



DIGITAL
LIFE

RJIL/TRAI/2019-20/630
30th January 2020

To,

Shri U.K. Srivastava
Pr. Advisor (NSL)
Telecom Regulatory Authority of India
Mahanagar Doorsanchar Bhawan
Jawahar Lal Nehru Marg, New Delhi 110002

Subject: Comments on Draft Recommendations dated 31.12.2019 on 'Network Testing before Commercial Launch of Services for Wireline Access Services'.

Dear Sir,

Please find enclosed comments of Reliance Jio Infocomm Ltd. on Draft Recommendations dated 31.12.2019 on 'Network Testing before Commercial Launch of Services for Wireline Access Services'.

Thanking You,
For **Reliance Jio Infocomm Limited**,


Kapoor Singh Guliani
Authorised Signatory



Enclosure: As above.

**RELIANCE JIO INFOCOMM LTD'S COMMENTS ON TRAI'S DRAFT RECOMMENDATIONS ON
"NETWORK TESTING BEFORE COMMERCIAL LAUNCH OF SERVICES FOR WIRELINE ACCESS
SERVICES"**

(Consultation Paper Dated 31st December 2019)

1. Reliance Jio Infocomm Limited (RJIL) thanks the Authority for giving the stakeholders an opportunity to share their views on this important issue pertaining to Wireline Networks. Considering the current status of the Wireline Networks in the country and their importance in rolling out 5G services combined with the enhanced focus on Wireline Networks under the National Digital Communications Policy, 2018 (NDCP-2018) with goal to enable fixed line broadband access to 50% of households, this discussion has critical implications for the sector.
2. At the outset, we submit that the Authority should examine the network testing prior to commercial launch of service in Wireline Networks in its entirety and should not seek to equate it with the similar recommendations for Mobile Networks. We submit that from technology and deployment perspective, Wireline networks are at great variance from the mobile networks, thus the testing requirements also differ and should be considered independent of any mobility requirements.
3. The Authority is aware that there are four major impediments to faster roll-out and testing of Wireline Networks i.e. POI at SDCA level, Provision of POI connectivity by BSNL, opening and testing of fixed line numbering from BSNL telephone exchanges in each of SDCA and the requirement of Right of Way (ROW) for laying Wireline networks. We submit that all these factors affect the roll-out and the consequent launch of commercial operations by a fixed network service provider. We are cognizant of the fact that the Authority is already working on the need to move with time and technology as today Centralised Switching is common instead of many small exchanges in a SDCA by reviewing the requirement of SDCA level POI for wireline services which will dismantle the artificial POI barriers imposed by BSNL. The Authority has also recommended for the need to ease ROW requirements, at various occasions. However, pertinently enough these issues still persist and need to be considered before deciding any commercial launch requirements for a Wireline Service Provider.
4. We submit that there is sufficient regulatory clarity around network testing, however, we will definitely welcome clear instructions to remove any residual ambiguity so that any service provider aspiring to galvanize the sector by inducting new technology, indigenous equipment and testing the same on a wide scale will not get unreasonably constrained.
5. The Unified License clearly lists the requirements of network testing by the licensee. Under clause 7 on 'Provision of Service', which is reproduced below, the license mandates



the service providers to install, test and commission all the applicable systems before commencement of service.

“7. Provision of Service:

The Licensee shall be responsible for, and is authorized to own, install, test and commission all the Applicable systems for providing the Service authorized under this License agreement. The Licensee shall intimate to the Licensor well in advance before the proposed date of commencement of any service in any Service Area containing the details of network and required facilities for monitoring of the service installed by the Licensee. Any service, permitted under the scope of this License Agreement, shall be commenced by the Licensee after giving an intimation to do so to the Licensor. However, the compliance to the scope of License and requisite facilities will be demonstrated to the licensor within 90 days from the date of receipt of such intimation from the Licensee.”

6. The Unified License also provides for compliance to QoS parameters prescribed by Licensor or TRAI. This results in an obligation for the operator for testing of network before and after commencement of service. These clauses read with the penal provisions under the License imply that the Licensee should be completely sure of compliance and performance of all applicable systems before commencement of service and that it should carry out sufficient testing to reach the desired compliance levels. The relevant clauses of the Unified License are given below:

29.1 The LICENSEE shall ensure the Quality of Service (QoS) as may be prescribed by the Licensor or TRAI. The LICENSEE shall operate and maintain the licensed Network conforming to Quality of Service standards subject to such other directions as Licensor / TRAI may give from time to time. The LICENSEE shall adhere to such QoS standard and provide timely information as required therein. Failure on part of LICENSEE to adhere to the Quality of Service stipulations by TRAI/Licensor is liable to be treated as breach of terms and conditions of License.

The LICENSEE shall provide periodic information on compliance of QoS standards to TRAI/Licensor as per schedule notified.

29.2 The LICENSEE shall be responsible for: -

- i) Maintaining the performance and quality of service standards.*
- ii) Maintaining the MTTR (Mean Time to restore) within the specified limits of the quality of service.*
- iii) The LICENSEE will keep a record of number of faults and rectification reports in respect of the service, which will be produced before the Licensor/ TRAI as and when and in whatever form desired.*



29.3 The LICENSEE shall be responsive to the complaints lodged by his subscribers. The LICENSEE shall rectify the anomalies within the MTTR specified and maintain the history sheets for each installation, statistics and analysis on the overall maintenance status.

29.4 The Licensor or TRAI may carry out performance tests on Licensee's network and also evaluate Quality of Service parameters prior to grant of permission for commercial launch of the service, after successful completion of interconnection tests and/ or at any time during the currency of the LICENSE to ascertain that the network meets the specified standards on Quality Of Service (QoS). The LICENSEE shall provide ingress and other support including instruments, equipment etc., for such tests.

34. Inspection and Testing of Installations:

34.1 The Licensor / TRAI may carry out performance tests as required for checking Quality of Service, if it so desires. The LICENSEE shall supply all necessary literature, drawings etc. regarding the equipment installed and shall also supply all the tools, test instruments and other accessories to the testing party of the Licensor / TRAI for conducting the tests. The list of performance tests will be furnished by the Licensee, which may be amended by the Licensor.

7. Thus, clearly the need of Network testing is well accepted under the license. We further submit that Network testing can have various dimensions depending upon the scale of proposed operations, the technology and network elements to be deployed and the need for achieving optimum connectivity prior to commercial operations and so on. We submit that all these aspects have a bearing on the scale and timelines of proposed network testing before commencement of service by a Wireline Network Provider as discussed in following paragraphs.
8. **Scale of proposed operations:** Any new service provider, in order to compete properly in a service area, will be required to test its network at all service and geographical levels to ensure a comparable or better service level, before commencement of service. Further, in case the service provider wishes to launch services at pan-India level to deliver the benefits of economy of scale to its subscribers then it has no option but to test at a large enough scale in all service areas before commencement of service requiring longer total testing duration. As is a normal practice across all industries, the scaling up of the testing requires a step-wise approach and the time-limits for each step are dependent upon the success of the previous step. Therefore, no restrictions should be put on the scale and



timelines of the testing, in case the objective is providing best in class service to consumers.

9. **Technology and Devices:** In view of the evolving technological implementation and customer requirements, the new service provider will be required to test new and innovative Fibre based technologies and also fine-tune them to support Fixed Mobile Convergence and other such innovative initiatives permitted under the Unified License as well as develop ecosystem for use of new technology. Further, the enhanced focus on the deployment of indigenous technology and devices by the Government would imply that any service provider desirous of following this vision will require more extensive testing than a service provider completely dependent on existing technology and devices. Further, the new and untested network elements will need to be tested at a scale to develop expertise, optimize the subscriber experience as well as to comply with Quality of Service requirements. Clearly, all of this will require timelines longer than those proposed in the draft Recommendations.
10. **Optimum Connectivity:** A fledgling service provider in a competitive market with an omnipresent Incumbent Operator and other private operators will be unwilling to offer service without proper and comparable connectivity. We submit that with the current impediments of POI connectivity, norms for allocation of numbering resources, time taken for opening of allocated numbering levels and ROW approvals, it is impossible to connect the network and test it in short durations and the Authority should refrain from putting any such restrictions before addressing these impediments for proper conduct of telegraphs.
11. Evidently, there are many aspects of network testing that need to be considered prior to finalizing the recommendations. Further, we submit that while the service provider fine-tunes its services during the test trials, the test users also benefit immensely from network testing as testing and improvement of services go hand in hand. In fact, the testers in many cases are early adopters of the service/ technology. In such a case, they need to be assured that upon commencement of services, they are automatically migrated as subscribers and do not face any roadblocks in using the service they tested extensively.
12. We further submit that the scale of network testing requirement implies that the testing cannot be limited to employees and business associates. The service provider will be required to enrol test users for desired scales. As per our understanding, as long as the test users are enrolled as per the requirements for enrolling commercial subscribers, all data and records are maintained in compliance with the provisions on Unified License and all inter operator settlements are done in compliance with Regulations, this should not be anyone's concern and should be kept out of the draft recommendations. Accordingly, the



Authority should not recommend any artificial restrictions on the duration of testing or scale of testing by such test-users.

13. We further submit that there cannot be a single yardstick for all technologies and type of equipment to measure the timeline requirement of the test phase. Further, the testing service providers alone can decide the requirements in line with the scale of testing envisioned, the technical challenges foreseen and availability of solutions to be deployed. Nevertheless, we submit that it is in the testing service provider's own interest to complete the testing at the earliest and monetize the services as anyway in testing phase also it is bearing the OPEX costs. Additionally, we submit that imposing onerous test phase conditions and timelines may prompt the service providers to offer the services at a premature stage without satisfying itself of the targeted service quality.
14. We submit that limiting the duration of testing with scale i.e. with test users would imply that notwithstanding the optimum scale of testing and newness of the technology to be deployed, all service providers desirous of offering service will be provided with a same small window for network testing. This would be an anti-level playing field measure, as, while the service provider deploying tried and tested technology may not need testing at all and on the other hand the service provider desirous of offering new technology with indigenous equipment will not get sufficient time to test and deploy the technology.
15. We would also bring to your notice that the success of ambitious and nation building programmes like 'Make in India' would require that we are able to replace a substantial part of the imported telecommunication equipment and applicable systems with those designed and developed indigenously. This would certainly warrant extensive multi-level testing at sizably large scales before deploying these applicable systems and equipment at a commercial level. Thus, putting any curbs on the size, scale and mode of testing would essentially act as a dampener to the success of 'Make in India' programme.
16. There is another aspect of technological innovations and advancement that requires multiple levels of testing and development with long gestation periods. The technological developments happen when there is a supporting environment for unrestricted testing with sufficient funding support. For India to lead the world in current age of Information Communication Technologies ("ICTs"), the innovation and development has to begin in India. That can only happen when there is enabling regulatory framework and sufficient private participations and funding. The telecom service providers with the intertwined business interests in the development of ICTs in India are uniquely placed to support this. However, this cannot happen without the Regulator's positive support. The first step in this support would be supporting unfettered testing and not restricting testing of telecom technologies in any way. This would also ensure that the forthcoming generation of



telecom technologies are deployed first in India instead of India having to import the technological know-how.

17. We submit that the Authority as a regulator of the telecom sector has a responsibility to protect the interests of both subscribers and telecom service providers including the new fledgling service providers and indigenous equipment manufacturers. The Authority is therefore requested to consider the rational approach. In the current era, it would only be an imprudent service provider, who would wish to prolong the free testing beyond the absolutely necessary period. The rational approach would be clearly to not impose any artificial restrictions on network testing. The service provider should be free to take a call on the scale and duration of network testing.
18. Telecom in India has been shining story of soft touch regulation and consistent policy making. In the past, India was decades behind the world in adopting telecom technologies and hence there was limited need for testing/ tweaking networks and services. However, we are increasingly seeing that global technological standards are coming to India simultaneously with their global debut. Hence, this necessitates extensive testing to ensure a world class product is co-created through testing and is suited and perfected to meet customer needs. We submit that the Indian telecom sector has flourished due to the Licensor and Authority's much lauded policy of 'Light Touch Regulations' and 'Forbearance'. The measures limiting the network testing phase before commencement of service would amount to micro-management and intrusive regulations. We submit that the Authorities should refrain from any such steps that have the impact of micromanaging the business decisions of the operators through unreasonable rules / regulations. Any such intrusive steps will have a discouraging impact on new operators desirous of entering the competitive market and this will also impact the large scale investments coming into the sector. The service providers will be dissuaded from taking risk of introduction of new technology untested elsewhere. Thus, denying the sector of latest technology. Such measures will also have an adverse impact in meeting the national goals of 'Digital India'.
19. In view of the above, we reiterate that there is no reason for micro-regulating the test phase as the service provider's interest lies in quickly monetising the services. Therefore, we recommend that no artificial restrictions should be imposed on the service providers regarding the phasing and duration of testing the network before commencing the service. However, following two security requirements need to be complied with during test phase:
 - a. The Licensee's network should be compliant with LIM related requirements.
 - b. The subscribers should be enrolled as test users in full compliance with DoT's extant instructions on subscriber verification.



20. In case the service provider is compliant in both the above requirements, then there is no difference in the subscribers acquired as test users and the subscribers acquired post the commencement of service. We understand that the service provider will inform the subscribers acquired as test users that he has been acquired as a test user and will seamlessly become a paid subscriber post completion of the test phase, besides the other requisite information pertaining to Testing Phase. Therefore, besides this, there should be no additional requirements.

Irrespective of the above, if at all the Authority wishes to prescribe certain recommendations on network testing before commercial launch of services for wireline access services, we are submitting the revised recommendations for your kind consideration.

Proposed DRAFT RECOMMENDATIONS

1. **The Authority recommends that a TSP should be allowed to enrol test subscribers in testing phase to carry out the network testing before commercial launch of its services.**
2. **The Authority recommends that: -**
 - a. **The Licensor should mandate by an amendment in the Access Service Licenses that the allocated numbering levels should be open in 10 working days of making the request by an operator for network testing and later on operation. Such numbering resources for networking testing and later on for network operations should be allocated by DoT within five working days of receipt of request from an operator.**
 - b. **There should be no restriction on the time-limit, if the network testing is conducted using wireline telephone test connections given to employees and business partners for test purpose only.**
 - c. **The number of test subscribers that can be enrolled by a TSP in an LSA should be limited to 10% of the total installed network capacity for that LSA.**
3. **The Authority recommends that if a TSP wants to enrol test subscribers in its network before the commercial launch of services for testing purpose:**
 - a. **It should give prior intimation to DoT and TRAI at least 15 days before commencing enrolment of test subscribers.**



- b. All licensing provisions related to the security and privacy such as ensuring adequate verification of each and every customer before enrolling him as a subscriber, protection and privacy of communication, maintaining Call Detail Record (CDR)/IP Detail Record (IPDR), Confidentiality of Information, Lawful interception & monitoring etc. must be complied with by the licensee.
 - c. During test phase, the licensee should be bound to submit test subscriber related statistics and their usage, and other information as per prevailing instructions of DoT/TRAI.
4. The Authority recommends that if a TSP wants to enroll test subscribers for the testing of its network, it should transparently give the following information to the test subscribers at the time of their enrolment:
- a. During test phase, TSP is not mandated to adhere to specified level of QoS. Therefore, there may be sub-optimal level of network performance.
 - b. The scope of services during the test period.
 - c. Applicable charge (fixed charge or usage based charge) during the test phase which may be free of charge also. It is not mandatory to provide CPE (Customer Premises Equipment) free of charge.

