



April 23, 2025

To:

Shri. SB Singh, Principal Advisor NSL, TRAI
Tower F, NBCC World Trade Centre, Nauroji Nagar, New Delhi-110029

Ref: TRAI Pre-Consultation Paper on Interconnection No 02/2025.

Subject: Request for TRAI Interconnection Policy to be aligned with DoT Equipment Location Amendment No 20-355/2012 AS-I Vol-V Dated 23rd June 2017 to enable faster and cost-effective roll out of services by small Telecom operators.

Dear Sir,

Zoom India has obtained All India Unified Access License for all 22 circles with NLD & ILD to offer Cloud based PBX (IP-Centrex, Call Center & Contact Center) services to its global customers present in India and to Indian Businesses. This new technology will immensely benefit the Software, Call Center & BPO Business Industry by reducing their cost of communications and increasing productivity. Since signing our first Access License Agreement, it has taken between 1 year to 2 ½ years to establish IP Pol's at 6 Circles.

TRAI in its Consultation Paper on Review of the Regulatory Framework for Interconnection Dated 21 Oct 2016 had rightly envisaged easing of Interconnection by means of Interconnect Exchanges or through NLD Operators. With IUC being reduced to 0-ZERO w.e.f 01 Jan 2021 and adoption of IP Technology by all operators the timing is most conducive to optimizing the Interconnection requirements to enable faster rollout of service by new operators based on a One Nation policy.

The issues are detailed in the following pages and request the Authority to consider our request to help new small operators **expedite their rollouts as this will not cause any financial loss to any operator nor compromise on security requirements. Being a small operator our capacity in the existing 6 Pol's is more than sufficient to service remaining 16 circles for next 3-5 years.** This will enable us to provide services in the remaining 16 circles early mainly benefiting Indian businesses.

Thanking You,
For and on behalf of ZVC INDIA PRIVATE LIMITED (UL Licensee)

(Authorised Signatory)
DINESH K SHIV, Head of Telecom Compliance
Ph: +91-810-596-7799; email: dinesh.shiv@zoom.com

TRAI 4 (a) Efficacy of existing interconnection frameworks in the current telecom ecosystem.

ZooM India Response:

1. Circle based 22 Interconnections with each operator is in not spirit of One Nation One License. This requires building 22 Pol's with 6 Operators requiring more than 150 Active + 150 Backup Interconnections for Nationwide rollout. This delays availability of service in B & C Circles.
2. Most operators' having non-mobile operations have taken advantage of *DoT amendment 20-355/2012 AS-I Vol-V Dated 23rd June 2017* and consolidated their IMS Cores between 2 to 4 locations based on their size of operations. To take full benefit of this provision and to reduce cost, Interconnects/Pol's can be reduced to 2 or 4 Locations for the entire country. For new operators Pol's in 2 locations is sufficient. Similar to the Division of 22 Circles into 2 MNP Zones, one Interconnect with all operators in each MNP zone is more than sufficient to start operations. As traffic builds up more Pol's - Points of Interconnection can be considered. (4 Pol's - to support the 4 regions in the country, 2 Pol's in each MNP Zone should suffice for non-mobile offerings). This kind of Nationwide traffic aggregation is allowed for messaging/SMS and the same should be allowed for Voice.
3. A National Access License with National Numbering Scheme (National MSC Codes with National Mobile LRN per operator) will also make Interconnections simpler.
4. *Location of switches and other network elements: DoT Amendment No 20-355/2012 AS-I Vol-V Dated 23rd June 2017. The licensee may deploy any of its equipment's anywhere in India subject to the interconnection points being located and operated in the respective service areas for inter operator, inter service area, NLD & ILD calls and meeting the security conditions as mentioned in the license.*
5. This above DoT amendment was revolutionary and in line with One Nation One License concept, however it fell short by insisting on local interconnection. A local interconnection will guarantee a 0-Zero Cost handoff off calls, but if operators would like to exchange calls outside the circle it should be allowed based on payment of carriage/transit fees for calls outside the circles. As cost of Interconnection is to be borne by Interconnection seeker (new operator) for first 2 years, new operator should have the liberty to send/receive calls using a NLD operator by paying both way carriage fees until Interconnection is established directly with each operator.
6. This will not comprise "*meeting the security conditions as mentioned in the license*" as meeting the security conditions does not require circle-based Interconnect and it is already being fulfilled by operators having 2 to 4 switching locations to serve the entire country but are meeting the security condition circle wise.

7. The last operator who built circle wise Interconnects 10 years back had a business case to justify the investment as they had anticipated large call volumes. New Small Operators have very less off net calls which does not justify Interconnection with every operator in every circle. Leveraging existing Interconnects through NLD Operators should be allowed for faster roll out.
8. Circle based Interconnections was probably relevant 30 - 15 years back due to limitations of transmission/switching capacities. Current capacity of transmission and switching even allows Mobile operators to reduce their National Pol requirement to few Pol's.
9. MNP Query/Dipping to be supported by MNP Operators as per license agreement with DoT and TRAI to prescribe tariff. (Ancillary to Interconnection). Each operator building a MNP DB is expensive to build and maintain; Since MNP operators have agreed to provide the service in the MNP agreement signed with DoT, TRAI should allow Licensed Operators to Dip from the existing two (2) MNP operators by paying appropriate dipping fee. Currently daily porting data is transmitted by a secure link free of cost and same/similar link can be mandated for dipping at a fee prescribed by TRAI.
10. Small Operators like us are dependent on rolling out services by renting rack space in Tier 4 data centres to house our servers & equipment's. Data Centre spaces are available in 10 of the 22 circles. The other 12 circles do not have Tier 3 Data centre facilities which is required for us to house equipment for Pol's in these 12 circles. This delays availability of service in B & C Circles. We can extend our services through Pol's built in other circles without having to build Pol's in B & C Circles.

TRAI 4 (b) Challenges faced by service providers in implementing interconnection.

ZooM India Response:

Access Pol: Our Access Interconnections with all operators are on IP/SIP.

- A. Two Operators have offered IP/SIP Interconnection at no extra cost
- B. Two Operators offered IP/SIP Interconnection at one time cost of Rs X Lakhs per Pol which has some basis/justification and seemed reasonable.
- C. One Operator has charged 2X as Recurring Annual Fee for providing IP/SIP which does not seem to have any rational.

Note: The extra costs are above the Port Charges recommended by TRAI.

NLD-NLD Pol (and Access-NLD) Pol: We are facing challenges obtaining NLD-NLD Pol & Access-NLD on IP/SIP.

- D. One NLD/ILD Operator has implemented NLD-NLD Pol on IP/SIP.
- E. Two Operators are supporting Access-NLD on IP/SIP.
- F. Two Operators have signed agreements for NLD-NLD and both are pending implementation.



- G. Two Other Operators have expressed difficulty in offering NLD-NLD Pol (and Access-NLD) on IP/SIP of which one operator has offered partial resolution for calls from their network to us which we welcome but agreement is yet to be signed.

Transit Calls on Delayed Interconnections: Operators who delay Interconnections beyond TRAI stipulated times should be mandated to transit calls through other operators at their cost until Pol is established.

Circuits For Interconnection: Being a small operator using low bandwidth we place order with the respective operators.

- H. Two operators have offered reasonable fair price for circuits
I. Two operators start at high price for circuits and reduce prices after multiple rounds of negotiations which delays Pol's.
J. One Operator is using a decade old list price. This operator offers 50% to their smallest customers but insists on 100% list price from us as we are considered competitors, and we don't deserve discounts/market rates offered to their other small customers whose annual billing is less than our annual billing.

TRAI 3 (c) Intelligent Network Services in Multi-Operator and Multi-Network Scenario Regulations, 2006

- K. 1800/1860 Services are essentially National Services but covered in Access Agreements. As a new operator who do not have Access Pol in all circles and we are anticipating issues which MTNL as a 2 Circle operators faced with some operators. The brief of the issue is in *TRAI Direction No.402-12/2012-I&FN Dt 05NOV2012 Clause 6 (iii) MTNL requested TRAI to direct X Operator and Y Operator to open MTNL's SCP codes outside Delhi and Mumbai;*
L. The IUC settlement rates for 1800/1860 are more than a decade old and outdated and not in line with current prevailing call/carriage rates. These high rates will eventually lead to reduced demand for these services.
M. One operator is seeking different rates for India Roaming users and exorbitant rates for International Roaming users for 1860 service which we believe there is TRAI direction against different charges to roamers. This operator is using their 1860 International User roaming rate of Rs. 4.03 per minute as reference and demanding an initial BG of 32.24 lakhs per E1 (= 8 Lakhs calls x Rs 4.03) defeating the purpose/intent of the TRAI Interconnect Regulations of 2018. It takes many weeks of discussions at multiple levels to reduce the value for each Pol. This exercise has to be repeated for every Pol without giving any credence to previous precedents.

TRAI 4 (c) Impact of emerging technologies on interconnection requirements.

ZooM India Response: As many many Pol's are not on IP/SIP, this is hindering rollout of CNAM/CNAP.



TRAI 4 (d) Best practices from global interconnection frameworks for possible adoption in India.

Extract of TRAI Consultation Paper on Review of the Regulatory Framework for Interconnection 21.10.2016

K- Interconnect Exchange 2.33. With a view to solve the problem of interconnection and ensuring effective interconnection, one option could be to establish an Interconnect Exchange. The Interconnect Exchange will provide interconnection ports to all varieties of TSPs and, in turn, it will reduce the number of POIs. Under such a scenario, the existing peer-to-peer interconnection may continue as before; however, all new augmentation of ports may be mandated to be done through Interconnect Exchange. Options could be explored to create a new licensee as has been done in case of mobile number portability (MNP) to operate Interconnect Exchange.

2.34. It is worth pointing out that the latest NLD authorization in the UL permits an NLDO to carry intra-circle (local) traffic upon mutual agreement with a TSP. This enables an NLDO to act as a transit provider and potentially many NLDOs can establish Interconnect Exchanges.

ZooM India Response for Voice: As cost of Interconnection is to be borne by Interconnection seeker (new operator) for first two years, new operator should have the liberty to send/receive calls using a NLD operator by paying both way carriage fees until Interconnection is established directly with each operator.

ZooM India Response for SMS: NLD Operators should be encouraged to offer SMS as a NLD service just like Voice is offered as a service by NLD only operators. New operators exchange A2P SMS through such NLD Operators without establishing SMS Interconnects with each operator.

TRAI 4 (e) Role of interconnection in improving consumer experience and network efficiency.

Building second/backup Pol's with each operator in each circle is an expensive investment. During impact/downtimes traffic should be allowed to pass through other operators/NLD/Interconnect Exchanges by paying Transit/Carriage fee. During such impact/downtimes times when Access Pol(s) have issues, operators are unwilling to send calls on their own working NLD Pol(s) even though the NLD license agreement permits the same.

Thanking You,
For and on behalf of ZVC INDIA PRIVATE LIMITED (UL Licensee)

(Authorised Signatory)
DINESH K SHIV, Head of Telecom Compliance
Ph: +91-810-596-7799; email: dinesh.shiv@zoom.com