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**Subject: COAI response to TRAI Consultation Paper on 'Review of the Regulatory Framework for Interconnection'**

Dear Sir,

This is with reference to the Consultation Paper on "Review of the Regulatory Framework for Interconnection" issued by TRAI on October 21, 2016.

In this regard, please find enclosed our response on the consultation paper.

Kindly note that one of our member operators, RJio, does not agree to the views expressed in COAI submission and will submit its views separately.

We hope that our submissions will merit your kind consideration and support.

Thanking You,

Yours faithfully,

**Rajan S. Mathews**  
Director General  
COAI



**Response to  
TRAI Consultation Paper on  
Review of the Regulatory Framework for Interconnection  
Released on October 21, 2016**

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**I. Preamble:**

1. COAI submits that the following key points should be kept in mind with regard to **the Regulatory Framework for Interconnection** :
  - a. The principle of “Fair, Reasonable, Reciprocal and Non-Discriminatory (FRRAND)” should be adopted.
  - b. Interconnect framework should be based on cost-based charging
  - c. Fair and equal terms for all
  - d. Approach of Transparency should be adopted by all operators
  - e. Interconnection should be only with a licensed entity having its own access network.

**2. Key Principles:**

- a. We would like to highlight following principles recognized globally for framing the interconnection agreements:
  - i. **Interconnection to be ensured:** Interconnection with a provider will be ensured at any technically feasible point in the network. Such interconnection is provided:
    - **under non-discriminatory terms, conditions** (including technical standards and specifications) and at rates & a quality no less favourable than that provided for its own like services;
    - **in a timely fashion, on terms, conditions** (including technical standards and specifications) and cost-oriented rates that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the interconnection provider need not pay for network components or facilities that it does not require; and

- upon request, at points in addition to the network termination points offered to the majority of the users, subject to charges that reflect the cost of provisioning / implementing additional facilities.
- ii. **Transparency in interconnection arrangements:** As a principle, the interconnection provider should make public its Reference Interconnection Offer. Procedures and terms & conditions for obtaining Interconnect should be made public.
  - iii. **Dispute settlement:** Interconnection seeker requesting interconnection should have recourse, incorporated in their mutually agreed agreements.
- b. Further, the interconnection framework co-exists with the regulatory framework on other aspects of telecommunication services and the overall regulatory framework has to be adhered to. **Interconnection framework cannot be seen in isolation.**

### 3. **Enforceability & Reciprocity:**

- a. The industry continues to face numerous challenges from state-owned players, who insist on perpetuating the non-reciprocal terms & conditions of Interconnection contrary to the RIO Regulation. Thus, **enforceability of the RIO Regulation with public operators in general has been a major issue that needs to be addressed so as to ensure fairness and reciprocity.**
- b. The framework needs to bring fairness and reciprocity in all the terms & conditions of Interconnection between all TSPs including with state-owned TSPs. **The principle of “Fair, Reciprocal, Reasonable, and Non-Discriminatory (FRRAND)” should be adopted.**

### 4. **Interconnect for licensed entity (having its own access network) only:**

- a. Interconnection essentially is of the networks to enable telecommunication services across the networks. Hence **as per license agreement interconnection is amongst the networks of Licensees only.**
- b. A licensee with no network of its own is not eligible to enter into an interconnection agreement.
- c. Access operators should provide interconnection to licensed entity only i.e. any entities like content providers/OTT providers who are not licensed in India should not be allowed to have direct interconnection with TSP.

**5. Relevance of the current exercise considering the stated views of the state owned operators:**

- a. In the TRAI pre-consultation paper on Interconnection BSNL stated that “.....it does not acknowledge regulatory, market and technological changes for any review of existing regulations on interconnection and all the interconnection agreements signed by them are effective, non-discriminatory, fair and transparent. M/s BSNL also submitted that there is no need to prescribe a standardized interconnection agreement and such a proposal from the Authority is an intrusive approach and it undermines the freedom of TSPs to enter into mutual negotiations and agreement with other TSPs in the matter of interconnection which has been referred to in the Licenses. “
- b. Further, MTNL stated that “ any review of the existing interconnection regulations is not called for by the Authority at this stage and there is no need for prescribing a standard agreement as parties should be allowed to reach at a mutually beneficial conclusion in their interest after negotiations. M/s MTNL, further, submitted that the status of the incumbent TSPs as ‘interconnection providers’ should not be tinkered with; the right of public sector TSPs of securing their interest by seeking Bank Guarantees (BGs) from private TSPs should not be diluted in any manner “

In this regard, we would like to submit **that if BSNL and MTNL continue to hold such view then the very objective of the TRAI exercise will be defeated.** We submit that the review should not result in disproportionate regulation on private operators, whilst BSNL continues to enjoy unilateral and one sided arrangements.

**6. Significant Market Power (“SMP”) and Augmentation of POIs:**

Further to the above, we would like to highlight following that need to be considered to promote level playing field:

- a. **Concept of Significant Market Power (“SMP”):** The industry today is recognised globally as a hyper-competitive market. There is hardly any other global market where such vigorous competition prevails. Thus, we believe that **the concept of the SMP has lost its relevance** since the last RIO Regulation was issued in 2002.

While the public sector operators do not have SMP, but they still continue to impose unilateral one sided conditions on other operators.

- b. **Augmentation of Pol:** Interconnection mutually benefits both Parties and augmentation of capacity at a Pol is the need of both the Parties based on the increase in the traffic exchanged. Thus, Parties should cooperate to augment the Pol expeditiously and in a defined time-frame to abide by the applicable QoS norms. Considering the work to be done by existing TSP and to ensure commitment of seriousness from a new entrant, the two year period for which new entrant has to pay for the resources for interconnection,

as provided under RIO 2002 is reasonable. After the initial 2-year period, issue of seeker/provider is not relevant and cost of entire augmentation should be shared between the Parties in the ratio of their respective outgoing traffic.

**7. Some of the other/ additional issues that need to be considered by TRAI with respect to Interconnect agreements with BSNL and MTNL are as below:**

**a. Emergency Services:**

**i. No other charges for emergency services will be levied by BSNL/MTNL except the applicable IUC:**

i.a. Emergency services are those that are availed in situations of distress. It is required that these services are facilitated through the least impeded routes and are not commercialized by BSNL/MTNL by the levying of charges that are higher than the standard interconnection charges. Currently, the charges levied by BSNL and MTNL are:

- **MTNL** levies a charge of Rs.1.20 per minute for emergency service traffic handed over to them by private TSPs in Delhi and Mumbai.
- **BSNL** collects an annual lump-sum in each LSA over and above the applicable IUC for such traffic on a “per-minute basis”. The lump-sum regime was introduced by BSNL in 2010 to replace the “per minute” charging regime akin to MTNL (i.e., Rs.1.20/min). The lump-sum was initially fixed at Rs.10 lacs p.a. for the entire service area with an annual increment which was later defined as 10% vide BSNL’s circular. Consequently, the lump-sum has escalated year-on-year since 2010-11 to Rs.16.10 lacs + service tax for FY 2015-16 in each LSA.

i.b. These charges are not only unreasonable and exorbitant but are unjustified since the legacy of BSNL/MTNL’s resources being deployed for emergency services by the organizations, i.e., police, ambulance, etc., has compelled operators to use their network.

**i.c. In this regard, we request TRAI to:**

- Notify that no other charges for emergency services will be levied by BSNL/MTNL except the applicable IUC.
- Intervene and direct BSNL/MTNL to allow operators to directly route and terminate the traffic to the respective organizations providing emergency services.

- ii. **Emergency traffic should be accepted by BSNL at all POIs:** TSPs are facing difficulty in handing over of emergency service traffic at Poles other than L-II TAX of BSNL even though there is no restriction in the existing Interconnection Agreements stipulating any particular level / Pole for handover of traffic. There should not be any artificial routing barrier such as L2 and L1 TAX etc. and BSNL should allow TSPs to any/the best available route to terminate these calls by directly translating it to the terminating numbers and ensure that there is no failure.
  
- iii. **Allow operators directly route and terminate the traffic to the respective organizations providing emergency services:** In the current scenario, traffic is handed over with Called Number as <SDCA Code + emergency short code>. BSNL converts this Called Number to actual Directory Number of the emergency assistance agency. Thereafter, the call is terminated onto the control center of the said agency akin to any normal call. Thus, although the number conversion is done by BSNL & MTNL, however this is solely on account of the fact that ONLY they are aware of the Directory Number of the concerned emergency assistance agency. Our member operators do not know the Directory Numbers of the emergency assistance agencies (at least where the terminal / PRI / telephone connection has been provided by BSNL & MTNL) and therefore cannot perform conversion to the actual B-Party Number.

Thus, we recommend that the provision of these services should be akin to any other short code configuration, in which the concerned agency/authority in whose favour the short code is issued by DoT, intimates the routing and termination numbers to all TSPs. Upon receipt of the Directory Number from such agency, all TSPs map the short code to the Directory Number and implement the routing at their end. If such a mechanism is deployed for emergency service calls as well, TSPs will have independence in routing of traffic to emergency assistance agencies. This model provides the autonomy to TSPs to manage the routing intelligence in their networks without being dependent on any other TSP and irrespective of the fact that the telecom resources deployed by the concerned agency may be of some other TSP.

- b. **Align the number of POIs:** There is need to reduce the number of Poles (levels of hand-over of traffic) of state-owned TSPs (i.e. fewer Poles per LSA by removing the hierarchical layers of Poles 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 (i.e. from L-I TAX to L-II TAX or from L-II TAX to SDCC Tandem).
  
- c. **Preclude levy of notional charges in contravention of IUC Regulations:** The new framework needs to preclude levy of notional charges in contravention of IUC Regulations, such as excess sum of 15p/min demanded by BSNL from NLDOs for inter-circle calls of national out-roamers carried by NLDO and handed over to BSNL at SDCA Poles in Home Circle of out roamer for termination in BSNL's Fixed Line network. BSNL levies this charge for the distance between Gateway TAX in Home Circle of out roamer

to SDCA Pol, on the pretext of notional carriage, whereas the call is actually handed over by NLDOs at last point / SDCA and no further carriage is involved.

- d. **No TAX transit charge wherever traffic is handed over at originating LDCC TAX or L1 TAX:** Capacity building at the MSC / TAX is a business decision of BSNL and therefore the cost of BSNL's inability to provide the direct Pol should not be transferred to the other TSP. Thus, in new framework no transit charge should be levied wherever traffic is handed over at originating LDCC TAX.
- e. **Reasonable infrastructure charges:** BSNL has been unilaterally specifying the rates of the infrastructure charges and increasing them without any justification and/or consultation with the private operators. For example, the recent revision in infrastructure charges by BSNL circular dated 12.06.2012, in which they attempted to apply the increased charges retrospectively from 2009. The issue was challenged before the TDSAT and the Court in its order dated 14.10.2014 directed prospective implementation but BSNL, vide another Circular dated 30.03.2015, has sought to prescribe Infrastructure charges at the same rate as would be achieved by retrospectively applying Circular dated 12.06.2012, thereby seeking to indirectly achieve the same objective that it could not achieve because of the TDSAT order.
- f. **Charges for shifting of POI's :**
- i. BSNL levies the following charges for Pol shifting:
    - o Surrender Charges at existing Pol equivalent to one full year's port charges
    - o Fresh Port Charges for new Pol for an equivalent number of E1s
    - o Set Up Charges
  - ii. It is a settled position that surrender charges and port charges are not applicable for shifting of POI and if at all any set up charges are levied, these should be reciprocal and payable on work done principle.
  - iii. We request TRAI to ask BSNL to facilitate Pol migration / shifting in adherence with the Judgments dated 06.03.2012 and 25.06.2012 of the Hon'ble TDSAT. The relevant extract from the judgment is enclosed as Annexure – 1.
- g. **Surrender Charges:** BSNL also applies charges for the surrender of any existing Pol at the rates equivalent to one full year's port charges. While on one hand the application of such charges is unwarranted, the situation is further worsened by BSNL applying these charges from the date of its approval for surrender rather than the date of application of the private operator for surrender.
- h. **Enable implementation of TDSAT pronouncements on Interconnection:** In a number of cases, the courts (Hon'ble TDSAT / HCs / SC) have tried to restore balance between the private operators and BSNL/MTNL on Interconnection related issues by

appropriate Orders and Judgments, however these have not been implemented by BSNL/MTNL by requisite amendments to the Interconnection Agreements. There is a need to execute such decisions to enable effective interconnection in true spirit. TDSAT in its Judgments has emphasized on the need for fairness and mutuality in the interconnection arrangements. The relevant portion of the Judgments is enclosed as Annexure – 2.

All the above has explicitly highlighted the need to bring level playing terms in the interconnection arrangements with BSNL/MTNL so that they are reflective of the much sought-after balanced interconnection structure.

**Therefore, considering the existing anomalies in the BSNL/MTNL interconnection agreements, we request TRAI to take cognizance of the same and make necessary changes in the framework to pave the way for effective interconnection arrangements.**

Kindly note that Vodafone is not party to the above highlighted submissions w.r.t BSNL/MTNL as it has approached TDSAT in respect of its challenges against BSNL/MTNL.

## **II. Query wise Response:**

**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.**



### COAI Comments:

1. Individual members of COAI will represent in the matter.

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?**

### COAI Comments:

1. Migration to a new framework should be allowed subject to mutual agreement of both parties.

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?**

### COAI Comments:

1. TRAI may prescribe an appropriate time-frame for entering into interconnection agreement when a new TSP with a valid telecom license and network, places a request for interconnection to an existing TSP.

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.**

### COAI Comments:

1. We believe that Regulatory intervention may not be required in this aspect. Depending on the two operators who are entering into an interconnect agreement, the new TSP may furnish **all the essential details that might be required for ensuring efficient and speedy provisioning of interconnection** on a reciprocal basis.

2. That said, the following illustrative list may be considered by the new TSP while placing request for entering into interconnection agreement:

- a. Details of the services for which interconnection is sought
- b. Proposed connectivity for each of the services – network diagram giving routing, etc.
- c. Interconnecting technology, for example, TDM/IP, SMPP, ISUP, etc.
- d. Capacities sought for interconnection along with justification

- e. Tentative dates by which the capacity is being sought
- f. Details of transport media such as satellite, Microwave, PDH, SDH, DWDM, ATM, etc.
- g. License authorizations available with the Seeker.

**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?**

**COAI Comments:**

1. In this regard, we are of the view that if both the interconnecting parties decide to continue with the same terms and conditions of interconnection, then the agreement may continue. But if any party seeks a review, a fresh agreement may be drawn up keeping in view of the technological, market, licensing, regulatory and legal developments.

**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?**

**COAI Comments:**

1. As highlighted by us in the preamble we believe that **the concept of the SMP as the basis for publishing a RIO, has lost its relevance** since the last RIO Regulation was issued in 2002. While the public sector operators do not have SMP, but they still continue to impose unilateral one sided conditions on other operators.

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

**COAI Comments:**

1. As highlighted in the preamble we submit that the principle of “Fair, Reasonable, Reciprocal and Non-Discriminatory (**FRRAND**)” should be adopted and reciprocity should be ensured.
2. We believe that Interconnection mutually benefits both Parties and augmentation of capacity at PoI is the need of both the Parties based on the increase in the traffic exchanged.
3. Considering the work to be done by existing TSP and to ensure commitment of seriousness from a new entrant, the two year period for which new entrant has to pay for the resources

for interconnection is reasonable. Thereafter the cost of augmentation should be shared between the Parties in the ratio of their respective outgoing traffic

**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 alongwith justification.**

**&**

**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?**

**COAI Comments:**

1. We are of the view that both parties should have a right to carry a call to the farthest point in its network and handover to the other party at the terminating end.
  2. We are of the view that call handed over at gateway switch serving multiple switches or connected to the multiple SDCA should be considered as far end handover and should be on a reciprocal basis.
  3. We also suggest that it should be the responsibility of any operator, including the fixed line operator, to carry calls from the declared termination point to the actual point of termination at its own cost. This will simplify the interconnection between mobile and fixed line operators.
  4. We thus request TRAI to accordingly make changes in the level of Interconnection.
- 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.**

**COAI Comments:**

- 1. All operators have existing interconnection agreements. The timelines for provision of Interconnection to new operators can be same as per these existing interconnection agreements.
- 2. We believe that there is no reason for any regulatory intervention/over prescriptive regulatory approach unless the TRAI sees an evident case of market failure.

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

**COAI Comments:**

- 1. We believe that the augmentation of the ports based on STM-1 is already allowed and is done based on technical feasibility and requirement.
- 2. We are of the view that the same should be mutually agreed between the parties and should not be mandated.

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

**&**

**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?**

**COAI Comments:**

- 1. In order to ensure that inflated demand for ports is not made by the interconnect seeker , we propose the following:
  - a. Any demands raised by the seeker should be technically derived based on volume of traffic during peak hours.
  - b. Demand raised should be discussed and agreed between the parties.

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

**COAI Comments:**

1. Interconnection happens on the core network whether it is fixed line or mobile/IP network. Therefore, we suggest similar time periods for provisioning of ports irrespective of the type of network.

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?**

**COAI Comments:**

1. We are of the view that there should not be any financial disincentive imposed on the TSPs.
2. Except for the point (a) all the other points will be covered in the Interconnect Agreement between both the parties.
3. Each party has the option to consider the dispute resolution mechanism as agreed for in the Interconnect agreement between the parties.

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?**

**COAI Comments:**

1. As highlighted in the preamble the commercial aspects of the interconnection should be left for the mutual agreement on a reciprocal basis.
2. In case the party feels that there is need of the B.G, **then the same should be allowed based on their mutual agreement on the reciprocal basis.**

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

**COAI Comments:**

1. We are of the view that provisions for the delayed payment may be discussed and mutually agreed between the TSPs.

**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?**

**COAI Comments:**

1. We are of the view that Interconnect agreement should continue to be service specific with the agreements clearly identifying the services, i.e. mobile call termination, fixed line call termination, limited mobility call termination, national long distance call termination, international long distance call termination.
2. With regard to the CDR based billing , we would like to make following submission:
  - a. While TSPs are equipped with a CDR-based billing system, a unified Pol with no demarcation may induce the operators to tamper with the CLIs, which may camouflage with the CLI meant for other services, leading to a security threat as well as a loss to the terminating operator and the exchequer. In such a situation, the operator will have no means to check and block such traffic.
  - b. TGs act as first level check whereas CDR-based billing acts as the second level check. The two together ensure that only the traffic with proper CLI and meant for a particular TG is sent to the concerned Pol.
3. Thus, it is very important to have separate TGs/Pols for separate services to ensure that the security is not compromised.

**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?**

**COAI Comments:**

1. If either Party detects Unauthorized calls (i.e. calls other than specified for that trunk group for which the applicable IUC is higher than the IUC applicable for calls prescribed in that trunk group), then the first party should be entitled to charge the defaulting Party the higher IUC, as applicable only for such unauthorized calls, recorded on this trunk group.

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?

COAI Comments:

1. In this regard, we would like to submit that the interconnection has been as per bilateral agreements among the TSPs, with dispute resolution and **this practice should continue even at the advent of change in technology at the interconnecting point.**
2. As per the existing License condition the licensees can interconnect their networks on both circuit switched and IP based protocol. The current License condition duly recognizes and provides for interconnection of PSTN/PLMN Services both on TDM and IP networks.
3. Further, COAI has always maintained that TDM and IP based networks should be allowed to co-exist and operators should have the flexibility to migrate /evolve to IP based networks based on their own commercial and business strategies. **Thus IP based interconnection should not be mandated**
4. It is submitted that in a scenario where both Parties mutually agree to interconnect on IP, they should be permitted to do so subject to overall compliance to other applicable licensing and regulatory requirements including but not limited to prevailing regulations on IUC, port charges, IN, RIO etc.

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

COAI Comments:

1. The answer to the above has to be given in the context of the ground reality of interconnection having established on a peer-to-peer basis due to the nature of the regulation and licensing conditions and techno economic feasibility. Investments have been made and continue to be made on this basis.
2. Direct peering, both for TDM as well as for IP technology, is the only economical options at high volume being handled by the present Point of Interconnections. This is quite evident from the fact that not only for TDM connectivity but even for IP connectivity the operators have established the peer to peer connectivity instead of using any kind of transit/interconnecting points. **Therefore an option of exchanging traffic only through interconnect exchange is ruled out at the very outset.**
3. Further the operators have already established their interconnection and thus any connectivity through interconnect exchange will be additional cost burden on them. Hence at

this stage, because of well spread networks in India we do not consider it technically and commercially viable option to have an interconnect exchange.

4. Also, an interconnect exchange may not bring much value in the chain as the issues like Inter-Carrier Billing, Intelligent Network Services are already being addressed under the current framework. There could also be concerns related to ownership of the facility, competition issues, creation of a bottleneck facility, redundancy concerns, etc.
5. Further, any interconnect exchange at such high traffic volume would substantially add to the cost of operators. Failure of such additional switching/transit point can be seen from the fact that despite BSNL providing an indirect path/transit facility to terminate the calls to their mobile network via their L1 TAX acting as an interconnection exchange/transit switch; almost all private operators have stopped using that facility due to additional cost. The fate of the interconnect exchange if at all set up; can be gauged from the above.
6. Even TRAI in its Direction on “Direct connectivity between networks of Service Providers”, vide File No. 101-13/2003-MN, 22<sup>nd</sup> July 2003, has acknowledged that transiting the traffic entails avoidable costs and accordingly justified the need for direct connectivity in the following words:

*“2. Need for Direct connectivity:*

*Transiting traffic between service providers in the same service area entails avoidable transit charges that are eventually passed on to the consumer by the service provider in the form of higher tariffs. Further, even from traffic engineering point of view this carriage may not be desirable especially in situations when the subscriber numbers are likely to grow. It would not be techno-economically viable for a large amount of traffic to follow the transit route unnecessarily. In order to estimate such traffic, data was also called for to have a considered opinion on the justification of **direct connectivity** between BSNL Cellular and other Pvt. CMSPs. From the data obtained, it was observed that the data justifies **direct connectivity** amongst service providers in most of the areas....”*

7. **Against the above backdrop, we are of the view that there is no need to consider setting up an Interconnect exchange for interconnectivity of various operators as it will only introduce another and additional element of cost in providing the service. This additional cost is also not desirable given the precarious financial situation of the industry.**



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?**

**COAI Comments:**

1. As highlighted above in response to Q21, **we believe that there is no need to establish a framework for Interconnect Exchange.**

2. Further, we would like to submit that the NLDO authorization does not permit transit traffic to be carried over by the NLDO. In this regard we have the following submission:

a. The clause which allows carriage of intra circle traffic in the Unified License – Access Authorization is as below:

*2.2 Licensee may carry intra-circle long distance traffic on its network. However, subject to technical feasibility, the subscriber of the intra-circle long distance calls, shall be given choice to use the network of another Licensee in the same service area, wherever possible. **The Licensee may also enter into mutual agreements with other UL Licensee (with authorization for access service)/other Access service licensee/National Long Distance Licensee for carrying its intra-Circle Long Distance traffic***

b. The present clause in the Unified License – National Long Distance Authorization is as below:

*2.1 (a) 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.*

c. This clause is similar to the clause present in the scope of the earlier National Long Distance License which stated as below:

*2.2 (a) 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.*

- Reference is drawn to clarifications issued by DoT vide its letters 16<sup>th</sup> July, 2007 which stated as below:

*Provision of carriage of intra circle traffic under Clause 2.2(a) of the 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 clause does not confer any right on the NLDOs to carry any intra-circle long distance traffic*

3. It is clear from the above that :

- The NLDO is not allowed to carry transit intra-circle traffic,
- Originating Access service provider can use a NLDO to terminate its own intra circle traffic.
- Originating Access service provider can also use a NLDO to terminate transit traffic in agreement with both the originating and terminating service provider.

4. **Thus, it is clear that NLDOs are not authorized to carry transit intra-circle traffic on the strength of their license and hence NLDOs are not permitted/eligible to establish an interconnect exchange for this purpose.**

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

**COAI Comments:**

1. Transit should be an exception not a rule as it entails additional costs over direct connectivity. With this caveat, access providers should be allowed to transit intra-circle calls.

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

**COAI Comments:**

1. We believe that the TSP need to be allowed to disconnect POIs in following circumstances:
  - a. Misuse of the terms and conditions of the Interconnection Agreement
  - b. Non-Payment of the dues
  - c. Providing the service not defined in the licence
  - d. Traffic manipulation
2. Before disconnecting the POI the TSP should give adequate notice to the other TSP prior to proceeding forward with disconnection.

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?

**COAI Comments:**

1. We are of the view that there is no need of any co-ordination committee.

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

**COAI Comments:**

All the relevant issues have been highlighted by us in our preamble for the Authority's consideration.

Kindly note that one of our member operators, RJio does not agree to the views expressed in the COAI submission and will submit its views separately.

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## Annexure – 1 - Shifting of POI's

1. Hon'ble TDSAT vide its Judgment and order dated 06.03.2012 had appointed a team of experts as Commissioners comprising Mr. J. Gopal, former Advisor, DoT and Mr. R.N. Prabhakar, former Member, DoT and former Member TRAI to give a report on the following questions :

*“1. Whether it is possible for the Respondent to carry out the shifting of equipment without augmenting its resources? It is to be kept in view that flow of traffic and quality of calls in accordance with existing norms is maintained?  
2. What is the reasonable time required for completing the process of shifting the equipment?”*

*The Commissioners had submitted their Report on 30.04.2012, recommending inter alia that:*

*“a) The shifting request of the Petitioner can be carried out without augmenting the resources at the Respondent end. It will not affect the flow of traffic as well as the quality of service. The quality of service as per the existing norms will be maintained.*

*b) The shifting will take 4 to 8 weeks depending upon the procedure followed as per above details.”*

The expertise and standing of these Expert Commissioners is only too well known and unassailable. Moreover, the Hon'ble TDSAT too has rejected BSNL's objections to the Commissioner's findings. In the report, the learned Commissioners not only considered the past precedents with regard to the request of the operators to shift their equipment without augmenting the resources of the Respondent but also considered in case from the technical aspects of the matter. The TDSAT accepted the Report of Commissioners on both counts and rejected objections raised by BSNL. It directed BSNL to facilitate Pol shifting as early as possible adopting any of the methods proposed by Commissioners which would take time ranging from 4 to 8 weeks. Thus any attempt by BSNL to impose a circuitous procedure for Pol shifting / migration appears to be a blatant attempt to obviate the findings of Id. Commissioners and the Judgment of the Hon'ble TDSAT.

2. Your kind attention is also invited to the TDSAT Judgment and Order dated 25.06.2012 in Petition No. 357 of 2011 where the Ld. TDSAT has already held that in such cases of shifting (wherein the POI could be shifted basis the migration of ports from old switch to new switch by testing only 1 E1 and thereafter migrating the rest, upon successful testing) there is clearly no need to set up a New POI at the new location and thereafter surrender of old connectivity.

The relevant extracts from the aforementioned judgment is reproduced herein below:

*8. “.....The parties have entered into inter connection agreements, in terms whereof they are required to maintain a level playing field. The new technologies having been evolving and keeping in view the fact the equipment's have their own shelf life, such shifting appears to be necessary”*

*11 “.... This Tribunal in its order dated 06.3.2012, while construing the interconnect agreement between the parties opined that charge can be levied only on reciprocal basis. If a party to the agreement incurs an additional expenditure, the other party would be entitled to be restituted therefor. But if no additional charge by way of augmentation of resources is necessary, the Respondent cannot be permitted to raise a bogey with regard thereto.....*

*It's second contention that the old GMSCs were required to be surrendered and new GMSCs were to be set up, was also held to be not correct.*

*The said order also takes note of the procedures adopted by BSNL itself in respect of shifting of the GMSCs in various circles where for augmentation of resources was not found to be necessary.....”*

*12. “This Tribunal considered only two examples of the Respondent itself, but before the learned Tribunal, a large numbers of examples were produced, whereby BSNL itself requested the Petitioner to shift their GMSCs from one equipment to the other, which request was heeded to by the Petitioner without levying any charge.”*

Thus it is a settled position that surrender charges and port charges are not applicable for shifting of POI and if at all any set up charges are levied, these should be reciprocal and payable on work done principle.

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## **Annexure – 2 - Implementation of TDSAT pronouncements on Interconnection**

- i. Appeal No.148 of 2005, BPL vs. MTNL, TDSAT Order dated 19.3.2007 Appeal No.218 of 2006, Reliance vs. MTNL, TDSAT Order dated 19.3.2007

*“In order to ensure that there is a semblance of fairness and reasonability and Respondent is not tempted to adopt an arbitrary approach in this regard as it has done in the matter presently before us, we request TRAI who at one point of time had intervened in this matter to lay down guidelines at the earliest to ensure that the fixation of such charges by service providers including MTNL is not done arbitrarily and is based on use of sound criteria and reasonable rationale and based on a realistic assessment of the commercial rentals prevailing in the market. To the extent that this infrastructure is also utilized by the Respondent for its outgoing traffic, TRAI may also see to what extent the costs need to be shared by the Respondent.”*

- ii. TDSAT, in Petition No. 48 of 2004, has pronounced judgment in favour of the private operators, allowing them to charge interest from BSNL on a reciprocal basis. The relevant portion of the TDSAT Judgment highlighting the same is as follows:

*“The petitioners have pointed out that large amounts of bills are not paid in time by the respondents and when paid after considerable delay there is no payment of interest whereas an interest of 24% per annum compounded quarterly is charged from them on their dues. We direct that this should be on reciprocal basis. Both parties are directed to enter into agreement regarding the rate of interest which will be applicable for both the parties on reciprocal basis.”*

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