

RJIL/TRAI/2016-17/1184  
9<sup>th</sup> December 2016

To,

**Shri Arvind Kumar,  
Advisor (Broadband & Policy Analysis),  
Telecom Regulatory Authority of India,  
Mahanagar Doorsanchar Bhawan,  
Jawaharlal Nehru Marg,  
New Delhi - 110002**

**Subject: Comments on TRAI's Consultation Note on 'Model for Nation-wide Interoperable and Scalable Public Wi-Fi Networks' dated 15.11.2016.**

Dear Sir,

Please find attached comments of Reliance Jio Infocomm Limited on the issues raised in the Consultation Note on 'Model for Nation-wide Interoperable and Scalable Public Wi-Fi Networks' dated 15.11.2016.

Thanking You,

Yours sincerely,  
For **Reliance Jio Infocomm Limited**,

  
**Kapoor Singh Guliani**  
Authorised Signatory



Encl.: As above.

**RJIL Response to TRAI Consultation Note on  
'Model for Nation-wide Interoperable and Scalable Public Wi-Fi Networks'**

**General Comments:**

1. We thank the Authority for issuing this consultation note, which is another step in its endeavor to proliferate Wi-Fi in the country. This note provides one interoperable and scalable model for Wi-Fi, while also discussing some pertinent issues like permissibility of reselling of bandwidth.
2. TRAI has a laudable objective of creating an inclusive Wi-Fi framework with focus on easing the challenges of subscriber authentication and a secure payment mechanism. We refer to our submissions to the TRAI consultation paper on Proliferation of Broadband through Public Wi-Fi Networks. In our submissions, we had suggested immediate regulatory intervention for the purpose of subscriber authentication so that Wi-Fi subscription and thus adoption could be eased. Another key aspect highlighted was the need to leverage the already authenticated CAF customers for mobile services both for subscription and payment mechanisms. We submit that these remain critical regulatory hindrances in proliferation of Wi-Fi in India.
3. Another aspect highlighted by RJIL was the need to promote seamless interoperability of Cellular/LTE and Wi-Fi networks, as this will be another key driver in growth of Wi-Fi adoption. We request that the Authority may also focus on this critical aspect.
4. We submit that the model suggested by the Authority to increase Wi-Fi adoption and penetration focuses on the relevant aspects and appears to be a feasible model, however it fails to clearly define the positions that various players in the model will take in the current regulatory framework. Additionally it suffers the inherent contradictions of a top-down mandated business model. The industry experience in India and internationally so far has shown that such models are rarely adopted at mass level and the key to success of a business model remains the ease of adoption of the models created by market forces. Therefore we suggest that the proposed model be kept as one of the options to increase Wi-Fi penetration and the market forces may be facilitated to evolve suitable models.
5. More importantly, the Authority should focus on removing all the regulatory bottlenecks preventing wider adoption of Wi-Fi networks like simplifying subscriber authentication issues, removing the regulatory hurdles in rollout of broadband, ensuring seamless interoperability of Cellular/LTE and Wi-Fi networks and so on.
6. Reselling of bandwidth is a complicated topic and should be pursued carefully as in the case of other telecommunication services. There are certain regulatory and security imperatives that must be addressed before anyone is allowed to provide





telecommunication services to end customers. These may be possible to be enforced only through some form of licensing / authorization mechanism.

7. An alternative mechanism within the licensing framework would be through the "franchisee" route. Hot-spot providers will be the franchisees of the Access service providers or ISPs under this model and the consequent security and subscriber authentication requirements will be the responsibility of the licensee. The TSP / ISP will have the overall responsibility that the franchisees are compliant with the prevailing regulatory requirements.
8. We suggest that on revenue sharing and other financial arrangements, the Authority should follow the long established and successful principle of light touch regulations and forbearance. We believe that in case an enabling environment is provided, businesses will grow organically and market forces will govern the value based financial conditions. As this is just the initial stages of the Wi-Fi and broadband revolution in the country, we recommend that the Authority should play the role of a facilitator and let the market forces govern the revenue sharing and other aspects.
9. Summary of RJIL recommendation is tabulated below:

1. The Authority should remove bottlenecks in rollout of Broadband.
2. Subscriber authentication for Wi-Fi access may be simplified and duplicate verification requirements must be eliminated.
3. The e-KYC based authentication models should be promoted.
4. The franchisee model for Hot Spot proliferation should be promoted.

Our Issue wise response is as below:

**Q1. Is the architecture suggested in the consultation note for creating unified authentication and payment infrastructure will enable nationwide standard for authentication and payment interoperability?**

**RJIL Response:**

1. The architecture as discussed in the consultation note is primarily an outline of a workable payment model, however the roles and responsibilities under this architecture are not very clearly brought out. There is requirement of more clarity as to how and where all the players envisaged in the model stand with respect to the Unified License regime and what sort of licenses/registration will be required by these stakeholders under the UL framework.



## RJIL Response

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2. As this model has many intermediary players, the whole process needs to be simple and easily comprehensible in order to be successful and widely adopted. We suggest that the Authority addresses these issue and keeps this model as an alternative guiding model that can be adopted by the service providers and the local governments at their discretion.
3. Another aspect that the Authority may look in to is the feasibility of a pan-India model at the beginning and it may also suit well to address all the hindering factors in growth of Wi-Fi. Payment and authentication mechanisms can be easily addressed in the current framework as well. We request the Authority's urgent intervention on our suggestion to simplify subscriber authentication.
4. We submit that while the primary focus of the proposed model is Customer Experience, broadband availability is the critical aspect in order to ensure wide proliferation of Wi-Fi hotspots. There are, in fact, negligible wireline broadband connections in the country, and to change this situation the Authority needs significant focus to facilitate last mile rollout of broadband services.

## Q2. Would you like to suggest any alternate model?

### RJIL Response:

1. As discussed in our general comments, for a model to be successful and well adopted, it should be simple and commercially viable and should be based on the organic growth governed by the market forces. We recommend the following two-pronged approach to facilitate growth of newer models to increase Wi-Fi proliferation.
  - a) **Rollout of Hotspot network based on the Franchisee model:** TSPs / ISPs should be allowed to rollout hotspots through franchisee model under light touch regulatory regime.
  - b) **Simplifying Wi-Fi access:** We suggest that the Authority should simplify the regulations governing subscriber authentication and improve consumer experience by allowing "one click" access, leveraging eKYC of Mobile / Payment Application at the public hotspots. This is an important aspect and will simplify customer experience significantly. There is no risk / issue in this as the subscriber verification done by Mobile / Payment Application is very robust.





**Q3. Can Public Wi-Fi access providers resell capacity and bandwidth to retail users? Is “light touch regulation” using methods such as “registration” instead of “licensing” preferred for them?**

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**Q5. Whether reselling of bandwidth should be allowed to venue owners such as shop keepers through Wi-Fi at premise? In such a scenario please suggest the mechanism for security compliance**

**RJIL Response:**

1. RJIL submits that the Public Wi-Fi access providers may be allowed to provide services after obtaining requisite license, such as ISP or VNO. This will ensure that all regulatory and security aspects are addressed in the provision of services to end customers, which has been a critical consideration for provision of telecommunication services.
2. As mentioned in our response to question 2, the Authority may also promote a franchisee model for proliferation of Wi-Fi. The venue and shop-keepers can be enrolled as the franchisee of the TSP/ISPs.
3. Control and implementation of Government orders on the kind and type of internet access will be controlled by the internet service providers (TSP/ISP), which is the only direct licensed party in the value chain. TSP will also be responsible for lawful interception and monitoring as well as ensuring that the internet monitoring system with sufficient capacity is installed.

**Q4. What should be the regulatory guidelines on “unbundling” Wi-Fi at access and backhaul level?**

**RJIL Response:**

RJIL submits that unbundling is not relevant in Indian context, owing to the negligible fixed line broadband penetration. Further, unbundling is a complex exercise and will delay the whole Wi-Fi initiative. It has been very difficult to implement even in the most developed markets. Given the substantial investment required in infrastructure to achieve the Digital India vision, the regulations should be eased for operators. We submit that the Authority should instead focus on removing the roadblocks in the proliferation of broadband and facilitate Wi-Fi deployment by promoting the franchisee model for Hot Spots.



**RJIL Response**

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**Q6. What should be the guidelines regarding sharing of costs and revenue across all entities in the public Wi-Fi value chain? Is regulatory intervention required or it should be left to forbearance and individual contracting?**

**RJIL Response:**

The Authority should employ the policy of forbearance in the matters of revenue sharing across all entities in the public Wi-Fi value chain as the industry itself is at conception stage. The Authority may monitor the growth and development of the value chain and intervene only in case of proven market failure. This will help establish a competitive level playing field.

