महानगर टेलीफोन निगम लि॰

(भारत सरकार का वधम) Mahanagar Telephone Nigam Ltd. (A Government of India Enterprise) CIN: L32101DL1986GO1023501





MTNL/RA/TRAI-C.P./2016 Dated 09.12.2016

To,

The Advisor (B&PA)
TRAI, New Delhi

Sub.: Comments on TRAI Consultation Paper dated 15.11.2016 on "Model for Nation-wide Interoperable and scalable public Wi-Fi Networks".

TRAI issued Consultation paper on 15.11.2016 on the aforesaid subject and asked the various stakeholders to comment on the issues involved in the consultation paper. In this reference following comments are submitted for consideration:

This reply may be seen in continuation to MTNL's comments on TRAI Consultation Paper dated 13.07.2016 on "Proliferation of Broadband through Public Wi-Fi Networks" (copy enclosed).

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?

MTNL Comments: The following comments are submitted in reference to the suggested architecture:

- Para 15(a) stipulates multiple registry providers. This inherently implies that the various registry providers have to synchronize their databases to provide seamless authentication to the hotspot users. The same result can be achieved if the hotspot providers interconnect with each other to provide Wi-Fi roaming.
- Separating the providers of Wi-Fi access network(AP's) and the billing system provider will create integration issues as multiple technologies will create integration issues.
- 3. Since the hotspot provider will tie up one of the hotspot software providers, Wi-Fi roaming will become a major issue. For Wi-Fi roaming

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- all the hotspot service providers will have to interconnect with each other.
- 4. Thus by separation of AAA from billing has necessitated two levels of interconnect instead of one. Thus we have increased the complexity of the architecture without any resultant benefit.

Further, as mentioned in the previous TRAI consultation dated 13.07.2016 on "Proliferation of Broadband through Public Wi-Fi Networks", the hubbased model along the lines suggested by the WBA, may be adopted but it is perceived that this model will only succeed if it is owned by GoI/ DoT to ensure fairness, transparency in accounting of data usage. It is also required to be ensured that AP's of all device manufacturers should be technically compatible with all available commercially grade AAA.

The regulator may also decide various commercial interconnection issues to facilitate interoperability among service providers in this regard.

Q2. Would you like to suggest any alternate model?

MTNL Comments: Only licensed ISP should be allowed to offer service. Hence, the service should be rolled out using GSM model only where an ISP should be responsible to maintain and run their Wi-Fi Networks as per their own arrangements and a roaming agreement may be done between the licensed ISPs so that subscribers may use the Wi-Fi networks of different ISP. The ceiling of IUC's may be decided by TRAI.

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?

MTNL comments: Not required as data services are already available at much cheaper rates, due to fierce competition (in GSM technology) and their will be not much demand for retail resell.

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

MTNL comments: Since MTNL is proposing that only licensed ISP should be allowed to offer Wi-Fi service as per their own arrangements, no unbundling is required.

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.

<u>MTNL comments</u>: This may be allowed, subject to defining the framework and service obligations of the parties, but the commercial arrangements. Further the OTP based security model may be considered.

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?

MTNL comments: As replied in Q.1 &2, since the licensed ISP should be the service provider, sharing of costs and revenue across entities involved should be left to forbearance and individual contracting between ISP and their back end contractors may be allowed.

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Encl.:a/a