**Response to Pre-Consultation Paper No. 02/2025 on Review of existing TRAI Regulations on Interconnection matters**

Dear Shri Gupta,

This detailed response is submitted by AAPLUS Consultants  to the Pre-Consultation Paper No. 02/2025 on "Review of existing TRAI Regulations on Interconnection matters." We appreciate TRAI's proactive approach in initiating this review, recognizing the dynamic nature of the telecom sector. Our comments aim to contribute to the development of a forward-looking and balanced regulatory framework.

We commend TRAI's emphasis on fostering interconnection, enhancing competition, promoting non-discriminatory practices, and ensuring the sector's long-term sustainability. We believe that the regulatory framework must strike a balance between promoting innovation and protecting fair competition. A predictable and transparent regulatory environment is crucial for attracting investments and facilitating the growth of the telecom ecosystem.

**Specific Issues and Suggestions:**

A. **Efficacy of existing interconnection frameworks in the current telecom ecosystem:**

* While the Telecommunication Interconnection Regulations, 2018, have provided a framework for interconnection,their efficacy is increasingly challenged by :

- The surge in data traffic and the need for higher bandwidth. *
- The complexity of network architectures due to the introduction of new technologies like 5G and network virtualization.
- The increasing importance of Over-The-Top (OTT) services and their impact on traditional interconnection models.

Specifically, we believe that a review of the following is warranted:

- Interconnection Usage Charges (IUC): The current IUC regime needs to be re-evaluated in light of the shift towards data-centric networks. There is a need to consider alternative models that promote efficient traffic routing and minimize disputes.
- Interconnection Usage Charges in case of SMS needs to be reviewed and brought in line with the cost based charge both for international as well as domestic SMS.
- Reference Interconnect Offer (RIO):While RIO is intended to simplify interconnection, its implementation can be complex and time-consuming. There is a need for greater standardization and clarity in the RIO process.
- Quality of Service (QoS) parameters:** The existing QoS parameters for interconnection may need to be updated to ensure they are relevant for new services and applications.
- Extending Interconnection obligations on OCLS ILDOs/IGSPs by amending the definition of interconnection which is currently oriented only towards voice network interconnection and revising the interconnection ie Access Facilitation charges for a CLS.
- Promoting Open Access CLS interconnection  by regulation

B. **Challenges faced by service providers in implementing interconnection:**

Service providers encounter several challenges, including a)Delays in obtaining interconnection from established players  or denial of the same b)disputes over capacity planning and network congestion,  c) Technical complexities in interconnecting different generation of networks. & d) High costs associated with network upgrades and expansion to facilitate interconnection .

 These  challenges need to be addressed inter-alia by following :

- Streamlining the approval process:
- TRAI should establish clear timelines and processes for interconnection approvals to reduce delays.  Developing a robust dispute resolution mechanism: An efficient and impartial dispute resolution mechanism is essential for resolving interconnection disputes in a timely manner.
- Promoting network standardization :Greater standardization of network interfaces and protocols can simplify interconnection and reduce technical complexities.
- Incentivizing network investments: Regulatory measures should incentivize investments in network infrastructure to support growing interconnection needs.

We also need to work on following:

C. **Impact of emerging technologies on interconnection requirements:**

D. **Best practices from global interconnection frameworks for possible adoption in India:**