



**FICCI's Feedback on Telecom Regulatory Authority of India's Consultation Paper on
The Terms and Conditions of Network Authorisations to be Granted Under the
Telecommunications Act, 2023**

Shri Akhilesh Kumar Trivedi

Advisor (Networks, Spectrum & Licensing)

Telecom Regulatory Authority of India

26th November 2024

INTRODUCTION

The Federation of Indian Chambers of Commerce and Industry thanks the Telecom Regulatory Authority of India for the opportunity to provide counter comments to the Consultation Paper on The Terms and Conditions of Network Authorisations to be Granted Under the Telecommunications Act, 2023 released by TRAI on 22nd October 2024.

As a leading voice of India's industry and commerce, FICCI recognizes the transformative potential of the Telecommunications Act, 2023, in shaping the nation's digital ecosystem. This legislation represents a pivotal step towards modernizing India's regulatory framework, fostering innovation, and ensuring inclusive connectivity across urban and rural landscapes.

India stands at the cusp of a digital revolution, with telecommunications serving as the backbone for economic growth and societal development. Against this backdrop, the proposed terms and conditions for network authorisations require careful deliberation to balance regulatory compliance with the industry's need for operational flexibility and innovation.

FICCI remains committed to collaborating with policymakers to address key concerns, promote regulatory clarity, and ensure that the Telecommunications Act achieves its vision of a digitally empowered India.

FICCI acknowledges that the TRAI Consultation Paper (CP) appropriately recognizes the Terms and Conditions wherein sector regulators or governments authorize service provision through licenses, authorizations, permissions, or registrations. Building on this foundation, FICCI has identified that specific services such as Content Delivery Networks (CDNs) and Internet Exchange Points (IXPs) warrant rationalization in light of significant technological advancements and evolving business models.



SPECIFIC RECOMMENDATIONS TO THE ISSUES FOR CONSULTATION

Q5. 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.) wof the Content Delivery Network (CDN) authorisation, as recommended by TRAI on 18.11.2022? 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 CDN authorisation? Kindly provide a detailed response with justification.

CDNs should not be subject to a registration / authorisation or excessive regulations because:

1. Fundamental Distinction between CDNs and Telecom Providers

Content Delivery Networks (CDNs) are fundamentally distinct from telecommunications providers and play a pivotal role in enhancing the internet ecosystem. Their contributions include improved performance, efficient traffic management, localized content delivery, bandwidth optimization, load balancing, and enhanced security. Given their unique nature and functions, CDNs should remain outside the scope of registration typically applied to telecommunications providers. This fundamental difference in infrastructure and operational dynamics underscores the need to maintain a clear regulatory distinction between CDNs and traditional telecommunication entities.

CDNs rely on two core components:

- Appliances for computing and storage, which facilitate content caching and delivery.
- Connectivity, which determines their operational model. CDNs either:
 - o Procure internet access as customers of telecommunications providers, or
 - o Operate as private networks that interconnect with telecommunications providers through transit or peering arrangements.

2. Competitive CDN market

The CDN market is highly competitive, with numerous companies offering commercial CDN services while others have successfully deployed in-house CDN solutions. These developments have significantly improved local content delivery to global audiences. The competitive nature of the market is evident from the continuous decline in CDN service prices.



In the absence of market failures, imposing excessive regulations on CDNs could hinder their growth and create unnecessary barriers to entry. Such measures risk stifling innovation and slowing the expansion of India's digital infrastructure.

The 2022 TRAI Consultation Paper on *Regulatory Framework for Promoting Data Economy through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India* highlighted the immense potential of the Indian CDN market, projecting a staggering growth of over 700% from USD 435.2 million in 2018 to USD 2846.8 million by 2027. This underscores the need for a light-touch regulatory approach to foster the continued growth and competitiveness of the CDN sector.

3. Agreements between CDNs and TSPs/ISPs should be confidential business-to-business (B2B) contracts

Agreements between CDNs and TSPs/ISPs should be confidential and should remain governed solely by market dynamics. Such agreements are commercially sensitive and do not require mandatory disclosure, as imposing such requirements could disrupt competitive practices and hinder market efficiency. Confidentiality ensures that these partnerships continue to drive innovation and mutually beneficial outcomes without unnecessary regulatory interference.

4. Interconnection should not be limited to registered networks.

Internet Exchange Points (IXPs) rely on CDNs to efficiently manage local traffic exchange. Restricting interconnection to only registered networks would hinder the ability to serve traffic locally, potentially forcing a shift of traffic to international routes.

Introducing a registration process for CDNs would lead to delays in launching new services and expanding existing ones, adversely affecting their ability to adapt to evolving market demands. Such restrictions would slow content delivery, reduce efficiency, and stifle innovation within the CDN ecosystem. To foster growth and maintain a competitive edge, CDN operations should not be confined to registered networks.

5. Global Norms

In most countries, CDNs operate without requiring a license, and TRAI should refrain from setting a contrary precedent. The success of the internet, both globally and in India, has been driven by the principle of "innovation without permission," enabling efficient and



localized traffic exchange through the growth of CDNs. Introducing a mandatory registration regime for CDNs would disrupt this virtuous cycle and stifle progress.

Additionally, linking internet interconnection (peering) to an authorization or registration contradicts widely accepted global norms. Unregulated peering has been the cornerstone of internet growth, fostering innovation, seamless interconnectivity, and market efficiency. Establishing such conditions in India would risk isolating the country from international best practices.

6. Role in Local Traffic Management

CDNs play a crucial role in managing local traffic exchange, often in collaboration with Internet Exchange Points (IXPs). Restricting interconnection in India to only registered networks would undermine the ability to serve traffic locally, potentially diverting it internationally—a counterproductive outcome.

7. CDNs to set-up their infrastructure in tier-2 and tier-3 cities

Mandating Content Delivery Networks (CDNs) to set up infrastructure in Tier 2 and Tier 3 cities is not necessary, as CDNs already collaborate with various ISPs across all regions to ensure a high-quality experience for consumers. While CDNs serve customers across geographies, the focus of data centre development in India has historically been on Tier-I cities such as Mumbai, Delhi-NCR, Bengaluru, and Chennai. This concentration is due to factors like robust connectivity, reliable power supply, and strong local market access, as highlighted in the TRAI Recommendations on the *Regulatory Framework for Promoting Data Economy Through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India* (Table 2.3, page 28).

Rather than imposing mandates on CDN providers to build infrastructure in Tier-2 and Tier-3 cities, the focus should be on incentivizing data centre providers to expand their operations into these underserved regions. As per *Recommendation 2.45* in the TRAI Recommendations (page 30), improving data centre infrastructure in such cities will create a conducive environment for the establishment of CDN networks in these areas. This approach will foster the development of digital infrastructure in underserved regions while supporting the growth of the CDN industry without imposing unnecessary regulatory burdens.

8. Regulation of CDNs as intermediaries under the Information Technology Act, 2000



Proposals to regulate CDNs under the Information Technology Act, 2000 fall outside the scope of this consultation paper and go beyond the purview of TRAI and the Department of Telecommunications (DoT).

9. Issuing blocking orders to CDNs directly in the case of content takedowns

The Information Technology Act, 2000 already lays down a process for issuing blocking orders / content takedown orders, which falls under the purview of the Ministry of Electronics and Information Technology. Proposals to issue blocking orders to CDNs fall outside the scope of this consultation paper and go beyond the purview of TRAI and the Department of Telecommunications (DoT).

Q6. 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 Internet Exchange Point (IXP) authorisation, as recommended by TRAI on 18.11.2022? If yes, what changes should be made in the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, 72 operational, security etc.) of the IXP authorisation? Kindly provide a detailed response with justification

Ans. In the absence of any demonstrated market failures, the government should avoid imposing regulatory or licensing obligations on Internet Exchange Points (IXPs) or similar entities providing peering services, including licensed TSPs/ISPs. The primary function of such entities is to act as neutral traffic interchange points, facilitating efficient data flow.

ISPs participating in IXPs are already governed by strict licensing frameworks, which include comprehensive national security obligations. Additionally, as traffic exchanged through IXPs is encrypted, there is no risk of unauthorized access, ensuring robust data privacy and sovereignty protections.

In its recommendations on the *Regulatory Framework for Promoting Data Economy through Establishment of Data Centres, Content Delivery Networks, and Interconnect Exchanges in India*, TRAI had proposed a Unified License (Virtual Network Operator) for IXPs. However, since this recommendation was not accepted by the Department of Telecommunications (DoT), TRAI should reconsider its earlier stance in light of the current market dynamics.

Recommendations

- IXPs should not be subjected to any licensing or authorization requirements.



- Their role is strictly limited to facilitating traffic flow without direct interaction with end users.

Q17. Whether there is a need to introduce certain new authorisations (other than the authorisations discussed above) to establish, operate, maintain or expand telecommunication networks under Section 3(1)(b) of the Telecommunications Act, 2023?

If yes -

- (a) For which type of telecommunication networks, new authorisations should be introduced?
- (b) What should be the eligibility conditions, area of operation, validity period of authorisation, scope, and terms & conditions (general, technical, operational, security etc.) of such authorisations?

AND

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.

Ans. There is no need for such new authorizations, as it will create confusion. On the contrary, all the authorization requirements (even any due to new situation) should be brought under the ambit of the existing provisions.

Proposed Recommendations for Streamlining the Authorization Process

- **Automated General Authorization:** The authorization process for non-spectrum activities should be fully automated, allowing entities to initiate operations by uploading the required information on an online portal. This approach should cover initial authorizations, renewals, and modifications or additions to existing authorizations.
- **Automated Numbering Resource Allocation:** The assignment of numbering resources should be automated and managed through an online portal. Clear, stage-wise timelines should be established to ensure transparency and efficiency in the allocation process.
- **Automated Test Report Management:** Approval or rejection of test reports for rollout obligations should be digitized, ensuring faster processing and greater consistency.
- **Electronic Bank Guarantee Submission:** The submission process for electronic bank guarantees should also be automated, facilitating smoother handling of general authorizations.



- **User Manuals and Sample Forms:** Rules should include distinct user manuals and sample forms/formats for each type of authorization to aid in the efficient management and functioning of telecom networks.
- **Inter-Ministerial Integration:** Seamless integration of the telecom authorization process with other relevant ministries, departments, and agencies should be prioritized.
- **Transparency and Market Fairness:** Application and authorization statuses should be publicly accessible to maintain transparency and fairness within the market.
- **Self-Certifications in Place of Affidavits:** Affidavits currently required under existing licenses should be replaced with self-certifications containing similar content, reducing administrative burdens.
- **Streamlined Fee Assessments:** The process for assessing license fees and spectrum usage charges should be simplified to enhance efficiency and reduce costs for stakeholders.
- **Ease of Doing Business (EoDB) Committees:** Each ministry or department should establish an EoDB Committee to review, simplify, and modernize existing processes, ensuring alignment with business and technological advancements.

Key Provisions for Terms and Conditions of Authorization:

1. **Rollout Obligation Module:** A dedicated module should be added to the single-window portal for managing rollout obligations, complete with defined timelines.
2. **Remote Network Access Requests:** A time-bound, online process for requesting remote access to networks from foreign locations should be implemented to facilitate global operations.
3. **FDI Compliance:** The portal should incorporate a streamlined process for Foreign Direct Investment (FDI) compliance submissions to simplify regulatory adherence.

Q26. Whether there is a need to change/ modify any of the financial conditions of the IXP and CDN authorisations from those recommended by TRAI on 18.11.2022? If yes, please provide a detailed response with justification(s).

Ans. Please refer to our response to Q5 & Q6. The current ecosystem effectively supports the operations of both CDNs and IXPs, and introducing onerous regulatory obligations would risk disrupting this balance. The relationship between ISPs and CDNs or IXPs is mutually beneficial, with a well-established framework ensuring each operates efficiently within its domain. Therefore, imposing any financial burden on CDNs or IXPs would be unwarranted.

We trust that our submission will assist in your decision-making process. Furthermore, we look forward to contributing to similar consultations in the future and are available to provide any clarifications or additional information as needed.