



OW/IN/TRAI/055
8th August 2024

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Subject : OneWeb India's Comments on Consultation Paper on *the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023*

Reference : TRAI's Consultation Paper dated 11th July 2024

Dear Sir,

This is in reference to TRAI's Consultation Paper on *the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023* dated 11.07.2024.

In this regard, we are pleased to enclose our comments on the said consultation paper for your kind consideration.

Thanking You,

Yours' Sincerely,
For **OneWeb India Communications Private Limited**

Rahul Vatts
Director

Encl: a.a

Response to CP on the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023

Executive Summary:

We thank the Authority for giving us the opportunity to comment on this critical Consultation Paper (CP) titled *the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023*.

It is heartening to see the Government's commitment for inclusive governance and the active involvement of stakeholders in shaping policy directions. The Satellite Communications ("SatCom") through the advancements brought about by the Low Earth Orbit (LEO) constellations - i.e. low latency and higher speeds, can bring fiber like connectivity in remote/rural areas or areas that are hard to reach/served through terrestrial networks, thereby enhancing digital inclusion.

Our vision resonates with the Government's opening of the Space Sector for private participation, aimed at propelling India towards a leading space power and bringing the fruits of this technology to hitherto rural/remote areas. The Indian Space Regulator IN-SPACe has envisioned an investment of \$22 Bn in next 10 years, and targets to make Indian space economy reach \$44Bn by 2033 from 8.4Bn in 2022 and expects that this will make India space economy command an 8% share of global space economy.

To realise this vision from a sector that has just been opened for private sector, it is desirable that the Government's licensing and policy prescriptions stay predictable and consistent for industry to continue investing, nurture and grow. In past few years, the licensor DoT has already made substantial reforms in India's Satcom licensing regime, and TRAI too has made various positive recommendations. Now majority of legislative and licensing landscape has been reformed, including but not limited to the seminal Telecommunications Act 2023 which has enshrined the allocation of spectrum for satellite services on the administrative basis, in line with global practice.

What is required now is to ease out any compliance/financial burden(s) for this nascent sector to grow, as well as allocate the administrative spectrum at the earliest. We are accordingly responding to a selective set of questions raised in the paper.

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Key recommendations:

- ✓ GMPCS and Commercial VSAT CUG Service authorisations should continue to be separate; they should not be clubbed with each other.
- ✓ SESG operators should be permitted to obtain/utilize the spectrum required for operation of SESGs/SNPs, to install baseband equipment at the SESGs/SNPs, and to connect SESGs with PoPs – under a light-touch registration framework. They should not be required to obtain any license/authorisation.
- ✓ The requirements of Inter-Ministerial Committee’s in-principle clearance for establishing/ modifying SatCom networks and NOCC’s carrier plan approval should be done away with.
- ✓ Gateways established in India should be allowed to be used to provide feeder-link connectivity to satellites that provide connectivity to customers outside of India.
- ✓ Pending issuance of Rules, spectrum for SatCom should be assigned to NGSO operators on a provisional basis.

In the section that follows, we provide our replies to select questions asked in the CP.

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

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Q12. In case it is decided to merge the scopes of the extant GMPCS authorization and Commercial VSAT CUG Service authorization 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.

Response:

We believe that the extant GMPCS and Commercial VSAT CUG authorisations should not be clubbed into a single authorisation.

On the one hand, Commercial VSAT CUG authorisation covers the provision of satellite-based data connectivity within a closed user group and backhaul connectivity to Access Service providers; and on the other hand, GMPCS authorisation covers the provision of satellite-based telephony and data services. Thus, it is apparent that the utility of services offered under the two authorisations is very different, and TRAI has itself taken note of this fact in the instant CP. Hence, we firmly believe that the two authorisations should not be clubbed.

Needless to say, the spectrum for both of these services should continue to be assigned administratively, as envisaged under the Telecom Act.

Accordingly, we recommend that GMPCS and Commercial VSAT CUG authorisations should continue to be separate.

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Q23. In view of the provisions of the Telecommunications Act, 2023 and market developments, whether there is a need to make some changes in the respective scopes and terms and conditions associated with the following service authorisations, recently recommended by TRAI:

- (a) Digital Connectivity Infrastructure Provider (DCIP) Authorization (under Unified License)**
- (b) IXP Authorization (under Unified License)**
- (c) Content Delivery Network (CDN) Registration**
- (d) Satellite Earth Station Gateway (SESG) License**

If yes, kindly provide a detailed response with justifications in respect of each of the above authorisations.

Response:

We believe that **there should be a separate light-touch registration for SESG operators; and they should not be required to obtain any license/authorisation.** The following considerations need to be factored in while introducing such a separate registration:

Current regime forces even satellite operators to obtain UL:

Under the present dispensation, even a satellite operator – who only intends to set up a Satellite Earth Station Gateway (SESG)/Satellite Network Portal (SNP) and use satellite spectrum only to the extent of operating the SESG/SNP to provide satellite bandwidth to TSPs and does not intend to provide any retail services to end customers directly – has to mandatorily obtain a Unified License (UL).

The UL comes with several stringent terms & conditions, including financial conditions like a heavy license fee (LF) and security requirements like lawful interception & monitoring. This translates into a huge compliance burden and associated costs for SESG operators, even though they have no intention of providing satellite communication services to end consumers.

The SatCom sector continues to be governed by a decades-old framework, which has not been updated to reflect the technological developments over the years. Now that the Government has allowed the entry of private players in the sector, there is an immediate need of a holistic review of the framework.

TRAI's Recommendations did not review the issue holistically:

Recognizing the problems faced by SESG operators, TRAI recommended for a separate SESG License – a simple registration for establishing and operating SESGs.¹ However, it recommended that SESG operators should not be allowed to install baseband equipment at the SESG and, thus, should also not be permitted to use spectrum (which is required for

¹ https://traigov.in/sites/default/files/Recommendation_29112022.pdf

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establishing the feeder link between the SESG and satellites).

TRAI based its Recommendations on the extant IP-I registration, without acknowledging the unique requirements of global-level satellite operators, especially NGSO. In case of a GSO satellite, the service provider operates the baseband equipment; however, in case of an NGSO constellation, satellite operator itself needs to install and operate the baseband equipment. Hence, TRAI's proposed framework may prove to be restrictive, rather than enabling, especially for NGSO operators. Therefore, we submit that TRAI Recommendations do not address the issue holistically and need to be reviewed.

SESG operators need to be allowed to use spectrum and install baseband equipment:

In order to effectively operate the SESG and provide satellite connectivity to TSPs, SESG operators should be permitted to use the spectrum required for establishing the feeder link between the SESG and the satellites. Further, the spectrum required for operation of UTs should be assigned to service licensees.

Many countries around the world have adopted this approach of having a separate registration for SESG operators and allowing them to use the spectrum required to operate the SESG, while assigning UT frequencies to service licensees.

Even in the broadcasting sector in India, teleport operators are permitted to use spectrum to uplink signals from a teleport to the satellite. Similarly, SESG operators should also be allowed to use spectrum to operate SESGs/SNPs.

SESG operators also need to be allowed to carry traffic from SESGs to PoPs:

It is also to be noted that global-level NGSO operators also establish multiple Points-of-Presence (PoPs) in addition to SESGs. It is at the PoP, and not the SESG, where the traffic is handed back over to the different partners/service providers. Since SESGs and PoPs may be located at different locations, they need to be connected via fibre/leased lines. Thus, for global-level players to efficiently operate in India, they also need to be permitted to connect SESGs with PoPs, including via leased line from licensed/authorised TSPs (without the SESG operator having to obtain any separate license/authorisation).

Accordingly, we recommend the following:

- (i) There should be a separate light-touch registration for SESG operators; and they should not be required to obtain any license/authorisation.**
- (ii) SESG operators should be permitted to obtain and utilize the spectrum required for operation of SESGs/SNPs and to install baseband equipment at the SESGs/SNPs.**
- (iii) The spectrum required for the operation of UTs should be assigned to service licensees.**

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- (iv) **An SESG operator should also be permitted to connect its SESGs with its PoPs, without having to acquire any other license/authorisation.**

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.

Response:

The following measures would enable ease of doing business in the country:

(a) Requirement of In-Principle Clearance from Inter-Ministerial Committee for SatCom Networks

The 2022 SatCom reforms included various measures like enhancement of scope of Commercial VSAT CUG service authorization, removal of MPVT charges etc., but a further round of reforms is required to enable the sector.

Currently, a SatCom licensee needs to obtain an in-principle clearance from Inter-Ministerial Committee – Satellite Network Clearance (IMC-SNC) for establishing/modifying any satellite-based communication network (even after obtaining the requisite licenses & authorisations).

We submit that this requirement does not serve any purpose and needs to be abolished.

It is important to note that there is no such corresponding requirement in the case of the terrestrial networks, even though they are deployed at a much larger scale, use a multiplicity of frequency bands and operate various different technologies, and need to manage interference with other licensed operators as well as unlicensed players and Government agencies. Thus, it is not clear why such a stringent requirement is imposed upon SatCom, which is a very niche sector in comparison.

Doing away with the requirement will help avoid any delay in launch of services by operators and boost investor morale.

Accordingly, we recommend that the requirement of in-principle clearance of IMC-SNC for establishing/modifying satellite-based communication networks should be done away with.

(b) Requirement of a Carrier Plan Approval from NOCC for SatCom

Presently, a SatCom operator is required to obtain a carrier plan approval from NOCC as a pre-requisite for frequency assignment. The requirement is purported to enable interference monitoring by NOCC.

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We believe that this requirement may be relevant for GSO, as multiple operators share the same satellite. However, in NGSO, the whole constellation serves the satellite operator itself and there is no need of interference monitoring by a third party (NOCC).

Even the interference with adjacent satellites is already taken care of by ITU coordination & interference mitigation mechanisms, which are mandatorily followed by all satellite operators.

In any case, an intimation (instead of an approval) may suffice the Government's purpose, without hindering the launch of services by operators.

Accordingly, we recommend that the requirement of carrier plan approval from NOCC for SatCom services should be done away with and replaced with a simple intimation-based process.

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.

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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.

Response:

The Indian Space Policy 2023 is a pioneering document. It contains enabling provisions for Indian entities to provide SatCom services outside the country, thus paving the way for India to become a regional as well as global leader in the sector.

It needs to be recognized that satellite networks are inherently international. Multiple countries are simultaneously served by the same transponders. Similarly, for the ground infrastructure, huge areas can be served by a single satellite gateway; there is no need to set up a separate gateway in each country.

Specifically, the gateways established in India may enable the operator to provide connectivity to its customers even outside the territorial boundaries of India, potentially a majority of South Asia.

In order to enable such services in line with the Space Policy, the gateways established in India should be permitted to be used for providing feeder-link connectivity to satellites that provide connectivity to customers outside of India. Needless to say, the connectivity

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services in other countries would be subject to respective licensing/regulatory frameworks.

Accordingly, we recommend that the gateways established in India should be allowed to be used to provide feeder-link connectivity to satellites that provide connectivity to customers outside of India.

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

Response:

The Telecom Act mandates administrative assignment of spectrum for satellite-based services like VSAT, GMPCS, NLD, etc. However, pending TRAI's Recommendations and final rules, NGSO-based operators are not being allocated any spectrum and are thus not able to launch services.

Even with the constellation in orbit, ground infrastructure ready and all licenses and authorisations in place, operators are not able to launch services due to lack of frequency assignment. Both the operator's and public resources are getting wasted in this process. Moreover, crucial segments like Defence and other Government users need these services for various use cases, but NGSO operators are not able to cater to them.

It is also to be noted that various GSO-based VSAT operators continue to provide services using the Ku/Ka band spectrum assigned to them before the Telecom Act was introduced.

In order to avoid any further delay in launch of services, the Government should also assign spectrum to NGSO-based VSAT operators on a provisional basis. Even E-band has been assigned on provisional basis pending final guidelines.

Accordingly, we recommend:

- (i) Pending issuance of Rules, spectrum for SatCom should be assigned to NGSO operators on a provisional basis.**
- (ii) Operators may provide an undertaking that the spectrum charges would be applicable from the date of assignment as decided under the final policy.**