bank

⁹ The TRAI's Recommendations on Rationalization of Entry Fee and Bank Guarantees dated September 19, 2023 available here:

https://www.trai.gov.in/sites/default/files/Recommendation_19092023.pdf.

¹⁰ Comments issued by the DoT in response to representations on AGR in 2023, available here:

https://www.saras.gov.in/main/latest_orders/Representations%20on%20review%20of%20Definition%20of%20GR%20and%20AGR%20letter%20to%20Industry%20Associations.pdf.

guarantees and license fee definition, and the standalone and revised GMPCS and VSAT authorisations, as discussed in response to Question 37 above, Amazon encourages an approach that fosters diverse participation by telecommunication providers and is sustainable for businesses over the long term. Keeping the entry fee and processing fee minimal will help better growth of the sector as a whole, and a cost-based approach to fees will reduce administrative burden for licensees and the government as well as enable businesses to provide high quality services to customers quickly and affordably.

Q40. N / A.

Q41. N / A.

Q42. What should be the amount of application processing fees for the various service authorisations including VNOs, other than the merged/clubbed/new service authorisations? Please provide your response for each of the service authorisation separately.

AND

Q43. Whether the amount of entry fee and provisions for bank guarantee for various service authorisations including VNOs, other than the merged/clubbed/new service authorisations, should be:

- (a) kept the same as existing for the various service authorisations under the UL/UL(VNO) license**
- (b) kept the same as recommended by the Authority for the various service authorisations under the UL/UL(VNO) license, vide its Recommendations dated 19.09.2023**
- (c) or some other provisions may be made for the purpose of Entry Fee and Bank Guarantees**

Please support your response with proper justification separately for each authorisation.

Amazon agrees with the TRAI's 2023 Recommendations of reducing entry fees for such providers. Amazon further submits that this rationale equally applies to GMPCS and VSAT authorisations and reducing entry fees will enable customers in India to enjoy higher quality, lower fees and greater choice in communications services. As noted in response to Question 37 above, sufficient barriers to entry would remain to regulate entry in the telecommunication sector. Therefore, reducing the entry fee for these authorisations would only be beneficial to ensuring steady growth and long-term health of the sector.

Q44. Whether there is a need to review any of the other financial conditions for the various service authorisations including VNOs, other than the merged/clubbed/new service authorisations? Please provide your response for each service authorisation separately with detailed justification.

Amazon agrees that the terms AGR, ApGR and GR should be defined in greater detail to provide clarity to providers for the respective service authorisations. For example, as noted above in response to Question 37, the clarifications that the DoT has issued may be incorporated within the terms and conditions itself, and any undefined / broad term used in these definitions may be explained.

Q45. N / A.

Q46. N / A.

Q47. N / A.

Q48. N / A.

Q49. N / A.

Q50. In the interest of ease of doing business, is there a need to replace the Affidavit to be submitted with quarterly payment of license fee and spectrum usage charges with a Self-Certificate (with similar content)? Please justify your response.

Yes, consistent with the TRAI's Recommendations on Ease of Doing Business in Telecom and Broadcasting Sector,¹¹ service providers should be allowed to either self-certify their revenues or submit annual returns / financial statements consistent with requirements under the Companies Act, 2013. These measures would reduce the regulatory burden on companies and increase the ease of doing business in the telecom sector, enabling providers to offer higher quality services to customers more quickly and affordably.

Q51. N / A

Q52. N / A

Q53. In case the scope of Internet Service authorisation is enhanced, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.

As noted in response to Question 37 above, clarity regarding the definitions of AGR, ApGR and GR in the rules under Telecom Act would be helpful. In particular, Amazon encourages the TRAI to clarify broad and vague terms in the existing definitions. This would clarify how certain entries must be calculated, improving compliance and reducing the cost and complexity of compliance.

Q54. N / A.

Q55. In case of merged extant GMPCS authorisation and Commercial VSAT CUG Service authorisation into a single authorisation namely Satellite-based Telecommunication Service authorisation, what should be the format of Statement of Revenue Share and License Fee for each of these authorisations? Please support your response with justification.

To reiterate, Amazon recommends the TRAI make incremental changes to the scope of services for several authorisations under the UL regime rather than implementing wholesale mergers (clubbing) or changes to the existing authorisation regime. Specifically, as highlighted in response to Questions 11 and 12 above, Amazon recommends the TRAI not merge the GMPCS and VSAT CUG authorisations, and instead change them to (1) simplify the authorisations, (2) modernize the service definition, and (3) remove conflicting scope definitions across different authorisations intended to work together.

Q56. N / A.

Q57. N / A

¹¹ Recommendation on Ease of Doing Business in Telecom and Broadcasting Sector dated May 2, 2023, available at: https://traai.gov.in/sites/default/files/Recommendations_02052023.pdf.

Q58. In case of migration, how the entry fee already paid by the company be calculated/ prescribed for the relevant authorisation(s)? Please provide detailed justification in support of your response.

Amazon suggests that the entry fee already paid by existing licensees can be calculated in the following manner:

- If the new entry fee is higher than the existing entry fee for that service authorisation, then the migrating service provider should pay the balance amount pro-rata based on the remaining validity of the authorisation.
- If the new entry fee is lesser than the existing entry fee for that service authorisation, then it can be adjusted (pro-rated for the remaining validity of the authorisation) in the next tranches of license fee payable by the service provider.

Q59. Should the application processing fee be applicable in case of migration. In case the response is yes, what should be amount of application processing fee? Please give reason(s) in support of your answer.

As noted in responses above, the application processing fee should be limited to any administrative costs for processing the application. The DoT may also consider waiving any additional application processing fee for migration, as the existing licensees would have paid several one-time fees including application processing fee and entry fee at the time of applying for their license.

Q60. What should be terms and conditions of security interest which Government may prescribe? Please provide detailed response.

The terms and conditions for the creation of security interests should afford adequate flexibility to achieve the financial aims of the authorised entity and the lender. The TRAI could also clarify what assets can be claimed as “security interests” by lenders.

Q61. N / A.