

OW/IN/TRAI/067  
19<sup>th</sup> November 2024

**Shri Akhilesh Kumar Trivedi**  
**Advisor (Networks, Spectrum and Licensing)**  
**Telecom Regulatory Authority of India,**  
World Trade Centre, Nauroji Nagar,  
New Delhi – 110029

**Subject : OneWeb India's Comments on Consultation Paper on *The Terms and Conditions of Network Authorisations to be Granted Under the Telecommunications Act, 2023***

**Reference : TRAI's Consultation Paper dated 22<sup>nd</sup> October 2024**

Dear Sir,

This is in reference to TRAI's Consultation Paper on *The Terms and Conditions of Network Authorisations to be Granted Under the Telecommunications Act, 2023* dated 22.10.2024.

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

Thanking You,

Yours Sincerely,



Nishtha Kapoor  
On behalf of **OneWeb India Communications Private Limited**

Encl: a.a

**Response to CP on *the Terms and Conditions of Network Authorisations to be Granted Under the Telecommunications Act, 2023***

**Preamble:**

We thank the Authority for giving us the opportunity to comment on this critical Consultation Paper (CP) titled *the Terms and Conditions of Network 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.

We are accordingly responding to a selective set of questions raised in the paper.

**In summary we recommend:**

- ✓ *There should be a separate light-touch registration for SESG/Satellite Communication Network operators. They should not be required to obtain any license/authorisation.*
- ✓ *In addition to the scope recommended by the Authority for SESG License, SESG/Satellite Communication Network operators should be allowed to acquire/use spectrum required for the operation of SESGs/SNPs and to install baseband equipment at the SESGs/SNPs.*
- ✓ *The spectrum required for the operation of UTs should be allocated to service licensees.*
- ✓ *An SESG/Satellite Communication Network operator should be allowed to connect its SESGs with its PoPs without having to acquire any other license/authorisation.*

OneWeb now provides its replies to the specific questions asked, in the sections that follow.

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**Q7. Whether there is a need to make any changes in the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, operational, security etc.) of the Satellite Earth Station Gateway (SESG) authorisation, as recommended by TRAI on 29.11.2022? If yes, what changes should be made in the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, operational, security etc.) of the SESG authorisation? Kindly provide a detailed response with justification.**

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**Q8. Whether there is a need to introduce a new authorisation for establishing, operating, maintaining or expanding satellite communication network, which may be used to provide network as a service to the entities authorised under Section 3(1)(a) of the Telecommunications Act, 2023? If yes –**

- (a) What should be the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, operational, security etc.) of such authorisation?**
- (b) Whether an entity holding such authorisation should be made eligible for the assignment of spectrum for both feeder link as well as user link?**

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

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**Q9. Whether there is a need to introduce an authorisation under Section 3(1) of the Telecommunications Act, 2023 for establishing, operating, maintaining or expanding ground stations, which may be used to provide ground station as a service (GSaaS)? If yes, what should be the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, operational, security etc.) for the authorisation to establish, operate, maintain, or expand ground stations, which may be used to provide GSaaS? Kindly provide a detailed response with justifications.**

**Response:**

Currently, there is no separate registration for SESG or Satellite Communication Network operators in India. While the Authority has recommended that a separate SESG License be introduced, the Recommendations have not yet been accepted. We believe that there are some important considerations which have not been taken into account in the said Recommendations. These include:

**The current regime forces even satellite operators to obtain UL:**

The current regime in India is such that even satellite operators – who only wish to set up Satellite Earth Station Gateways (SESGs)/Satellite Network Portals (SNPs) and acquire satellite spectrum to operate the SESG/SNP to provide satellite bandwidth to TSPs and do not intend to provide any retail services to end customers directly – have no choice but to take a UL.

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Consequently, they have to deal with various onerous conditions, including security compliances like LIM facilities and the payment of hefty LF, even though they have no intention of ever providing satellite communication services to end consumers. In fact, the cost of such compliance makes up a significant portion of the estimated revenue of satellite operators.

The regime for the SatCom sector in India has not evolved over the past 20 years and has thus not kept pace with the sector's significant technological advancements. It is high time that the framework was holistically reviewed, especially in light of the recent opening up of the space sector for private players.

TRAI's Recommendations did not review the issue holistically:

The Authority recognised this issue and recommended, vide its Recommendations dated 29.11.2022<sup>1</sup>, for a separate SESG License – a simple registration for establishing and operating SESGs. However, the Authority failed to address the issue holistically, as it recommended that SESG licensees should not be allowed to install baseband equipment at the SESG and, accordingly, should also not be permitted to use spectrum (which is required for establishing the feeder link between the SESG and satellites).

The framework proposed by the Authority is based on the one followed for the registration of tower companies (IP-I) and does not acknowledge the unique requirements and business models of global-level satellite operators.

Moreover, the Authority has failed to consider the difference between GSO and NGSO satellites. The Recommendations may be relevant in the case of GSO satellites, where the baseband is operated by the service provider. However, in the case of NGSO constellations, the baseband is technically required to be installed and operated by the satellite operator itself.

SESG/Satellite Communication Network operators need to be allowed to use spectrum and install baseband equipment:

Following on from the above, in order to effectively operate the SESGs/SNPs and provide satellite connectivity to TSPs, SESG/Satellite Communication Network operators should be permitted to use the frequency required for establishing the feeder link between the SESGs/SNPs and the satellites. Needless to say, the frequencies required for the operation of UTs should be allocated to service licensees.

As noted by the Authority itself in the consultation paper preceding the said recommendations, multiple jurisdictions follow the approach of having a separate registration for SESG operators and allocating the frequencies for SESGs/SNPs to the SESG operators and UT frequencies to service licensees.

It is to be noted that even in the broadcasting sector, teleport operators are allowed to use spectrum to uplink signals from a teleport to the satellite. Similarly, SESG/

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<sup>1</sup> [https://traigov.in/sites/default/files/Recommendation\\_29112022.pdf](https://traigov.in/sites/default/files/Recommendation_29112022.pdf)

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Satellite Communication Network operators should also be permitted to use spectrum to operate SESGs/SNPs.

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

On a separate note, it is also pertinent to highlight the operating model of global-level NGSO operators – in addition to SESGs, they also set up multiple Points-of-Presence (PoPs). It is at the PoP, and not the SESG, where the traffic is handed back over to the different partners/service providers. Now, a PoP may not necessarily be located at the same location as the SESG and, when at different locations, they would need to be connected with each other through a fibre/leased line. Therefore, it follows, that in order to enable such global-level players to efficiently operate in India, it would be essential to allow these operators to also be able to connect the SESG with the PoP, including through a leased line from licensed/authorised TSPs, without having to acquire any separate license/ authorisation.

**Therefore, we recommend the following:**

- (i) There should be a separate light-touch registration for SESG/Satellite Communication Network operators. They should not be required to obtain any license/authorisation.**
- (ii) In addition to the scope recommended by the Authority for SESG Licenses, SESG/Satellite Communication Network operators should be allowed to acquire/use the spectrum required for the operation of SESGs/SNPs and to install baseband equipment at the SESGs/SNPs.**
- (iii) The spectrum required for the operation of UTs should be allocated to service licensees.**
- (iv) An SESG/Satellite Communication Network operator should also be allowed to connect its SESGs with its PoPs, without having to acquire any other license/authorisation.**

**Q20. What provisions should be included in the terms and conditions of various network authorisations under Section 3(1)(b) of the Telecommunications Act, 2023 to improve the ease of doing business? Kindly provide a detailed response with justifications.**

**Response:**

Some measures which may be taken to improve the ease of doing business are discussed in detail below:

- (a) Removing the Requirement for In-Principle Clearance from the Inter-Ministerial Committee for SatCom Networks**

As part of the 2022 SatCom reforms, the Government took several very welcome steps with regard to satellite-based services like the removal of MPVT charges

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and scope enhancement of Commercial VSAT. However, the sector still yearns for more crucial reforms to be initiated such as doing away with the requirement of in-principle clearance from the Inter-Ministerial Committee for Satellite Network Clearance (IMC-SNC) for various activities.

Even after obtaining the license/authorisation, the satellite operator is still required to obtain in-principle clearance from IMC-SNC for the following activities:

- Establishing any satellite-based communication network.
- Starting totally new service/network or change in the service/network.
- Use of new technology for the first time, change of technology.
- Setting up of additional hub/gateway station.
- Change of frequency band.
- Any proposal not exactly similar to a previously cleared proposal or not scrutinised and approved by the IMC-SNC for any other licensee.

We believe that these requirements are archaic, serve no purpose and, hence, should be done away with.

Moreover, there is no corresponding requirement of obtaining such a clearance from an Inter-Ministerial Committee, not even in the case of the vast terrestrial networks deployed across India that provide services to over a billion customers, operate millions of BTSs, operate in multiple spectrum bands (e.g., 700 MHz/900 MHz/1800 MHz/2.1 GHz/2.3 GHz/2.5 GHz/3.3 GHz/26 GHz) and multiple technologies (2G/3G/4G/5G) and manage interference with other operators at circle level with unlicensed operators and various government users.

As SatCom will remain a very niche segment relative to terrestrial, there is no point in continuing with such onerous requirements for SatCom. This reform will boost investor confidence, simplify the procedure and still meet the objectives of the Government, without impacting the precious time to launch service.

**Therefore, 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) Removing the need for a Carrier Plan Approval from NOCC for SatCom**

Currently, a SatCom operator is required to obtain a carrier plan approval from NOCC.

We understand that this requirement flows from GSO-based networks, where the same satellite is shared among multiple operators, thus necessitating interference monitoring by NOCC.

However, in the case of NGSO, the whole constellation serves only one entity, which is the satellite operator itself. Hence, there is no case for interference monitoring by a third party.



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Even interference with adjacent satellites is a non-issue, as ITU already has well-defined processes for coordination among different satellite systems, with which all satellite operators have to mandatorily comply.

In case it is still felt that the submission of information regarding carrier plans, antenna parameters, etc. is necessary, NGSO operators could continue to provide the same on the Saral Sanchar portal on a self-intimation basis – rather than having to seek an approval.

**Therefore, 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.**

**Q27. Whether there is a need to change/modify any of the financial conditions of the Satellite Earth Station Gateway (SESG) authorization from those recommended by TRAI on 29.11.2022? If yes, please provide a detailed response with justification(s).**

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**Q28. In case it is decided to introduce a new authorisation for establishing, operating, maintaining or expanding satellite communication network under Section 3(1)(b) of the Telecommunications Act, 2023, then, what should be the financial conditions for such authorisation?**

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**Q29. In case it is decided to introduce an authorisation under Section 3(1) of the Telecommunications Act, 2023 for establishing, operating, maintaining or expanding ground stations, which may be used to provide Ground Station as a Service (GSaaS), then:**

**(a) Whether there is a need to have financial conditions associated with such an authorisation?**

**(b) In case your response to the above is in the affirmative, then what should be financial conditions for such an authorisation?**

**Please provide detailed response with justification.**

**Response:**

Please refer to the response to Q7-9.