



Interconnection TRAI <interconnection.trai@gmail.com>

RCOM's Response to Consultation Paper on Review of Regulatory Framework for Interconnection

1 message

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Tue, Dec 13, 2016 at 7:28 PM

To: Interconnection.trai@gmail.com

Cc: Ashish.S.Garg@relianceada.com

Dear Sir,

Please find attached herewith RCOM's response to TRAI consultation paper on Review of the Regulatory Framework for Interconnection.

We hope that Authority would find merit in our comments and take them into consideration while taking any final view on the matter.

Regards,

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Regards, Ashish
Sent from IBM Notes Traveler

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Reliance Communications Limited's Response to the TRAI Consultation Paper on Review of the Regulatory Framework for Interconnection

EXECUTIVE SUMMARY

- A. We recommend that TSPs should be encouraged to enter into bilateral negotiations and interconnection agreements. The concept of SMP and requirement of publishing RIO should also be done away with.**
- B. TRAI should prescribe a Standard Interconnection Agreement, which must be entered into between TSPs, in case they fail to enter into interconnection agreement on mutual basis in a specified time-frame. Such Standard Agreement should be based on principles of Fairness, Equality and Reciprocity and must apply to all TSPs including PSUs.**
- C. Existing interconnection agreements may be allowed to migrate to the new framework/ Agreement. Request from any party to the agreement should be acceded by the other party in a specified time frame.**
- D. A time frame of 90 days should be prescribed for entering into interconnection agreement.**
- E. New TSP should be required to submit the information that is essential for entering into Agreement and ascertaining that the interconnection facility and resources to be shared will be put to legitimate use.**
- F. Decision to enter into fresh agreements or continue with the existing agreements should be left to the parties to the interconnection. However, neither party should be permitted to refuse interconnection based on new framework (to be prescribed as a result of this consultation).**
- G. The operators whose license gets expired or if opted to migrate to UL from their existing CMTS/UASL license, should not be mandated to enter into new interconnect agreement provided that if either party requests to sign afresh agreement under the new interconnection regime, the same should be assented by the other party.**
- H. The concept of interconnection seeker/provider in case of Access to Access should be allowed for the initial two years wherein the late entrant should be considered as the seeker. For NLD/ILD-Access services, the existing practice should be continued and the NLD/ILD operator should be considered as seeker of interconnection with Access service provider.**
- I. Hierarchical layers of Pols of BSNL & MTNL from L-I TAX to L-II TAX to SDCC Tandem to Local Exchange should be removed. Transit charges for carriage within the network of BSNL/MTNL should also be done away with.**
- J. Parties should have a right to carry a call originated by its subscribers, to the farthest point through its own network and then deliver it to the other TSP.**

- K. Interconnection for inter-circle calls between TSPs (including BSNL) should be prescribed at TAX/ Gateway MSC level.
- L. Fixed Fee/ Minimum Commitment for emergency services calls should not be levied by BSNL/MTNL from private TSPs. Further, TSPs should be allowed to choose best available route to terminate emergency calls by directly translating it to the terminating number.
- M. A time period of 15 days should be sufficient for Provisioning/ Augmentation of ports for Mobile/IP Networks. For fixed-line network, a timeline of 30 days should be allowed.
- N. Minimum number of E1 ports for start of service should not be prescribed in advance. Any criteria for initial demand of ports is also not required as the same is expected to be based on initial traffic projection thus restricting seeker from making any inflated demand.
- O. Capacity threshold criteria for raising subsequent demands of ports should be defined at 70% to ensure that the QoS and business is not impacted in the interim till the time augmentation of PoI takes place.
- P. Augmentation of ports may be allowed at higher levels i.e. STM-1; however, it should not be mandated.
- Q. There is no requirement of prescribing any financial disincentive for interconnection related issues and the existing practice of TRAI and DoT resolving any inter-operator issue should be continued.
- R. There is no need to have Bank Guarantees in the interconnection agreement.
- S. Bill & Keep (BAK) regime for all kind of termination should be implemented which will take care of all settlement and billing related disputes between the TSPs. This will also address the issues related to higher IUC traffic vis-à-vis lower IUC traffic.
- T. Interconnection and interconnection agreement for Full Mobility, Limited Mobility and Fixed Line Network of UASLs/ULs should be service agnostic subject to adherence to all rules and regulations including National Numbering Plan, National Routing Plan & National Signalling Plan. Licensees having multiple service license/ authorization should also be allowed to interconnect as integrated operator.
- U. Voice over Internet calls must be in adherence with the National Numbering Plan, National Routing Plan & National Signalling Plan.
- V. Light Touch Regulatory & Policy measures are required to encourage TSPs to migrate to Interconnect at IP level. Co-existence of Both TDM and IP interconnect should be permitted to continue.
- W. Interconnection at IP level should not be mandated; however, neither party should refuse the same in case it is technically feasible for the party to interconnect at IP level.

- X. There is no need for establishing an Interconnect exchange and TSPs should be allowed to be continued with peer-to-peer arrangements existing for past many years between them.
- Y. Since DoT does not permit NLDOs to act as a transit provider for carrying intra-circle traffic from one TSP to another TSP, TRAI may take up the issue with DoT so that such a framework can be developed and implemented accordingly.
- Z. Access providers should not be allowed to transit intra-circle calls; except in certain circumstances such as Disaster and Emergency breakdowns, wherein self owned infrastructure of the operator is temporarily not available for service.

AA. A TSP should be allowed to disconnect Pols in following situations:

- i. Either party ceases to hold valid license from DoT
- ii. Any order from court of competent jurisdiction mandating winding-up or dissolution of a party
- iii. If in the interest of National security, competent authority such as DOT/TRAI orders termination
- iv. If there is any breach of any financial obligation under the agreement

AB. Each party should be provided 30 days for making payments. In case the same is not made within this period, notice of 30 days should be given to the defaulting party in writing. In case the payment is not made within this 60 days period, party should have the right to withdraw/ disconnect the Pols.

AC. There is no need of having a coordination committee as the framework recommended in our response should be sufficient to facilitate effective & efficient interconnection between TSPs.

Preamble

1. We are thankful to TRAI for giving us this opportunity to respond to this consultation paper on Review of the Regulatory Framework for Interconnection.
2. We support TRAI initiative to review the interconnection framework in view of the technological changes and existing Regulations. The earlier model RIO dated 12 July 2002 has become outdated these days as concepts of Incumbent TSP, SMP, etc have lost their relevance in the prevailing market, where most of the TSPs are interconnected with each other and have also renewed their licenses post completion of 20 years of operations.
3. It is therefore necessary that the interconnection framework should be renewed to include the technological changes and the regulatory provisions laid down ever since the publication of earlier RIO regulation dated 12th July 2002.

4. As the efficient interconnection has become an essential input to all types of voice calls, data services, Internet, messaging, broadband and a wide range of applications and content services, it is necessary for the operators to follow certain principles of interconnection:
 - i. Non-discriminatory between different operators for the same Service.
 - ii. Reciprocal interconnection and costs should be reasonably balanced. Bill and keep arrangements are an efficient alternative to cost-based interconnection.
 - iii. Interconnection should be permitted at any technically and commercially feasible points.
 - iv. Cost inefficiencies of incumbent operators should not be passed on through charges to interconnecting operators.
 - v. Interconnection arrangements and agreements should encourage efficient and sustainable competition.
 - vi. Shared responsibility for establishing interconnection. Both parties are equally responsible for establishing interconnection, as quickly as is reasonably practical.
 - vii. Quick and fair resolution of inter-operator disputes.
 - viii. Interconnections are increasing becoming IP based.

5. **TRAI has been the leading proponent for driving growth and enhancing consumer benefit. Over the past few months, the Authority has recommended a number of pro-growth, pro-consumer and above all, pro-competition policies. We believe that the TRAI determination on IUC and Interconnection Framework also needs to be consistent with these recent policies. This will also ensure full impact of other recommendations of TRAI to promote competition.**

In view of the above, we would like to submit response to the queries raised in the Consultation Paper as follows:

- Q1: Which amongst the following is the best option to ensure fair, reasonable and non-discriminatory terms and conditions of interconnection agreement between telecom service providers (TSPs), in view of the technological, market, licensing, regulatory and legal developments in the telecommunication services sector in India since 2002?**
- (i) To amend the Telecommunication Interconnection (Reference Interconnection Offer) Regulation, 2002 taking into consideration the technological, market, licensing, regulatory and legal changes since the year 2002;**
 - (ii) To prescribe a Standard Interconnection Agreement, which must be entered into between interconnecting TSPs, in case they are unable to mutually agree on terms and conditions of interconnection agreement between themselves in a specified time-frame;**
 - (iii) To prescribe only the broad guidelines based on fair, reasonable and non-discriminatory principles and leave the details of the interconnection agreement to be mutually decided by the interconnecting TSPs in a time-bound manner; or**
 - (iv) Any other method.**
- Please provide justification in support of your response.**

Our Response:

1. **According to RCOM, option (ii) is the best option to ensure fair and reasonable terms & conditions of interconnection agreement between TSPs. This will encourage TSPs to enter into bilateral negotiations and agreement with other TSPs. The Standard Interconnection Agreement (SIA) will cater to the situation wherein two TSPs fail to arrive at bilateral arrangements within a specified time frame.**
2. SIA to be prescribed by the TRAI must be fair and reciprocal in line with the orders of Hon'ble TDSAT and various other courts which have held that reciprocity has to be maintained in Interconnection matters between Operators.
3. Provision of a Standard Interconnection Agreement has various advantages as follows:
 - a. Avoid longer disputes resulting in substantial delays and legal costs
 - b. Faster rollout of a new entrant
 - c. Ensure that agreements entered into by the TSPs are non-discriminatory.
 - d. New entrants gain confidence before committing resources that their business will be viable and that they will be able to resolve any disputes in a timely fashion.
4. **TRAI may look at formation of a Committee as a part of this Consultation process, to arrive at a Standard Agreement. The committee may comprise of one representative from each Operator including BSNL & MTNL and the officials from TRAI.**

Q2: Whether existing interconnection agreements should also be allowed to be migrated to the new framework which will come out as a result of this consultation process?

Our Response:

1. **Yes, the existing interconnection agreements should also be allowed to migrate to the new framework/ Agreement.**
2. **The migration should not be mandated by the TRAI however request of any party seeking such migration should be acceded by the other party with in the specified time frame of 90 days.**

Q3: What should be the time-frame for entering into interconnection agreement when a new TSP with a valid telecom license places a request for interconnection to an existing TSP?

Our Response:

We feel that a time frame of 90 days should be prescribed for entering into interconnection agreement. The request placed by the late/new entrant must be accompanied with all necessary information required by the Interconnection provider for considering the request (refer response to Q4 below).

Q4: Which details should a new TSP furnish while placing request for entering into interconnection agreement? Please provide detailed justification in support of your response.

Our Response:

1. In accordance with various provisions under the license, TRAI has always held that all the TSPs are required to provide interconnection to other eligible service providers having a valid license in a non-discriminatory manner on agreed terms. This makes it obligatory for the licensees to enter into suitable interconnect agreements.
2. Since it is obligatory for the licenses to enter into interconnection agreements, **new TSP should be required to submit minimum but essential information that is required for entering into Interconnection Agreement and ascertaining that the interconnection facility and resources to be shared under the agreement will be put to legitimate use.** The information/ details that may be required along with the request are:
 - a. Details pertaining to License/Authorization issued by the DoT u/s 4 of Indian Telegraph Act
 - b. Details of the Business Plan and Service to be provided
 - c. Initial and Subsequent Traffic forecasts (around 1 year) with at least two intervening reviews of the forecast and actual ground situation.
 - d. Details of technical requirement of interconnection and network diagram to enable existing TSP design a suitable technical solution/ plan.
3. Once the above information/ details are provided, the same may be examined and agreed mutually between TSPs to enter into Interconnection agreement within the prescribed time frame.

Q5: Should an interconnection agreement between TSPs continue to operate if an interconnecting TSP acquires a new license upon expiry of an old license? Alternatively, should fresh agreements be entered into upon specific request of either party to the interconnection?

Our Response:

1. Most of the interconnect agreements are coterminous with the license i.e. 20 years which is a significant time frame wherein licensing, regulatory and technology landscape in telecom sector undergo a drastic change and warrants review of existing terms & conditions of the agreement.
2. Further, Interconnect agreements of TSPs permit review of the agreement in the event of a material change in the applicable license conditions and regulations etc. Therefore, **we are of the view that the decision to enter into fresh agreements Or continue with the existing agreements should be left to the parties to the interconnection. However, agreement based on new framework to be prescribed as a result of this consultation, should not be refused by either party.**

3. **The operators whose license gets expired or if opted to migrate to UL from their existing CMTS/UASL license, should not be mandated to enter into new interconnect agreement provided that if either party requests to sign afresh agreement under the new interconnection regime, the same should be assented by the other party.**
4. TRAI is aware that new Interconnect agreements between some TSPs including RCOM and PSUs (BSNL & MTNL) are still pending since year 2012 due to the pending review of terms of the agreement and making it reflective of current regulatory and commercial environment. **In such cases, interconnectivity with BSNL & MTNL is continued only with the intent of not inconveniencing the subscribers on both sides and the public at large.**
5. **Further, there is no clarity on when the Basic Service licenses of BSNL & MTNL are expiring. At present, PSUs have agreements with private TSPs as an integrated operator and hence is difficult to determine expiry of their license and respective interconnection.**

Q6: Whether it is appropriate to mandate only those TSPs who hold significant market power (SMP) in a licensed service area to publish their Reference Interconnect Offers (RIOs)? If yes, what should be the criteria for reckoning a TSP as SMP? If no, what could be the other approaches to streamline the process of interconnection in a fair, reasonable and non discriminatory manner?

Our Response:

1. **The concept of SMP and requirement of publishing RIO is not relevant today and hence should be done away with, in view of our response to Q1 wherein we have recommended adoption of Standard Interconnection Agreement by the parties in case bilateral negotiation fails between them.**
2. Moreover, we have experienced in the past that enforceability of RIO Regulations of TRAI have been a major issue with the PSU operators. **TSPs have continued to face numerous challenges from PSUs who insist on perpetuating the completely one-sided, non-reciprocal terms and conditions of interconnections**, which are completely contrary to RIO Regulations of TRAI.
3. Further, due to paradigm shift from wireline to wireless services and significant reduction in market shares of PSU operators, there is no case to continue treating PSUs as SMP anymore.

Q7: Whether there is a need to continue with the present concept of interconnection seeker/ interconnection provider? If yes, what should be the criteria?

Our Response:

1. **We feel that the criteria should be as per the suggestion given below:**

- a. **Access Service Provider – Access Service Provider:** Existing practice which is working well should be allowed to be continued whereby the late entrant is considered as the Interconnection Seeker, for the initial two (02) years after which the cost is borne by both parties based on their respective outgoing traffic.
 - b. **Access Service Provider – NLDO/ILDO:** Existing practice of NLDO/ILDO to be considered as Seeker for interconnection with Access Service provider should be continue.
 - c. **Renewed Licenses:** The licenses which are renewed upon expiry of 20 years term should be considered as existing operator for this purpose i.e. should not be considered as seeker.
2. As far as various charges as highlighted by the TRAI, payable by the Interconnection seeker are concerned, we would like to make the following submission:
- a. **Setup Cost:** For any new PoI required to be established between the networks, each party should bear its own set up cost.
 - b. **Port Charges:** We believe that interconnection is the requirement of both the parties and thus there should be no port charges applicable for new or existing TSPs.
 - c. **Infrastructure Charges:** These charges should be dispensed with as it is a mutual requirement of both the parties.
3. We would further like to highlight that the principle of reciprocity is in practice among private TSPs as far as above or any other financial or technical obligation is concerned. However, the PSUs require private TSPs to bear the entire cost of interconnection, including the cost of outgoing traffic from BSNL, in perpetuity. This needs to be corrected as interconnection is a mutual requirement.

Q8: Whether there is any need to review the level of interconnection as mentioned in the Guidelines annexed to the Telecommunication Interconnection (Reference Interconnection Offer) Regulation, 2002? If yes, please suggest changes along with justification.

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Q9: In case interconnection for Inter-circle calls to fixed-line network continues to remain at Short Distance Charging Area (SDCA), should alternate level of interconnection be specified in cases of technical non-feasibility (TNF) at SDCA level?

Our Response:

1. **Parties should have a right to carry a call originated by its subscribers, to the farthest point through its own network and then deliver it to the other TSP.**
2. **Alternatively, since there is no restriction in the existing Interconnection Agreements stipulating any particular level / PoI for handover of traffic, the parties may be left to mutual negotiations wherein the Parties may mutually agree to point of handover, subject to technical feasibility, and such handover should not be unreasonable denied by the other party.**

3. Further, the call handover at gateway switch serving multiple switches or connected to the multiple SDCA should be considered as far end handover and should be on reciprocal basis.
4. **There is also a need to reduce the number of Pols of state-owned TSPs by removing the hierarchical layers of Pols from L-I TAX to L-II TAX to SDCC Tandem to Local Exchange and remove transit charges for carriage within the network of BSNL/MTNL.**
5. **Interconnection for inter-circle calls between TSPs (including BSNL) should be prescribed at TAX/ Gateway MSC level serving the area.**
6. **Routing of Emergency Calls:**
 - i. **No Fixed Fee/ Minimum Commitment for emergency services should be levied by BSNL/MTNL:** The services for emergency/Level 1 availed from BSNL/MTNL involve termination to fixed line numbers for which the applicable IUC (Termination Charge) is Zero. Further, DoT also mandates TSPs to not to charge subscribers for emergency calls. Therefore, BSNL should not impose any IUC or lump-sum charge for facilitating the emergency service traffic.
 - ii. **Emergency traffic should be accepted by BSNL at all POIs:** TSPs are facing difficulty in handing over of emergency traffic at Pols other than L-II TAX of BSNL. BSNL should allow TSPs to adopt any/the best available route to terminate these calls.
 - iii. **Allow operators directly translate and terminate the traffic to the respective organizations providing emergency services:** In the current scenario, traffic is handed over to BSNL/MTNL with Called Number as <SDCA Code + emergency short code> and BSNL then translates this to actual Directory Number of the emergency assistance agency. We recommend that similar to other short codes configurations, in which the concerned agency/authority intimates the routing and termination numbers to all TSPs, the short code is translated to the Directory Number directly by the TSPs and implement the routing at their end and terminate the call directly to the Agency handling emergency services. **This will also standardize the implementation of Single Emergency Number "112" where all calls to 112 will be translated to the directory number.**
 - iv. **Hand over to PSAP directly by the TSPs:** Once MHA sets up the PSAPs, the operators should be allowed to terminate the calls directly to the PSAPs.

Q10: What should be the framework to ensure timely provisioning/ augmentation of E1 ports? Please provide full framework with timelines including the following aspects:

- (a) **Minimum number of E1 ports for start of service;**
- (b) **Maximum time period for issuance of demand note by the interconnection provider;**
- (c) **Maximum time period for payment for demanded E1 ports by the interconnection seeker;**
- (d) **Intimation of provisioning of requested E1 ports by interconnection provider;**
- (e) **Space allocation for collocation of transmission equipment;**
- (f) **Maximum time period for establishment of transmission links by the interconnection seeker;**

- (g) **Maximum time period for acceptance testing;**
- (h) **Maximum time period for issuance of final commissioning letter by the interconnection provider; and**
- (i) **Maximum time period for start of traffic in the POI after provisioning/ augmentation of E1 ports for which payment has already been made.**

Our Response:

1. Since most of the details such as traffic forecasts and technical requirements are already provided by new TSP and thoroughly examined by the existing TSP before signing interconnection agreement (refer response to Q4), following timelines should be sufficient for completing end-to-end process of Provisioning/ Augmentation of ports:
 - a. **15 Days for Mobile/IP networks for initial and subsequent demands both.**
 - b. **30 days for Fixed-line network for initial and subsequent demands both.**
2. **Minimum number of E1 ports for start of service should also not be prescribed in advance as the same can best be determined by the new TSP starting the service and seeking interconnection, based on the new entrant business model.**

Q11: Whether augmentation of ports be allowed at higher levels such as STM-1 in place of E1?

Our Response:

1. Augmentation of ports may be allowed at higher levels i.e. STM-1; however, it should not be mandated.
2. In case of IP based interconnect, interconnection should be allowed at MB and GB level.
3. For smaller requirements, the existing practice of E1 level ports should be allowed to be continued.

Q12: What should be the criteria to ensure that inflated demand for ports is not made by interconnection seeker?

Our Response:

1. **Initial demand of ports is expected to be based on traffic projection and any inflated demand from seeker is not envisaged.** Therefore, we feel no requirement of prescribing any criteria for initial Pols. **In case the traffic is not of expected magnitude and not meeting the initial forecasts, the ports can be de-provisioned on mutual basis.**

2. Capacity threshold criteria for raising subsequent demands of ports should be defined at 70% to ensure that the QoS and business is not impacted in the interim till the time additional capacity is provided.

Q13: In case the interconnection seeker agrees to bear the total cost of equipment required for augmentation in advance, should the interconnection provider give the requested ports irrespective of volume of traffic at POI?

Our Response:

We feel that the parties should be given sufficient independence to discuss and decide such commercial issues on mutual basis.

Q14: Should separate time periods for provisioning of ports be prescribed for (i) fixed-line networks and (ii) mobile/ IP networks?

Our Response:

Time period for provisioning of ports for Fixed-line networks and Mobile/ IP networks should be prescribed as 30 days and 15 days respectively.

Q15: Whether financial disincentive should be imposed on TSPs for-
(a) not entering into interconnection agreement within a stipulated timeframe;
(b) not providing initial POI;
(c) not augmenting POI within stipulated timeframe;
(d) for violation of any clause prescribed in the regulations.
If yes, what should be the amount of such financial disincentives?

Our Response:

1. At the outset, we would like to submit that **there is no requirement of prescribing any financial disincentive for interconnection related issues and the existing practice of TRAI resolving any inter-operator issue is working fine and hence should be continued.**
2. Either party can approach TRAI for issues such as, non-signing of interconnect agreement, non-provisioning/ augmenting of Pols or for violation of any clause prescribed in the Regulations. Thus, there is no need of prescribing any financial disincentive in this regard.
3. **In case any party is not satisfied with the resolution provided by the TRAI, the parties also have the right to approach TDSAT or any other Higher Court for adjudicating such dispute.**
4. Further, TRAI can recommend to DoT for suitable action in line with the license conditions.

Q16: Whether there is a need to have bank guarantee in the interconnection agreement? If yes, what should be the basis for the determining the amount of the bank guarantee?

Our Response:

We feel that there is no need to have Bank Guarantees in the interconnection agreement. This is an unnecessary cost obligation on licenses service providers.

Q17: What should be the method to settle Interconnection Usage Charges and how should the delayed payment between TSPs be handled?

Our Response:

- 1. RCOM has been recommending Bill & Keep regime for all kind of terminations for past many years. Once the same is implemented, settlement procedures will have no relevance and billing disputes between the TSPs will disappear.**
- 2. Till such time, method to settle IUC should be as per existing practice i.e. based on bilateral discussions between the parties.**
- 3. Issues with respect to the delayed payments between TSPs should also be allowed to be handled on bilateral basis however it must be ensured by the TRAI that neither party imposes unreasonable conditions such as BSNL at present charges interest upto the rate of 24% in case of delay. In any case, the interest should not exceed SBI base rate.**

Q18: Whether interconnection and interconnection agreement should be service-specific or service-agnostic (i.e. a TSP can send any type of traffic on a point of interconnection which is allowed under the terms and conditions of the license given to it)? What are the advantages/ disadvantages of having service specific POIs when the TSPs are equipped with call data record (CDR) based billing systems?

Our Response:

- 1. Presently, the interconnection agreement and POIs are done separately for each license/ service of same operator. However BSNL & MTNL interfaces with other operators as an integrated supplier of various services in spite of having different licenses for each service. Since most of the TSPs now hold UL with various service authorizations, service agnostic agreement and POI should be allowed to such TSPs also.**
- 2. We recommend that the interconnection and interconnection agreement for Full Mobility, Limited Mobility and Fixed Line Network of UASLs/ULs should be service agnostic subject to adherence to all rules and regulations including National Numbering Plan, National Routing Plan & National Signaling Plan i.e. a licensee should be allowed to send any type of traffic originating from any service provided under the same license. This is possible with introduction of Bill & Keep IUC regime for all kind of termination wherein overall regulatory cost and billing & settlement**

issues between operators will get reduced as service-specific Pols and CDR based reconciliation requirements will have no relevance in BAK IUC regime.

3. **However, in case of Voice over Internet calls, it must be ensured that their routing and termination is in adherence with the National Numbering Plan, National Routing Plan & National Signaling Plan.**

Q19: If POIs are merged together, what methods of discovery, prevention and penalization of any traffic manipulation by TSPs (whereby higher IUC traffic is recorded as lower IUC traffic in the CDR of the originating TSP) should be put in place?

Our Response:

1. **We would like to again recommend that Bill & Keep regime for all kind of termination is implemented immediately which will automatically address the issues related to Higher IUC traffic vis-a-vis Lower IUC traffic.**
2. Moreover, there is already the license condition that **CLI tampering is not allowed** which is believed to be a strong deterrent for preventing operators from any such traffic manipulation. Further, to identify such cases, if any, **each operator also shares Numbering level's breakup with DoT and other operators to make CDR based reconciliation process more robust and foolproof.**
3. In case any such case is identified/ discovered, the originating operator may be asked to pay the differential amount, with interest, if any.

Q20: Which policy and regulatory measures are required to be taken to encourage TSPs to migrate to Interconnection at IP level? What should be the terms and conditions for inter-connection at IP level?

Our Response:

We suggest that a **"Light Touch" Regulatory & Policy measures are required to encourage TSPs to migrate to Interconnect at IP level.** We would like to suggest the following in this regard:

1. **Interconnection at IP level should not be mandated; however, neither party should refuse the same in case it is technically feasible for the party to interconnect at IP level.**
2. **Co-existence of Both TDM and IP interconnect should be permitted to continue.**
3. Based on the points of confluence of their respective network architecture, such interconnection should be permitted to be a bilateral agreement between two operators. **The network operators are best placed to decide the locations and structure of Pol for IP based network, hence regulatory intervention should not be there.**

4. **Bill and Keep (for termination charges) is the most attractive framework of IUC** for future deployment of technologies like IP based Networks.

Q21: Whether there is a need to establish a framework for Interconnect Exchange to eliminate bilateral interconnection issues?

Our Response:

1. **There is no need for establishing an Interconnect exchange and TSPs should be allowed to be continued with peer-to-peer arrangements existing for past many years between them.**
2. Establishment of interconnect exchange shall lead to skewed loading of the network as all traffic between the operators shall have to reach the exchange before it is handed over to the other operator.
3. It will also prevent the use of shortest path leading to the increase in latency and congestion in the network. Therefore, at this stage, we do not recommend to have a common point of interconnection i.e. interconnect exchange and the established peer to peer arrangement should continue.

Q22: Is there any need for a separate framework for Interconnect Exchanges in view of the fact that the new NLDO authorization permits transit traffic to be carried over by NLDO?

Our Response:

1. The NLD license provisions regarding carriage of intra-circle traffic/call has been changing from time to time. Such provisions at different points in time were as under:
 - i. **Old NLD License (2002):**
..... for the present LICENCE, the LICENCEE will only pick up, carry and deliver Inter-Circle traffic which goes outside or across from one circle to another, from and to the network of Access Providers, excluding purely intra-circle traffic except when such pick up, carriage and delivery is by way of mutual agreement with Basic Service Provider in accordance with their respective agreed terms.
 - ii. **NLD Service License dated 14th December, 2005:**
The NLD Service refers to the carriage of switched bearer telecommunications service over a long distance and NLD Service Licensee will have a right to carry inter-circle traffic excluding intra-circle traffic except where such carriage is with mutual agreement with originating service provider.
2. **DoT had issued clarification on 16th July, 2007 that provisions for carriage of intra-circle traffic under NLD license is barely to enable the access providers to use the network of NLDOs, if they so require, for carriage of their traffic in their network from one station to another. This further clarified that NLDOs are not allowed to carry any intra-circle long distance traffic.**
3. This means that an access provider can use the services of an NLDO for only carrying traffic from one point to other within its own network. However, for the calls destined

for other networks, it has to be handed over to that operator directly and not through an NLDO.

4. **This clarification cleared that NLDOs are not allowed to carry intra-circle traffic from one operator to another and NLDOs have developed their business cases accordingly over these many years.**
5. **New NLDO authorization under Unified License (UL) have similar clause regarding carrying intra-circle traffic and in no case the understanding of the same be held different from the understanding of previous provisions and clarifications issued by the DoT. Relevant clause under NLD authorization is as under:**

The NLD Service Licensee shall have the right to carry inter-circle switched bearer telecommunication traffic over its national long distance network. The Licensee may also carry intra-circle switched traffic where such carriage is with mutual agreement with originating access service provider.
6. **In light of the above, we request that TRAI may take up the issue with DoT so that such a framework can be developed and implemented accordingly.**

Q23: Whether access providers should be allowed to transit intra-circle calls?

Our Response:

1. We recommend that at this juncture, **there is no need of allowing access providers to transit intra-circle calls.** Such arrangements were required in initial stages when telecom sector was evolving and related infrastructure was not in sufficient capacity and the dependence was predominantly on PSU operators. Private TSPs required services from PSU operators to establish connectivity with other TSPs for transit of their calls to other service provider's subscribers.
2. **However, Government may allow such arrangements between operators for temporary period under limited circumstances such as Disaster and Emergency breakdowns, wherein self owned infrastructure of the operator is temporarily not available for service.**

Q24: Under what circumstances, a TSP can disconnect POIs? What procedure should be followed before disconnection of POI?

Our Response:

1. **A TSP should be allowed to disconnect Pols in following situations:**
 - a. **Either party ceases to hold valid license from DoT**
 - b. **Any order from court of competent jurisdiction mandating winding-up or dissolution of a party**
 - c. **If in the interest of National security, competent authority such as DOT/TRAI orders termination**

d. If there is any breach of any financial obligation under the agreement

However, in case of termination, a notice of reasonable time frame may be given by the disconnecting party, unless any order from any competent authority requires immediate disconnection.

- 2. Each party should be provided 30 days for making payments. In case the same is not made within this period, notice of 30 days should be given to the defaulting party in writing. In case the payment is not made within this 60 days period, party should have the right to withdraw/ disconnect the Pols.**

Q25: Is there a need to have a coordination committee to facilitate effective and expeditious interconnection between TSPs? If yes, who should be the members of the co-ordination committee? What should be the overall operating framework for the committee?

Our Response:

There is no need of having a coordination committee as the framework recommended in preceding paragraphs of the response will be sufficient to facilitate effective & efficient interconnection between TSPs.

Q26: Is there any other relevant issue which should be considered in the present consultation on the review of regulatory framework for Interconnection?