



DIGITAL  
LIFE

RJIL/TRAI/2019-20/150  
04<sup>th</sup> July 2019

To,  
Shri S.K. Singhal  
Advisor (BB&PA)  
Telecom Regulatory Authority of India  
Mahanagar Doorsanchar Bhawan  
Jawahar Lal Nehru Marg, New Delhi 110002

**Subject: Comments on Consultation Paper on Review of the Regulatory Framework for Interconnection dated 30.05.2019**

Dear Sir,

Please find enclosed comments of Reliance Jio Infocomm Ltd. on the Consultation Paper on Review of the Regulatory Framework for Interconnection dated 30<sup>th</sup> May 2019.

Thanking you,  
For **Reliance Jio Infocomm Ltd.**

  
**Kapoor Singh Guliani**  
Authorised Signatory



Enclosure: as above.

**RELIANCE JIO INFOCOMM LTD'S COMMENTS ON TRAI'S  
"CONSULTATION PAPER ON REVIEW OF THE REGULATORY FRAMEWORK FOR  
INTERCONNECTION"**

**General Comments:**

1. At the outset, Reliance Jio Infocomm Limited (RJIL) thanks the Authority for issuing this consultation paper to deliberate this critical aspect of interconnection that was left unaddressed in the Telecommunication Interconnection Regulations, 2018.
2. We submit that there is an urgent need for pioneering reforms in the current prevailing levels of interconnection in Fixed Networks, otherwise this single issue has the potential of thwarting all positive initiatives taken to rejuvenate the fixed telephony and to deliver "Digital India" with FTTX (Fiber to the X) technologies.
3. The Government has embarked upon the ambitious "Digital India" programme with the goal of high speed internet as a core utility, that will lead to digital empowerment of the citizens. We submit that the fixed line networks will play a major role in achieving these goals by taking the reliable and always available broadband to the nook and corner of the country. Consequently, the role of fixed networks has been well recognized National Digital Communications Policy – 2018 (NDCP-2018), which talks about incentivizing fixed line Broadband and rationalizing license fee on fixed line revenues to incentivize digital communications and other enabling provisions like fixed line portability. Thus, it is incumbent on the Authority to institute the necessary reforms in fixed interconnection as well to facilitate broader participation in Fixed Network, at the earliest.
4. We submit that the levels and points of Interconnection prescribed in the Guidelines annexed to "The Telecommunication Interconnection (Reference Interconnection Offer) Regulation, 2002" have become antiquated due to the advent of technology and other extraneous factors. The soft switches used in the IP based networks have replaced the traditional switches in the TDM based circuit switched networks. These standalone soft switches with appropriate media gateways can replace a large number of standalone TDM switches. For all service providers, barring Public Sector Units (PSUs) i.e. BSNL/MTNL, a single switch is used for providing basic service in a licence service area (LSA) and effectively requires interconnection at one location only.
5. We submit that currently in case of PSUs, interconnection between basic to basic for local call is at the SDCC Tandem and all long distance/ILD calls from basic are being handed over at Level-II TAX. Intra-circle mobile to fixed call is being handed over by



mobile operator to basic operator at Level-II TAX. Inter-circle calls to BSNL fixed line call is being handed over at SDCC Tandem on NLD POI.

6. As you are aware that the aforementioned level of interconnection was decided keeping in view the PSTN network hierarchy. However, we understand that, with the passage of time, BSNL has itself changed its PSTN hierarchy. Most of the SDCC tandem exchanges are abolished and being served by only RSU. In some circles, BSNL has even done away with a separate Level-II TAX in each LDCA. In almost all circles, BSNL has deployed IP based Level-II TAXs, wherein the separate Level-II TAX for each LDCA concept no longer has much relevance.
7. It is further submitted that the concept of SDCA was evolved for the purpose of Local Call charging at cheaper rate vis-à-vis STD calls. This difference between local and STD calls tariffs has itself been abolished by BSNL. Presently, as per information available on BSNL's website, tariffs for local and STD calls is same. For charging local calls and STD calls, BSNL uses the same pulse rate i.e. 120 Seconds for ON-NET Fixed/WLL (except 10 digit numbers) and 60 seconds for all other types of calls viz ON-NET cellular and OFF-NET Fixed/WLL/Cellular.
8. Thus clearly, this legacy structure has lost its relevance and the Authority should do away with the archaic requirements like interconnecting at SDCA and TAX levels with the fixed networks of the PSUs. Reliance Jio Infocomm Limited (RJIL) has made numerous representations on the subject and we request the Authority to mandate that the Interconnection should be provided at any technically feasible centralised point.
9. We submit that current level based interconnection requirements act as an entry barrier and also as a bottle-neck for expansion of service by private players. The Authority has itself noted that for a new service provider entering the fixed line market, it needs to establish at least 2645 Points of Interconnection (POIs) with each of the competing pan-India existing fixed line operators for local calls only, which is not only a daunting exercise but at the same time extremely costly and inefficient.
10. It is pertinent to highlight here that the interconnection woes with BSNL do not end at their insistence on levels of interconnection, but the issue runs much deeper. As you have been made aware by our various communications, there are multiple cases where the demand notes are not issued for close to a year, similar levels of delays are seen in allotting dates for switch acceptance testing and issuance to commissioning letters. We submit that this is despite regular follow-ups and deploying dedicated personnel for expediting the interconnection with BSNL. The timelines for various activities for interconnection, as prescribed under Telecommunication Interconnection Regulations, 2018, have no significance and relevance as far as



BSNL/MTNL are concerned as they follow their own processes without taking cognizance of regulatory requirements.

11. Furthermore, even the consumer centric initiatives like permitting handover of the emergency traffic of fixed line users at a single location within a LDCA at BSNL LDCC/Level-II TAX location till the time respective POI at BSNL SDCC Tandem gets established, are rejected on the grounds that the same is not in BSNL's commercial interests. BSNL is also not receptive to leveraging the provisions in National Long Distance Authorization, that permit that the NLDOs to pick, carry and deliver traffic from different legs between LDCAs and SDCAs, even in this case the SDCA level POI is sought.
12. We further submit that the Unified License has made the service wise interconnection and separate switches redundant, the IP networks can cater to all the service requirements at a single switch only. Furthermore, the distance based charging is a thing of past and post removal of IUC charges for all calls originating and terminating in fixed line networks, most service providers, including PSUs, are providing free voice to their subscribers without any distance based encumbrances. Thus, clearly this huge POI interconnection infrastructure is not required.
13. Furthermore, with increased focus on FTTX services, as enunciated in the NDCP – 2018 with enablement of fixed line broadband access to 50% of households as one of the goals and the movement towards convergence, it is appropriate that all artificial barriers to its growth are removed. The SDCA level interconnection is the biggest such barrier. We reiterate that the interconnection level at SDCA should be done away and the fixed line network interconnection should be provided only at Level-I TAX i.e. one POI for a service area. Further, if required on mutual agreement operators can establish POI at Level-II TAX level and there should be no restriction on handing over of traffic of another LDCA at Level-II Tax.
14. In view of the above, we submit that continuing with the existing points of interconnection is nothing but inefficient utilisation of the resources and are detrimental to the growth of fixed line services, hence, there is urgent need to prescribe one point of interconnection with fixed networks in a circle for intra as well as inter circle calls.
15. We would also highlight that the current extensive Fixed Interconnection requirements coupled with the License requirement to interconnect prior to commencement of service, provides Interconnection providers with considerable clout over the commencement of services by their new competition. We submit that



the sector has already suffered enough due to the unnecessary leverage with interconnection providers and the same should be eradicated completely.

16. RJIL believes that co-operation and co-option is the best way to arrive at solutions to most problems and therefore, even in this case, our first preference was to mutual understanding between the service providers to ensure that the interconnection takes place at the earliest. However, all our efforts have been thwarted by rigid attitude of PSUs, therefore firming our belief that it is an issue that needs strong and unambiguous regulations. Accordingly, we request that the Authority should provide a clear-cut interconnection framework. Under this, the interconnection should be provided at LSA level and if required by interconnection seeker the same may at most be provided at LDCA level i.e. at Level-II TAX. We submit that BSNL is migrating to NGN based networks and new entrants are anyhow deploying IP based networks therefore, it will be beneficial to both BSNL and new entrants if the interconnection at **LSA level** is mandated to be IP based.
17. Further, the IP based interconnection will eradicate the possibility of POI augmentation related issues once and for all, as this will help near real time POI capacity addition in line with the FTTX customer growth without impacting QOS due to augmentation delay. This will also enable BSNL to carry SDCA based traffic to respective SDCAs over internal IP-MPLS network, essentially creating a win-win situation for both parties.
18. To summarise, we submit as under:

1. **The current hierarchy based interconnection requirements for fixed networks are redundant and should be done away with.**
2. **In order to realize the full potential of FTTX service, the Authority may remove all hindering factors and SDCA based interconnection remains the primary hindrance, which needs to be removed at the earliest.**
3. **The Fixed interconnection should be provided in a time-bound manner with the mandated primary level of interconnection should be LSA, however, in case, required by the interconnection seeker, it should at most be provided at Level-II TAX.**
4. **The mandatory interconnection at LSA level should preferably be IP based interconnection.**



Issue wise response:

**Q.1 Whether the flexibility be provided to interconnecting operators for interconnecting PSTN to PSTN networks at SDCC/ Level II TAX (SSA)/ Level I TAX (LSA) levels as per their mutual agreements? If no, then justify your comments with reasons.**

and

**Q.2 In case of no mutual agreement between the operators, what should be the level of interconnection for interconnecting PSTN to PSTN networks be mandated in the Regulations.**

**RJIL Response:**

1. As mentioned in our General comments, RJIL preferred to have a mutually agreed interconnection regime, however, such desire for ideal regime has been badly thwarted by the Interconnection Providers. As highlighted above, BSNL is deliberately sticking to its antiquated interconnection levels and processes of delaying the POIs in a manner designed to frustrate a new entrant.
2. We submit that BSNL is not even willing to leverage the new technologies and equipment that it has already deployed to facilitate interconnection. On its part, RJIL has been requesting BSNL to mutually agree on a simpler level of interconnection, since the days it started planning the commencement of its FTTX services. As BSNL had replaced local/tandem exchanges with RLU/RSUs at many SDCAs for better operational efficiency and it had also commissioned IP based local exchanges serving multiple SDCAs, RJIL requested it to permit interconnection for local traffic at the Level-II TAXs already being used for STD/ISD traffic. We also submitted to BSNL that we will be establishing more POIs at Level-II TAXs, as and when the traffic increased, however to no avail.
3. As a result, RJIL was compelled to start establishing POIs at SDCA levels thereby which are also facing innumerable delays on account of rigid processes followed by BSNL/MTNL in complete violation of Telecommunication Interconnection Regulations, 2018. As mentioned above, the mutual agreements and co-operation have no meaning when the well-entrenched incumbent, has ulterior motives and there is no other way out than legally binding them in to compliance. BSNL, in one of its recent communications, has blatantly admitted that budging from the existing levels of interconnection is not in its “commercial interests”.
4. In view of the above, we submit that the level of interconnection and the timelines to meet interconnection demand should be regulated by the Authority and should not be left to mutual agreements. The interconnection framework should be devoid of



past hang-ups and technological challenges. The interconnection should be based on new IP based technologies and should be provided in a time-bound manner. This framework should be based on the principles of efficient and effective utilization of resources. As highlighted in the General comments, the IP based interconnection will be future requirements proof and beneficial to both BSNL and new entrants as BSNL is also moving towards new NGN bases network architecture.

5. Under this framework, the IP based Interconnection should be necessarily provided at a single mutually agreed location for the whole LSA. The first step of this mechanism should be to explore the possibility of a single location interconnection, which should be completed in 7 days. There should not be any additional carriage charge for such handover at the LSA level interconnection. The Authority may permit mutual agreement to take the interconnection level to LDCA, in case of technical infeasibility at BSNL's end. However, in such case the concurrence to the interconnection seeker should be mandatory and the whole activity may be completed in 15 days from the date of request for interconnection.
6. We further submit that, in either level of interconnection, BSNL should be explicitly prohibited from demanding carriage or transit charges for carrying the calls to SDCA level. The competing service providers should not be made to pay for BSNL's inefficiencies.

**Q3. Any other issue you would like to bring to the attention of the Authority.**

**RJIL Response:**

1. We take this opportunity to highlight another anti-consumer and anti-competition, unilateral measure taken by BSNL. As the Authority is aware, the provision of emergency services at one single number across networks, is one of the most consumer centric provisions in the licensing framework and all service providers are license bound to provide these services. Further, BSNL being the original incumbent fixed line operator has all the emergence respondents on its fixed line network. Consequently, all the other service providers, both fixed and mobile, in order to maintain consumer continuity, without putting the emergency respondents to the onerous task of handling multiple lines, handover such calls to BSNL for a simple unified delivery.
2. However, for providing such essential services BSNL charges a fixed annual fee, running into crores of rupees for pan-India services, from each competing service provider and these charges are further increased every year.



3. We request the Authority to intervene and stop such practice at the cost of consumers. The Authority is aware that BSNL has no valid justification for these charges except for exploiting its unique position, as the cost is long recovered. Further, it is pertinent to note that, it is physically cumbersome for the emergency respondents to maintain multiple numbers, a few service providers have already attempted to install separate numbers, however, it turned out be impracticable. We submit that the inevitability of the BSNL fixed line number with emergency responders should not be permitted to be used in unreasonable manner.
4. We further request Authority to consider ushering in fixed line portability at the earliest to promote fixed line penetration and competition in the segment. This will invigorate the sector and give required impetus to broadband proliferation.
5. The Authority may also revisit its recommendation on integrated numbering schemes to remove the distinction between fixed and mobile services. The current NNP was formed in 2003 and is not serving purpose in view of exponential increase in Mobility numbers and dwindling Fixed line numbers. Migration to Integrated Numbering System is the only feasible long-term solution to meet the numbering requirements as well as facilitate much needed fixed line portability.

