



SatCom Industry Association (SIA-India) Response to the Draft Indian Telecommunications Bill.

Introduction

Satellite Industry Association (SIA-India) welcomes the opportunity to share inputs on the draft Indian Telecommunications Bill 2022 (Draft Bill), released on 21st September 2022.

SIA-India lauds the government of India's efforts to reform and fine-tune the policy and regulatory environment to enable the growth of full potential of telecommunications. We recognize the government's responsibilities in protecting consumers, supporting industry, growth, and integrity of the telecommunications network, and ensuring national security. We commend the government's consultative approach on a subject with diverse ramifications.

About SatCom Industry Association (SIA-India)

SIA-India advocates on behalf of the satellite industry. Its members comprise government and private sector players involved in satellite technologies, manufacturing, and services. SIA-India seeks to build on India's globally recognized strength in space communications. It aims to augment this strength with that of global players and new entrants to leverage satellite communications for India's citizens and the economy.

SIA-India works with stakeholders to promote a conducive regulatory environment for satellite communications in India. It highlights the unique role of satellite communications in extending broadband connectivity to rural and remote users who cannot be served cost-effectively by terrestrial players.

SIA-India recognizes that robust competition in the telecommunications sector is key to maximizing consumer benefits, including quality and affordability. It endorses competition between players, technologies and business models.

SIA-India Response to the Draft Bill.

Given its primary focus, SIA-India submission below addresses portions of the Bill with potential impact on satellite-based services.

Spectrum Management (Section 5, Schedule 1)

The massive growth in wireless technologies—terrestrial and satellite—underlines the importance of effectively managing the spectrum. SIA-India, therefore, sees value in the Draft Bill's approach to addressing spectrum management in the parent telecom legislation. Including spectrum management in the primary legislation can empower regulators to ensure the efficient use of a finite resource.

SIA-India applauds Section 5 of the Draft Bill, which enables spectrum to be validly assigned using different methods, whether by auction, administrative process, or other methods. Auctions are but one method and are most suitable when multiple players require exclusive access to spectrum over substantial areas nationally, like in the case of terrestrial mobile services.

Auctions are not appropriate for the assignment of spectrum in other contexts where such exclusivity is not required. For a wide range of telecommunications applications, countries, including India, use administrative processes to assign spectrum (e.g., for satellite services or fixed point-to-point microwave) or, in some cases, dispense with licensing altogether or as in the case of license-exempt bands (e.g., for Wi-Fi devices).

Spectrum assignment methodology, be it an auction, administrative, or unlicensed utilisation, hold true respectively, subject to the physical and technical complexity aspects of the technology in use, resource supply-demand mismatch, past precedence and global practices. Hence, no methodology is superior to another or should have a preference or priority over another.

Due to the technical characteristics of satellite services and the spectrum sharing mechanisms already used by the industry worldwide, auctioning spectrum for satellite services and providing exclusive rights to its use will hinder the development of satellite networks in India because it will decrease its usability and, consequently, decrease its overall value.

In fact, unlike the assignments of spectrum for use by terrestrial networks, the fragmentation of spectrum unequivocally results in a loss of satellite capacity that cannot be alleviated. This is one of the reasons why auctions are not the mechanism used in most world jurisdictions. Assignment of spectrum should be done in line with international standards and in a manner that ensures maximum usability. As the nature of satellite spectrum assignments is to be shared (multiple satellite operators/service providers use the same frequencies), which is facilitated via coordination with other satellite operators, auctions that give exclusive rights to a few satellite operators by dividing the spectrum among them will limit the use of spectrum and would constrain the viability and inherent flexibility of satellite systems. In the case of satellite spectrum, the international best practice is to use fair and transparent administrative processes to assign spectrum for space stations and earth stations. There is no precedent for auctions of satellite spectrum in bands that can be routinely shared between multiple satellite operators. The very few countries that have auctioned domestic orbital slots have either abandoned the practice (e.g., US and Brazil) or have encountered difficulties with failed auctions (e.g., Thailand, Mexico). Indeed, the universal practice of the countries with the most developed satellite sectors (including the U.S., the U.K., Brazil, Canada, China, and France) is not to auction spectrum for satellite services for space stations or earth stations.

Significantly, the spectrum assignment through methods other than auctions is consistent with the judgment of the Supreme Court of India in 2012 in the 2G spectrum case. In response to the Central Government's subsequent query, the Court clarified that it does not see auctions as a constitutional principle¹. It acknowledged that auctions may not always be appropriate². There is no justification for

¹[C]an auction as a method of disposal of natural resources be declared a constitutional mandate under Article 14 of the Constitution of India? We would unhesitatingly answer it in the negative since any other answer would be completely contrary to the scheme of Article 14.”).

²The Supreme Court also reasoned: “Auctions may be the best way of maximizing revenue but revenue maximization may not always be the best way to sub serve public good. ‘common good’ is the sole guiding factor under Article 39(b) for distribution of natural resources. It is the touchstone of testing whether any policy sub serves the ‘common good’ and if it does, irrespective of the means adopted, it is clearly in accordance with the principle enshrined in Article 39(b).” (*id.* at ¶ 116).

the Explanatory Memorandum to the Draft Bill to specify auctions as the “primary” method for assigning spectrum.

In SIA-India’s view, the Draft Bill correctly allows spectrum to be assigned by the administrative process for government functions and for “purposes given of the public interest and necessity,” as defined in Schedule 1, whether performed by government or non-government actors. The list of activities in Schedule 1 for which administrative assignment of the spectrum is prescribed includes as governmental activities and activities currently conducted by non-governmental entities throughout India. To remove any ambiguity in this regard, the Draft Bill and Explanatory Memorandum should clarify that assignment by the administrative process is available for both governmental and non-governmental applicants performing the activities listed in Schedule 1.

Given the international best practices outlined above, Schedule 1 of the Draft Bill correctly enables spectrum for satellite services to be assigned by the administrative process – whether such services are to be performed by government or non-governmental actors. In SIA-India’s view, the list of satellite services in Schedule 1, Item 15, of the Draft Bill is incomplete. It does not reflect the full range of satellite services for which spectrum is already being assigned by the administrative process today. Schedule 1, Item 15 should be extended to include all satellite services, not just certain ones. In addition, particular, the Department of Telecommunications should add “earth stations in motion” (such as the In-flight and Maritime Connectivity (“IFMC”) services approved by DoT in 2018) to Schedule 1, Item 15. IFMC services use satellite spectrum and operate similarly to the VSAT services already listed in Schedule 1, Item 15.

SIA also wishes to highlight the following related concerns:

- Telecom Regulatory Authority of India (TRAI) is yet to give recommendations sought by the government on the auction of satellite and backhaul spectrum. However, it had noted in its consultation paper that “...making satellite-based services affordable [...] may need promotion and different consideration”. (page 38 Consultation Paper on Licensing Framework for Earth Stations [here](#)).
- Auctioning satellite spectrum could have long-term consequences for the industry. It could jeopardize the USD 184 Bn per annum estimated, in a recent Plum Consulting Report to be the contribution of the satellite industry to the Indian GDP.
- An auction process would drive up the price of spectrum such that it becomes prohibitively expensive for prospective entrants.
- Satellite broadband is used by many administrations as potent tool to bridge the digital divide rather than seeing it as a source of revenue for the Government. An auction approach to spectrum prioritizes revenue over the important public purpose served by a robust licensing process.

In summary, auctioning satellite spectrum is against global best practices, can disrupt existing services and deter future investments in the telecommunications network. It will make the provision of Internet services via satellite more expensive and technically difficult and, consequently, hinder the development of rural connectivity in India.

Refarming and harmonization of spectrum (Section 5)

Section 5(6) enables the Central Government to repurpose and rearrange the spectrum. Understandably, a sovereign government would wish to retain this right. However, such power should be exercised sparingly and only after an open and transparent consultation and consideration of full range of public interest factors.

While the Draft Bill's intent to allow deployment of new technologies in existing frequency bands is welcome, there are several other concerns with these provisions.

Taking a holistic view of India's communications needs and goals (not just the needs of a single sector). The Draft Bill allows *refarming* and assigning spectrum *that has already been assigned*, to one or more additional entities if such secondary assignment does not cause harmful interference (Section 5(8)). This is risky. To cost-effectively provide broadband to all in India, a mix of technologies, including satellite and terrestrial solutions, will be needed. Consequently, each technology will need access to the spectrum. Viewed in this way, it is risky to reallocate the satellite spectrum that is being used productively today for meeting uncertain future terrestrial requirements. This will not ensure the most efficient and predictable use of spectrum and is likely to be self-defeating.

The need to harmonize spectrum internationally for satellite services. The need to harmonize is as relevant for the terrestrial mobile spectrum as it is for the satellite spectrum. This is important since Satellites are built to serve entire regions and multiple countries. The international nature of satellite services requires a high degree of spectrum harmonization.

The need for investment certainty. All telecom providers, including satellite operators, need certainty in the regulatory environment to make long-term investments. In the case of satellite operators, these investments in space often cannot be changed or swapped out easily, quickly, or cheaply in response to regulatory changes.

The potentially high costs and disruptions of a repurposing or rearranging of spectrum assignments or reallocations. Repurposing or rearranging the spectrum can result in substantial disruption to existing users, substantial expense in changing operations, and significant stranded investments. These should be considered, including potential compensation.

The Draft Bill also lacks sufficient clarity about issues relevant to spectrum repurposing or rearranging. These include:

“Excluding time taken for roll-out of service: The Draft Bill does not define “unutilized spectrum”. It should clearly set- forth parameters for what amounts to “unutilized” spectrum to ensure regulatory certainty and avoiding arbitrary action. The time taken to rollout service must be excluded so that operators have enough time to utilize spectrum.

Flexible use / Sharing - Although the Draft Bill would allow the central government to impose certain conditions for spectrum sharing with different entities in order to promote newer technologies, these conditions are not specified, which would lead to regulatory uncertainty for service providers. Specifically, powers to direct spectrum sharing with different entities may hinder spectrum access and may also expose it to interference.

The Draft Bill could also benefit from the inclusion of statutory safeguards that existing assignees of spectrum are given a reasonable opportunity to be heard and highlight any potential harm to their service, as these statutory safeguards would provide greater certainty when rules / guidelines are frequently amended.

Role of the Telecom Regulatory Authority of India (Section 46)

Specialized expert bodies like TRAI -and its counterparts elsewhere - play a key role in responding to technological, economic, and business developments in the telecommunications sector. TRAI does so today with a legislative backing for its role in the TRAI Act, 1997 (amended in 2000) which gives it a recommendatory role in certain licensing matters. The government is not bound to accept the recommendations but was obliged to seek them from TRAI and promptly provide the body with information.

The Draft Bill proposes amendments to TRAI Act 1997, which reduce the TRAI's limited role in licensing process. It removes the obligation to seek the TRAI's recommendations or to provide the body with information.

SIA believes that such a move is counter-productive when independent sector-specialist regulators are busy addressing rapid changes in the technology and business of telecommunications. The independent role of TRAI protects the interests of consumers and stakeholders have been a valuable and essential part of the Indian regulatory framework.

Further clarity should be provided on the overlap between TRAI and the jurisdiction of other authorities as the Draft Bill seems to create some overlap between the TRAI and the Government's powers, such as prescribing measures relating to unsolicited commercial communications.

Additionally, the Government should continue to ensure engagement of industry stakeholders. Such involvement gives the Government a unique insight in industry concerns and is essential in framing better regulations. This could be ensured by the inclusion, in the Draft Bill of a general consultation procedure whereby interested parties were given the opportunity to comment on any measure which may have a significant impact on the country.

Infrastructure (Schedule 5)

The Draft Bill contains provisions allowing terrestrial service providers to obtain rights of way to public property to build their networks. A similar provision for satellite infrastructure should be considered by expanding the items of telecommunications infrastructure in Schedule 5 of the Bill to include satellite ground infrastructures, such as gateway earth stations.

The Draft Bill defines Telecom Infrastructure as only consisting of towers and fibre, etc. and is not consistent with the ITU's definition of digital infrastructure. Regarding the definition of infrastructure, the Draft Bill allows the government to provide tax benefits for installing telecom infrastructure and Schedule-5 provides an indicative list of such infrastructure. However, we note that satcom infrastructure is not specifically included as a part of Schedule-5 to receive such tax benefits. We see no reason why satellite gateways would not be considered as infrastructure and thus suggest their inclusion for tax benefits.

Although, also mindful that the process for seeking such registration is not included in the Draft Bill and is yet to be specified by the Government, we suggest that the Draft Bill clarify that licensed telecommunication service providers will not require additional registrations to set up/utilise

telecommunication infrastructure to provide licensed services. No separate authorisation should be required for dealing and possession of Satellite Customer Terminals by intermediaries who make the equipment available to customers. If such an authorisation is needed, not only does it impact service providers' ability to sell their equipment at scale, it will also hamper the adoption of new technology by customers.

Regulatory Sandbox (Section 32)

SIA supports the creation of carefully defined "regulatory sandboxes". Such a provision will provide critical support for the demonstration and testing of technologies and services in a controlled manner. A regulatory sandbox will promote innovation and ensure the safety and security of consumers and stakeholders before launching a technology or service for broader use.

Power to Prescribe Standards (Section 23) The Draft Bill allows the central government broad powers to frame standards for telecom equipment /network /infrastructure. The adoption of different local standards adds to the complexities (and costs) for foreign operators who are interested in providing services in India. As such, we propose the Draft Bill clarify that these standards will be in line with the globally accepted benchmarks. Doing so will enable a harmonious, global standard for such services and products, and boost global sustainability initiatives.

The definition of telecommunication network also includes telecommunication equipment, which in turn includes "software not embedded like Operations Support System/ Business Support System". This can have wide implications given that such software used in telecom equipment /devices/services (if considered 'telecommunication services') could potentially fall within the purview of operating the telecommunication network. Such 'software' should not be subject to telecommunications laws, which have traditionally governed the physical equipment necessary for enabling telecommunication, particularly given the ambit of telecommunication services under the Draft Bill. The follow-on impact of such a broad definition would necessarily result in telecommunication laws, for example, prescribing standards for such software, which necessarily falls outside the ambit of such laws.

Process for Obtaining Licenses / Registration / Authorisations (Section 3, 4)

Despite simplification of the regulatory and licensing framework being a key objective of the government, the Draft Bill could do more to further this objective instead of leaving details to be determined by the central government in the future. In particular, we suggest including some essential principles to a successful licensing process.

The definition of "telecommunication services" requiring a license explicitly includes "satellite-based communication services". However, the Draft Bill is silent on the process for obtaining licenses and authorisations for providing telecommunication services. It simply states that the grant of license will be subject to prescribed terms and conditions.

License Conditions: A streamlined and light-touch license regime would be key in encouraging innovation and investment in the telecom sector. Detailed consultation should be held with industry stakeholders before these terms and conditions are finalised.

Engaging with the Department of Space: Entities which want to operate satellites and provide satellite-based services will also require approvals from the Department of Space (for instance, under the

proposed Draft Space Policy or obtaining landing rights. It would be beneficial if the Draft Bill set up a single window clearance mechanism for satellite service providers to obtain all relevant approvals.

This would (i) ensure that industry operators do not have to engage with multiple Ministries for seeking authorisations; and (ii) be helpful in simplifying the process and reducing delays.

Public Safety and National Security Provisions (Section 24)

The Draft Bill grants wide powers to both central and state governments as well as LEAs to ensure 'public safety', 'national security', and in cases of 'emergency'. But it does not define the scope/definition of these terms. This leaves considerable powers like a) search or take-over of service providers' equipment/networks; b) using network for surveillance; c) suspension of services, d) prescribing/revising standards for telecom equipment/network/infrastructure, amongst others, at their discretion. This has the potential to cause interruptions in telecommunication services.

Additionally, it is not clear how the existing interception provisions will harmonize with the over- broad provisions in the Draft Bill proposed powers. We suggest these provisions should be modified to ensure that adequate safeguards are provided before the Government is able to take possession of telecommunication services or suspend telecommunication services.

Furnishing Information to the Government

Section 24(2) gives the Central Government and State Government the power to direct (i) time bound suspension of message transmission or provision of telecom networks/services, (ii) interception of messages, and (iii) disclosure of data in specific situations.

Section 51 mandates Telecom licensees, registered entities and assignees to furnish information in response to requests by Central and State Governments, if it (i) is in their possession or control, and (ii) is necessary in relation to pending or apprehended civil or criminal proceedings.

Section 51 provides no determining principle to seek information for "apprehended" civil/criminal proceedings. This could lead to roving and invasive inquiries by Governments even when there is no offence committed by an individual. Further, there is also no limitation on the scope of the information that may be sought under this provision. Therefore, the provision is disproportionate and must be suitably modified (for e.g., removing the word "apprehended", and clarifying the scope of information that can be sought).

Voluntary Undertaking (Section 8)

The voluntary undertaking should also be applicable to a breach in reporting or compliance requirements by a licensee, whereas a licensee should be allowed to submit an undertaking that it has met all compliances.

In Sub-section (1) the following should be inserted "and any compliances required to be submitted under the license, registration, authorization, or the assignment granted under this Act."

Appeal (Section 10)

Decision of appeals should be time bound and not later than 30 days. Accordingly, the following should be inserted at the end of the provision "and no later than 30 days from the date of appeal."

Payment of contribution by licensee, registered entity, or assignee(Section 28)

Under the current licensing conditions, license fees are a levy by the Government which is charged as a percentage of revenue (ApGR) earned by service providers.

Government has been earning GST on these revenues. Charging GST on the license fee amounts to dual levy and harms the cash flow of the operations. Currently the licensee fee is charged as a percentage of revenue (ApGR). The current 8% levy includes 5% that goes towards the Universal Service Obligation Fund. We suggest the Telecom Development Fund should also be part of the 8% and not be charged extra over and above the current license fee.

Penalties (Chapter 11)

Section 47(1): The Draft Bill provides for punishment of offences specified in Schedule 3 through either imprisonment and/ or fine.

Section 48 (Offence by Companies): The Draft Bill imposes liability on employees of a company who at the time of the offence - were responsible for the company's conduct relating to the offence.

While the introduction of compounding and graded penalties is a laudable measure, the Government should consider further reforms:

Compoundable Offences: Expanding the list of offences that are compoundable to ensure that the enforcement regime is simplified, and innovation is not stifled. For example, compounding should be permissible for offences such as providing telecommunication services without a license or gaining access to a telecommunication network when due to minor or inadvertent errors (a brief lapse in licensing due to a payment processing issue, the intercept of a message on the good faith belief that a subpoena was valid, etc.). While such instances may merit monetary fines, imprisonment for an inadvertent act would be highly disproportionate.

Personal Liability: The Draft Bill should modify the provision on strict liability of a company officer or employee to be consistent with provisions of statutes such as the IT Act (Section 85). An individual person carrying out his or her official duties should be held not liable unless the government can show that the contravention was due to wilful or grossly negligent conduct on the part of that person.

Proposed Rewording of Some Sections of the Draft Bill

We propose the following alternative text for some provisions, or parts thereof, in the Draft Bill:

2. Definitions

(4) "broadcasting service" means a telecommunication service intended to be received by the general public either directly or indirectly;

Reason: Editorial.

(7) "license" means a license, approval, authorization, permission by whatever name called, granted under this Act for providing:

(a) telecommunication services (including only such broadcasting services in Schedule 2 and any other broadcasting services as may be notified by the Central Government as requiring a license); and

(b) telecommunication network;

Reason: Simplification (only two types of licenses: a) telecommunication service and b) telecommunication network), coherent with section 3(2)(a). This reflects that broadcasting was included in the definition of telecommunication service.

(10) "NFAP" mean the National Frequency Allocation Plan issued from time to time, by the Central Government identifying which frequency bands are available in India for each telecommunication service,;

Reason: To reflect the mandatory nature of the NFAP.

5. Spectrum Management

(2) The Central Government may assign spectrum for telecommunication through:

(a) auction;

(b) the administrative process for governmental functions or purposes in view of public interest or necessity as provided in Schedule 1; or

(c) in any other manner as may be prescribed.

Reason: We support the conclusion that satellite-based services, as identified under item 15 of Schedule 1, are administratively assigned as in the best public interest and, therefore, should also include many of the new emerging technologies, including Earth Station in Motion (ESIMs).

As discussed above, we believe that auction is not an appropriate method for spectrum assignment to satellite use. It is proposed to make this argument clear in sub-section (2) despite the possibility to grant exceptions, as mentioned in sub-section (5), which seems to be applicable to very specific situations. Supreme Court of India has also recognized that auctions are not required for the government's assignment to private participants of all natural resources.

The wording above is compatible with the current practice that some spectrum, e.g., for public mobile services, is often assigned by auction to reflect the need for exclusive spectrum assignments (even then, other methods are possible, e.g., Japan, smaller countries). Spectrum for fixed point-to-point microwave links and satellite services, is often assigned by administrative process due to the non-exclusive nature of the spectrum use. Spectrum, for Wi-Fi, is typically exempt from licensing altogether.

Proposed additions to Schedule 1:

We recommend that the list of satellite services exempt from the auction in Schedule 1 (15) be expanded to include other satellite services with similar characteristics, e.g., Earth Stations In Motion (ESIM) services, including In-flight and Maritime Connectivity (IFMC) services, that operate similarly to VSAT services, GMPCS services that operate similarly to MSS and IFMC services

Suggested Deletions (sections 5.8, 5.9)

We recommend deleting sub-sections 5.8 and 5.9 and an alternative text for subsection 5.8

(8) The Central Government shall take such measures and actions to guarantee the most efficient utilization of the spectrum while guaranteeing the rights granted to the licensees in accordance with the relevant terms and conditions.

Reason: These sub-sections are provided as optional actions for implementation by the Central Government and are then unnecessary to appear in an Act.

6. Sharing, Trading, Leasing, and Surrender of Spectrum

Sharing, trading, leasing, and surrender of spectrum assigned under sub-section (2) of Section 5 is permitted, subject to the terms and conditions, including applicable fees or charges, as may be prescribed by the Central Government.

Reason: To make the provision more assertive.

23. Power to prescribe standards

The Central Government, when necessary, issues standards, as may be prescribed, in respect of:

(a) telecommunication equipment, telecommunication services, telecommunication network, and telecommunication infrastructure;

(b) manufacturers, importers, and distributors of telecommunication equipment; or

(c) reliability of the provision of any telecommunication services to the public.

Reason: This action by the Central Government should not be optional as it is strictly necessary.

Future Role of TRAI (Section 46)

Remove subsection (b) to (i) of Section 46.

Reason : TRAI serves an essential public consultative role that ensures a measure of transparency and fairness in licensing, as TRAI brings both its own independent policy expertise to bear and consults with the public.

8. Voluntary Undertaking

(1) At any stage, a licensee, registered entity or assignee may give, and the Central Government may accept, in the manner as may be prescribed, a voluntary undertaking in respect of any breach of terms and conditions of license, registration, authorization or assignment granted under this Act. And any compliances required to be submitted under the license, registration, authorization or the assignment granted under this Act.

Reason: The voluntary undertaking should also be applicable to a breach in reporting or compliance requirements by a licensee, whereas, a licensee should be allowed to submit an undertaking that it has met all compliances.

10. Appeal

Any person aggrieved by any action under this Chapter may prefer an appeal to the appellate authority as may be prescribed, within thirty days of the action and the appellate authority may pass such orders expeditiously as deemed fit under law and no later than 30 days from the date of appeal.

Reason: Decision on appeals should also be time bound and not later than 30 days.

Summary of Recommendations

We summarise below SIA-India's main recommendations regarding the Draft Bill:

1. Move away from the concept that an auction is the "primary" method of assigning spectrum in recognition of the many instances when auctions would not be appropriate.
2. Clarify in Section 5(2) that the administrative process can assign spectrum to the government and non-government users alike for the specified activities in Schedule 1
3. Consistent with international best practice, amending Schedule 1, Item 15, to include all satellite services among the activities for which assignment by the administrative process is prescribed. At a minimum, the list of satellite services in Item 15 should be expanded to add Earth Stations in Motion (ESIM), such as IFMC services, that operate similarly to VSATs.
4. Exercise abundant caution in using government powers to repurpose and rearrange satellite spectrum.
5. Retain TRAI's current role in the licensing process by removing subsections (b) to (i) of Section 46.
6. Expand Schedule 5 of the Draft Bill to include satellite ground infrastructure to facilitate the build-out of satellite infrastructure in India.
7. SIA-India supports the creation of carefully defined "regulatory sandboxes" as a tool for experimentation and innovation.