

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

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

Dear Sir,

Extreme Infocom Pvt. Ltd. is holder of NLD and ISP-A Universal Licenses. The company is operating Extreme IXP (www.extreme-ix.org) - India's leading Internet Exchange Provider. Extreme IXP is serving peak traffic of 2.9 Tbps (www.extreme-ix.org/technical/statistics/) in 41+ Points of Presence across 6 cities - Mumbai, Delhi NCR, Chennai, Bengaluru, Hyderabad and Kolkata.

We're committed to bringing India up to speed and making India a global hub for internet content, services and apps by providing world class peering solutions across all states of India.

We are pleased to learn about the authority's keen interest in aligning the regulatory framework for the telecom industry with the Telecommunication Act, 2023 and further developing the sector to ensure efficiency and regulatory parity. We believe that the questions under consideration indicate a progressive approach towards achieving the said goal.

In this regard, we would like to share a few comments and recommendations on the questions pertaining to the overall authorisation regime and regulation of IXPs and CDNs in particular.

Background:

Marking a shift from telecom licensing, Section 3 of the Telecommunication Act, 2023 grants the power to the Central Government to issue authorisation. This establishes the legislature's intention to enable ease of business in the telecommunication sector by removing administrative and regulatory hardships. Accordingly, DoT sought TRAI's recommendations on terms and conditions, structure and scope of authorisation to provide telecommunication services. In this background, TRAI has now issued the present consultation paper to solicit comments on specific issues related to the framework for the service authorisations to be granted.

We believe that the Indian telecom sector would greatly benefit from the shift to a general authorisation regime as compared to a licensing regime as this would simplify business processes and encourage ease of doing business. Given the far-reaching consequences and impact such a monumental shift in regime will have on the industry, the Authority ought to have been given more than just 60 days for formulating its recommendations. This was necessary for the stakeholders to get more than mere 21 days for submitting their response to questions of grave consequences. We have however put together the following as our response to some of the pertinent issues:

Q.2 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 authorized entities in case of any amendment in the rules? Kindly provide a detailed response with justifications.

We believe that transitioning from a licensing regime to a general authorization framework could significantly enhance India's telecommunications sector by promoting ease of doing business, fostering innovation, and reducing administrative burdens. Below are our detailed responses to the proposed shift and the necessary safeguards

General Authorizations vs. Licensing Regime

A general authorization framework simplifies the process for new entrants, reducing barriers to entry and encouraging more competition. This aligns with India's goal of improving the ease of doing business. In contrast, licensing regimes can [create](#) unnecessary hurdles for legitimate players, stifling innovation and market growth. General authorizations [establish](#) objective and transparent criteria for service provision, reducing discretionary powers and ensuring decisions are based on clearly defined principles. By limiting individual licenses to specific cases, such as the use of scarce resources like spectrum or services posing public health risks, arbitrary decision-making can be minimized.

The European Union's approach, as outlined in the European Electronic Communication Code, emphasizes the freedom to provide electronic communication networks and services with minimal restrictions, intervening only for specific, justified reasons. This model promotes market efficiency and administrative simplicity. Similar provisions can be seen in the regulatory approach of [Australia](#) and [Singapore](#) as well. The EU [Directive](#) 2018/1972 specifies that to ensure optimal use of resources, fees should reflect the economic and technical situation of the market concerned, as well as any other significant factor determining their value.

General authorizations reduce regulatory compliance burdens, allowing telecom entities to focus on innovation and service quality. This framework decreases the administrative workload for regulatory authorities, enabling them to allocate resources more effectively and oversee the market more efficiently. By streamlining market entry, general authorizations enable quicker deployment of new services and technologies. This agility is crucial for staying competitive in the rapidly evolving telecom sector.

Adopting a general authorization regime aligns India with international standards, enhancing its attractiveness as a destination for global telecom investments and partnerships. By reducing the complexity of regulatory processes, general authorizations allow regulatory bodies to focus on strategic oversight and market development rather than procedural compliance checks.

Proposed Safeguards for General Authorization Framework

1. Narrowly Defined Requirements for the authorization:

- Only services utilizing scarce resources (e.g. spectrum) or posing significant public health risks should be required to seek authorization, or any kind of permission from the government to provide their services

To further support the point that only services utilizing scarce resources or posing significant public health risks should be required to seek authorization or licensing from the government, it is important to highlight how legislative intent demonstrates this differentiation. Throughout the Act, the legislature has prescribed the payment of both fees and charges for the use of spectrum¹, emphasizing its scarce nature and significant value. In contrast, for other telecommunication services, the Act mandates the payment of either fees or charges, but not both². This differentiation in payment structures reflects the categorization of services based on their resource utilization and associated risks. Therefore, such distinction should be mirrored in the authorization process as well, making authorization mandatory only to services that utilize scarce resources, like spectrum, or pose significant public health risks.

- All other services should be exempted under Section 3(3) of the Telecom Act. In other words, invoking the power under Section 3(3) of the Act, the Central Government ought to exempt all those services that neither utilize scarce resources nor pose significant public health risks, from seeking authorisation under Section 3(1) of the Act.
- This targeted approach ensures that regulatory interventions are necessary and justified, preventing overreach and arbitrary misuse.

2. **Cost-Recovery Based Fees:**

- Authorization/licensing fees should cover only the administrative costs of regulation, set on a cost-recovery basis. This principle is reflected in Article [16](#) of the EU Directive 2018/1972 and is recognized as a global best practice.
- Any additional fees (e.g., spectrum management fees, universal service charges) should be separate from administrative fees, clearly defined, and based on transparent, objective criteria. These fees should not create barriers to market entry or serve as revenue sources disproportionate to the regulatory services provided.
- In fact, by prescribing payment of either fees or charges for providing telecommunication services (those not using spectrum)³, the legislature reflects its intention of removing unnecessary costs for increasing ease of business. Thus, to further this intention, authorisation fees should only be based on cost-recovery.

Detailed submission on this point has been made in response to question number 61.

3. **Clear and Transparent Criteria:**

- The criteria for general authorizations should be predefined and easily accessible to all potential service providers. This ensures predictability and reduces uncertainty for businesses.

¹ Sections 4(3) and 4(6) of the Telecom Act, 2023

² Sections 3(1) and 3(8) of the Telecom Act, 2023

³ Sections 3(1) and 3(8)

- Regulatory objectives should be broad and general under the general authorization framework, with specific conditions applied only when necessary to optimize scarce resources or address public safety concerns.

In conclusion, shifting to a general authorization framework, with narrowly defined authorization requirements for specific cases exempting authorization requirements from all other cases, will promote a more dynamic, innovative, and efficient telecommunications sector in India. By adopting international best practices and ensuring transparent, objective regulatory criteria, we can safeguard the interests of authorized entities while fostering a competitive market environment.

Q. 7 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.

Q. 8 Whether there is need for merging the scopes of the extant National Long Distance (NLD) Service authorization and International Long Distance (ILD) Service authorization into a single authorisation namely Long Distance Service authorisation under the Telecommunications Act, 2023? Kindly provide a detailed response with justifications.

Inclusion of Leased Circuits/Virtual Private Networks within Internet Service Authorization

Under the Telecommunications Act, 2023, there is a compelling need to include the provision of leased circuits and Virtual Private Networks (VPNs) within the scope of Internet Service authorization. This necessity arises from several factors rooted in existing definitions and regulatory frameworks, as well as the evolving nature of technology and market dynamics.

The current regulatory framework in India outlines specific definitions and restrictions for leased circuits and internet leased lines (ILLs). A leased circuit is defined as a dedicated, point-to-point connection, including VPNs, while an ILL is a dedicated link between an internet node and a subscriber. Access service licensees can provide leased circuits within their service areas but are prohibited from interconnecting with other networks. NLD service providers can offer leased circuits using their parent NSO's infrastructure, while ISPs can establish their own transmission links but cannot provide leased circuits to third parties.

Including leased circuits within the scope of ISP services is essential to optimize resource utilization, foster fair competition, and adapt to technological advancements. By allowing ISPs to offer leased circuits, the existing infrastructure can be more effectively employed, leading to increased efficiency and potential cost reductions. Moreover, it levels the playing field with other service providers, promoting healthy competition and driving innovation. The convergence of technologies necessitates a flexible regulatory framework that enables service providers to offer a comprehensive suite of services, including leased circuits and VPNs, to meet evolving customer demands. Additionally, provisions such as inclusion of leased circuits within the scope of authorisations should not depend on the type of service or technology, as this would require modifying authorization terms for every new technology. Ultimately, this approach facilitates end-to-end connectivity and enhances the overall quality of internet services.

There is also a strong case for merging the National Long Distance (NLD) and International Long Distance (ILD) service authorizations into a single Long Distance Service authorization. This consolidation would simplify the regulatory environment and reflect the converging nature of telecommunications technologies and services.

The current regulatory framework faces challenges due to its complexity and outdated structure. Maintaining separate authorizations for national and international long-distance services creates unnecessary bureaucratic hurdles for service providers, hindering operational efficiency. The convergence of technologies, particularly the widespread adoption of IP and Ethernet, renders the distinction between

national and international services increasingly obsolete. This technological shift underscores the need for a unified regulatory approach that can adapt to the evolving telecommunications landscape.

A single long-distance service authorization offers several advantages. By consolidating the NLD and ILD licenses into a unified framework, administrative burdens for service providers are significantly reduced, streamlining operations and enabling a greater focus on service delivery. This consolidated approach empowers providers to offer a comprehensive suite of long-distance services, catering to diverse customer needs and enhancing overall service quality. Furthermore, a simplified regulatory environment fosters a more competitive market, stimulating innovation and investment in the telecommunications sector.

Q. 23 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.

CDN regulation

Content Delivery Networks (CDNs) are fundamental to the modern digital infrastructure, serving a wide range of internet applications. We do not believe that the regulation of CDNs in any form is the correct approach, and would suggest focusing on creating a supportive policy environment that encourages their growth and innovation.

The global video streaming market is [anticipated](#) to reach USD 124.57 billion by 2025, growing at a CAGR of 19.10%, driven by the increasing demand for services such as news, sports, gaming, and social media platforms. Similarly, the CDN market is [projected](#) to expand from USD 14.4 billion in 2020 to USD 27.9 billion by 2025, with a CAGR of 14.1%. India's CDN market is [projected](#) to grow significantly. Industry forecasts predict a consistent growth rate of 13.3% annually between 2023 and 2030. Along with data centers and Internet Exchanges, CDNs are essential for efficient content delivery and enhancing user experiences. Their presence should be widespread, extending beyond major urban centers to foster inclusive digital growth.

The introduction of 5G will significantly [impact](#) CDNs, making them vital for delivering low-latency content for applications like autonomous vehicles, Industry 4.0, video surveillance, cloud gaming, and telemedicine. The migration of storage to 5G edge locations and the public cloud further highlights the importance of CDNs.

Considering the emerging and high-growth nature of the CDN industry in India, it is crucial to avoid regulatory frameworks at this stage. Instead, government actions should focus on creating a conducive policy environment that supports the development of CDNs. Implementing regulations on CDNs and their operations, such as caching, could disrupt legitimate content delivery and hinder growth. Globally, the CDN industry has flourished with [minimal](#) regulatory intervention, a model India should emulate.

Attempting to define and regulate CDNs can create significant challenges. CDNs encompass a broad range of technologies for data replication and delivery. Any regulatory definition might inadvertently encompass other internet technologies, creating unnecessary regulatory uncertainty.

Introducing registration requirements for CDNs sets a problematic precedent. If CDNs are required to register, it could lead to calls for similar regulations for other internet services such as email providers, web

hosting services, and DNS providers. The strength of the internet lies in its largely unregulated nature, which has driven its rapid growth and innovation.

The CDN market is characterized by high competition and low entry barriers. Established firms like Akamai and newer companies like Fastly demonstrate the competitive nature of this market, evidenced by the continual reduction in CDN service [prices](#). There is no indication of market failure, which negates the need for regulatory measures. CDNs utilize servers for computing, storage, and connectivity, often as customers of telecommunications providers or as private networks interconnected through transit and peering. They are not telecommunications operators and should not be classified or regulated as such. Most countries do not [require](#) CDNs to hold operating licenses, and India should not establish this precedent.

CDNs improve internet performance by enhancing traffic management, reducing bandwidth usage, balancing loads, and increasing security. Excessive regulation could stifle these benefits and slow technological advancement. Given the vital role of CDNs in the digital ecosystem, fostering a supportive policy environment without regulatory constraints is essential.

In conclusion, the success of the internet and CDNs, in particular, has been driven by an environment free from heavy-handed regulation. It is imperative that we maintain this approach, avoiding any regulatory measures that could hinder innovation and growth. TRAI should focus on policies that support the expansion and enhancement of CDNs, leveraging their capabilities to improve internet access and performance across India.

IXP regulation

Internet Exchange Points (IXPs) play a crucial role in the Internet ecosystem by facilitating the exchange of Internet traffic between different networks, improving speed, and reducing latency. The recommendation by TRAI to introduce a specific IXP license under the Unified License framework is premature and could potentially hinder the growth and development of IXPs in India, where the proliferation of IXPs is low to begin with. Instead, an enabling policy environment is necessary to foster the IXP market without imposing regulatory restrictions.

Benefits of IXPs:

IXPs play a critical role in facilitating the free flow of internet traffic by reducing latency. They enable multiple ISPs and networks to connect and exchange traffic locally, rather than routing it through distant locations, resulting in faster internet speeds. Additionally, IXPs enable Internet Service Providers (ISPs) to optimize the use of their existing resources by exchanging traffic more efficiently, reducing the cost of transit and increasing network reliability.

A 2021 [research](#) by the United Nations Economic and Social Commission for Asia and the Pacific states that for every 1% increase in the number of IXPs per 10 million inhabitants, the fixed-broadband download speed (kbps) is expected to increase by approximately 0.8%. This is indicative of a positive correlation between growth of IXPs and improved internet speed in the country. Additionally, IXPs also cut internet costs for ISPs by up to [20%](#). They attract operators, spur peering arrangements for faster info exchange, and boost local internet speeds tenfold.

Another [benefit](#) of a robust IXP ecosystem is the boost in competition among ISPs, which aids the growth and expansion of smaller ISPs. IXPs foster increased competition in the ISP market by allowing smaller ISPs to directly exchange traffic with other ISPs and content providers. This reduces their dependency on larger ISPs for transit services, which can be costly and hinder their ability to compete on price and service quality. The ability to exchange local traffic locally is especially crucial for smaller ISPs that may lack access to high-speed international connections.

Given this, a robust IXP ecosystem can certainly help accelerate digital service adoption in India which remains constrained by the lack of adequate infrastructure.

With citizens continuing to demand more data, it is essential to bring data storage, such as data centers and CDN networks, closer to the service providers' networks and consumers. IXPs play a critical role in this by facilitating interconnections between ISPs, and between ISPs and CDNs, enhancing network performance, reducing latency, and improving connectivity. This localized traffic exchange eliminates the need for expensive ILD & NLD long-distance connections, directly benefiting consumers by enabling faster access to locally available and cached content at CDNs, and thus improving the overall Quality of Experience (QoE). IXPs merely facilitate traffic flow and do not interact with or oversee the nature of the content being exchanged.

Furthermore, IXPs contribute significantly to the resilience and robustness of the Internet. This resilience allows the Internet to withstand sudden shocks and disruptions while continuing to function effectively. The importance of a resilient internet has been underscored during the COVID-19 pandemic, where the internet has become integral to daily activities such as job applications, purchasing groceries, medical consultations, and official work. This resilience is measured globally by the [Internet Resilience Index \(IRI\)](#). Despite India's strong score in Security (66%), it scores poorly in Infrastructure (31%), Performance (40%), and Market Readiness (35%), resulting in an overall score of only 43% and ranking 6th in South Asia. Enhancing the IRI through the proliferation of IXPs should be a priority to support India's ambitions as a Digital Economy.

Comparative Analysis of IXP proliferation:

India lags in IXP penetration compared to countries like Finland and Singapore. Finland and Singapore have 12.5 and 22 IXPs per 10 million people respectively, whereas India has only 0.23 IXPs per 10 million people.⁴

⁴ This is based on the author's calculation of calculating the number of IXPs per 10 million inhabitants using the total population of the country (from <https://www.statista.com/>) and the number of IXPs (from Internet Exchange Directory | PCH. (n.d.-b). <https://www.pch.net/ixp/dir#!mt-filters=>

IXPs per 10 million inhabitants vs. Country

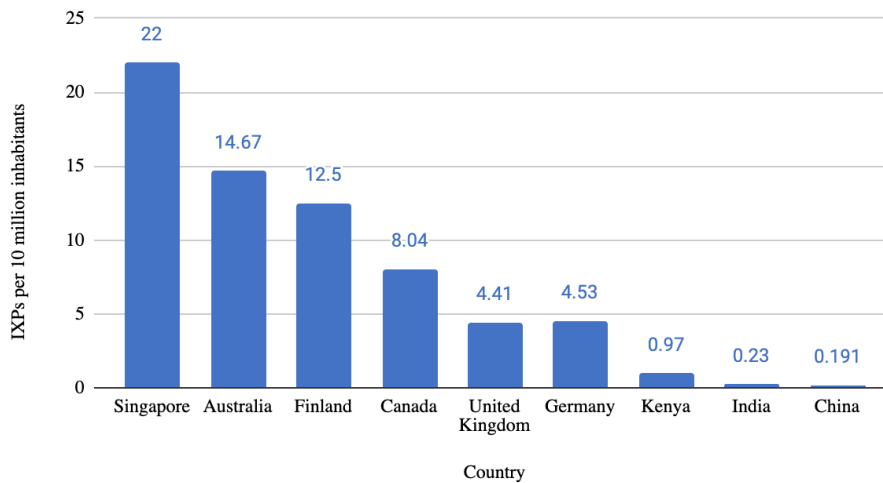


Fig 1: Number of IXPs (per 10 million inhabitants)

Global Practices:

Globally, IXPs are not subjected to ISP licenses. For instance, no country mandates IXPs to operate under an ISP license, recognizing their unique role and technical simplicity. Countries like [Singapore](#) and [Canada](#) adopt a light-touch or no-licensing approach, which has proven successful in fostering robust IXP ecosystems.

In Singapore, IXPs require an SBO (Individual) license to operate, without the need for bank guarantees, entry fees, or processing fees. In Canada, no license is required to enter the telecommunications marketplace, including establishing an IXP. The [UK](#) does not require a license or individual authorization unless a service provider uses radio spectrum or access to public or private land.

In [Africa](#), governments' initiatives aimed at reducing stifling regulatory requirements that called for licensing and mandatory peering resulted in the localisation of traffic increased from 30% in 2012 to 70% in 2022. The impact of this reflected in significant cost savings, increased points of presence of content providers, and an exponential growth in the number of IXPs. Therefore, the success of IXPs such as Kenya Internet Exchange Point (KIXP) and Internet Exchange Point of Nigeria (IXPN), demonstrates the benefits of IXPs in lowering internet costs, increasing ed speeds, and improving ed connectivity. Similar [initiatives](#) in Thailand and South Korea have supported cross-border connectivity and network performance.

In Thailand, the [Ayeyawady–Chao Phraya–Mekong Economic Cooperation Strategy \(ACMECS\)](#) and [Thailand's IXP Hub](#) Initiative have supported cross-border connectivity, leading to increased demand for broadband services and greater competition among ISPs. In South Korea, the development of IXPs and national roaming strategies for expanding 5G coverage has improved network performance and reduced dependence on international links.

Regulatory History:

TRAI's past recommendations for a class license for IXPs were not acted upon by DoT, indicating no intent to subject IXPs to the licensing regime. IXPs, by nature, differ from ISPs and should not be burdened with similar licensing conditions. In countries with thriving IXP ecosystems, such as Singapore, Canada, and the UK, IXPs are either lightly regulated or not regulated at all.

There has been no previous reference by DoT to regulate IXPs, and even TRAI's recommendation in 2011 for a class license for IXPs was not acted upon by DoT. Notably, TRAI did not argue that IXPs fell under Section 4 of the Telegraph Act, suggesting that the government intended to keep IXPs free from licensing requirements. Moreover, when the National Internet Exchange of India (NIXI) was established, there was no license requirement clarified for its operation, further indicating a preference for non-regulation.

IXPs do not provide any telecom services and hence do not qualify to be licensees under the Unified License. They merely offer physical infrastructure without providing bandwidth, internet services, or IP transit services. The activities of IXPs are not covered under the ISP license, emphasizing their distinct role from ISPs. While ISPs deliver internet services directly to end-users, IXPs facilitate interconnection and traffic exchange between networks, a unique and differentiated function that should not be conflated with ISP services.

IXPs have been operating in India without any licensing for more than two decades, likely because they do not provide services directly to end users of the internet. The functioning of IXPs is similar to that of system integrators or network equipment providers who offer managed services and charge their customers on a recurring basis. Thus, IXPs operate as B2B businesses, contributing in a manner similar to companies like Nokia, Ericsson, Samsung, and Cisco, which provide network services to TSPs and ISPs.

Recommended Framework:

To support the growth of IXPs in India, a non-regulatory framework should be adopted, expanding existing TSP regulations and guidelines to mandate current license holders to provide critical facilities for IXPs. Key recommendations include:

1. **Distributed Exchanges:** IXPs should have the right to build distributed exchanges across multiple data centers (DCs), crucial for scalability and efficiency.
2. **International Connectivity:** Explicitly allow international members to connect directly to Indian IXPs, enhancing India's position as a global hub.
3. **Access to Dark Fiber:** Grant IXPs access to IP1 dark fiber infrastructure and Right of Way (RoW) for connecting facilities between different DCs.
4. **Infrastructure Sharing:** Allow IXPs to share infrastructure with government-controlled operators to support operations outside major metropolitan areas.
5. **Cross-Connect Facilities:** Ensure all DCs provide unrestricted access to cross-connect facilities for IXPs and their members.
6. **Cache-Fill Capacity:** Permit IXPs to offer cache-fill capacity for CDNs, facilitating the development of IXPs in Tier 2 and Tier 3 cities.

Classification of IXPs:

IXPs primarily function as Closed User Group (CUG) services, facilitating traffic exchange between users of specific AS numbers, without providing general Internet transit. This is distinct from the services provided by ISPs. Moreover, IXPs operate as simple Layer 2 Ethernet services, not as full-fledged Internet services. Thus, **they should not be classified under ISP regulations, which could lead to conflicts of interest and reduced neutrality.**

Content filtering requirements:

Since IXPs operate using simple Layer 2 Ethernet infrastructure, **it is infeasible to invest in expensive Layer 3 DPI equipment for content filtering.** Putting any requirements to handle L3 (IP) traffic goes beyond the scope of their services and will drastically increase the costs of operating such points. Effective content filtering should be managed at the International Gateway level or through direct content takedown notices, without involving IXPs.

Furthermore, the recommendation by TRAI for light touch licensing requires IXPs to implement content filtering and website blocking. This is unnecessary as ISPs, who are already licensed and resourced, are responsible for these functions. Since the traffic passing through IXPs eventually goes through ISPs, duplicating these obligations on IXPs is redundant. Such requirements would impose significant and unjustified costs on IXPs, making their operations commercially unviable.

Conclusion:

India's broadband infrastructure requires urgent improvement, and the IXP market is still emerging. A no-entry barrier and no-licensing approach is most suitable until the market matures. Policy interventions should focus on creating an enabling environment for all stakeholders including IXPs, avoiding regulatory frameworks and levies that could stifle growth and innovation. The growth and success of IXPs is largely dependent on the regulatory framework in place. The approach to regulation should be one that fosters innovation, attracts investment and does not impose undue cost or compliance burden on IXPs. Having a supportive regulatory environment will be crucial for IXPs to become hubs for international content and connectivity. This, in turn, can have a positive impact on the local internet industry, making it easier for consumers to access the content and services they desire, thereby increasing the overall reach and impact of the internet.

Therefore, in terms of regulation, it may be better to look at a policy that provides economic incentives for the establishment of IXPs rather than introducing a regulatory overlay onto this system. Without IXPs, we risk concentrating control of critical infrastructure among a few providers, limiting options for traffic exchange and creating network performance issues. The lack of competition in India's internet ecosystem is a key factor that has affected broadband penetration in non-metros regions, as dominant ISPs have less incentive to expand networks. Addressing this requires regulatory interventions, policy reforms, and promoting competition through open access to infrastructure and the establishment of neutral IXPs.

Q61. Whether there are any other issues/ suggestions relevant to the fees and charges for the authorisations to provide telecommunication services? The same may be submitted with proper explanation and justification.

To ensure a fair and equitable regulatory environment, it is crucial that authorization and licensing fees are strictly limited to the administrative costs of regulation. These fees should follow a cost-recovery model, directly reflecting the expenses incurred by the regulatory body in overseeing the telecommunications sector. Such an approach also aligns with international best practices, including those outlined in Article 16 of the EU Directive 2018/1972 and ensures that fees are objectively justified, transparent, non-discriminatory, and proportionate to actual regulatory costs. In the United States⁵, the Federal Communications Commission (FCC) can assess and collect regulatory fees only to recover the costs of its regulatory activities covering enforcement, policy and rulemaking, user information services, and international activities. This establishes that even in the U.S. telecom sector, regulatory fees are designed to recover the actual costs of regulation, ensuring they are fair and proportionate. Similar provisions can be seen in the regulatory approach of [Australia](#) and [Singapore](#) as well.

While ensuring a cost-based recovery, administrative fees as opposed to other charges, should be transparent and reflect only the cost of regulation and any additional fees or component thereof should be clearly defined and justified. This ensures that administrative fees are not perceived as revenue-generating mechanisms for the government, thereby preventing any potential distortion of the market.

The existing fee structure, which bases the license fee on AGR, functions similar to a tax. Service providers are required to pay license fees based on their AGR, and when this is combined with the Goods and Services Tax (GST), it results in a cascading financial burden. This dual cost ultimately falls on the end consumer, making telecommunication services more expensive. For instance, broadband services are currently subject to an 18% GST. Additionally, the AGR-based fees are also passed on to customers, further increasing their expenses. Thus, to ensure transparency, the component-wise breakdown of such fees should be reflected to the consumer, making it clear what costs they are paying for. It is worth noting that historically, telecom services in India have been subject to service taxes since 1994-95, with rates progressively increasing from 5% to 12% by 2006,⁶ and now to 18% under GST. This significant rise in tax revenue also underscores the need to avoid additional financial burdens on consumers. Thus, to ensure that the service becomes affordable and reaches a wider consumer base in the country, it is essential that the customer is not excessively burdened.

However, over the past few years, it can be seen that receipts for this sector have been significantly high compared to costs. For instance, both in 2022-23 and 2023-24, the telecom expenditure⁷ was significantly lower than the receipts⁸. This shows that collection has been a manifold of actual expenditure.

It is also crucial to ensure that it is not tax which is ultimately collected under the garb of fees. Taxes and fees are inherently different. Taxes are intended to raise general revenue, while fees are charged for specific

⁵ Section 9 of the Communications Act of 1934

⁶ https://nipfp.org.in/media/medialibrary/2013/08/TRAI_Revised_Final_Report_December_2011_final.pdf

⁷ <https://www.indiabudget.gov.in/doc/eb/sbe13.pdf>

⁸ <https://www.indiabudget.gov.in/doc/rec/allrec.pdf>

services benefiting the end consumer. Without this distinction, fees effectively become unjustified taxes. The distinction between 'tax' and 'fee' was also highlighted by the courts of law in various judgments over the years. Hon'ble Supreme Court in the **Shirur Mutt's Case**⁹ held that taxation is characterized by compulsion, meaning it is imposed by law without the taxpayer's consent, and payment is enforced by law. Additionally, taxes are imposed for public purposes without direct benefits to the taxpayer, contributing to the general revenue of the state. On the contrary, a 'fee' is a charge for a special service provided to individuals, typically based on the costs incurred in rendering the service. As the jurisprudence on this evolved, courts have recognized that regulatory fees, such as license fees imposed for regulating an activity, must meet the standard of reasonableness and cannot be excessive. Even though these fees are not charged for providing a specific service, they must be justified and reasonable. This was held by the Hon'ble Supreme Court in **Delhi Race Club Ltd vs Union Of India & Ors.**¹⁰ It is thus necessary to ensure that under the garb of levying a fee, the regulatory authority should not attempt to impose a tax and must keep the fees proportionate to the regulatory cost only.

Rationalizing fees to cover only regulatory expenses will have significant positive implications for the telecommunications sector and the broader economy. Lower entry fees can stimulate competition and investment, which are crucial for expanding telecommunications services. Therefore, by reducing entry barriers, we can facilitate greater coverage, enhance service quality, and ultimately drive economic growth.

We thank TRAI for the opportunity to provide our input on this matter. We would be pleased to discuss any of our points further and are available to meet in person to elaborate on our recommendations.

⁹ 1954 AIR 282

¹⁰ 2012 (8) SCC 680