



Association of Unified Telecom Service Providers of India

AUSPI/12/2016/024

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Subject: AUSPI's Response to the TRAI Consultation Paper No.14/2016 on Proliferation of Broadband through Public Wi-Fi Networks.

Dear Sir,

We are pleased to enclose AUSPI's response to the TRAI Consultation Paper on Proliferation of Broadband through Public Wi-Fi Networks for your consideration.

Thanking you,

Yours sincerely,

Ashok Sud
Secretary General
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Encl: As above

Copy to :

1. Shri R S Sharma, Chairman, TRAI
2. Shri Anil Kaushal, Member, TRAI
3. Shri Sudhir Gupta, Secretary, TRAI



AUSPI's Response to the TRAI Consultation Paper on Proliferation of Broadband through Public Wi-Fi Networks

General

Internet access is provided by licensed Telecom Access Service Providers and internet service providers. Any entity wishing to provide access through Wi-Fi needs to obtain Unified License with Access Service or ISP authorization and also to follow the licensing conditions. TSPs/ISPs provide access to last mile for internet access.

In the Licensing framework of the Government, there is no category of Wi-Fi service provider and Wi-Fi hotspots are being set up by TSPs/ISPs on a model which is consistent with the licensing regime. Any reselling of data can happen only through MVNO rules as per the guidelines laid down by the Government of India. For setting up Wi-Fi in addition to the need of backhaul, there are challenges being faced by the service providers for setting up of sites and infrastructure and other Right of Way issues.

Our specific comments on the issues raised by the Authority are as follows:

- Q1.** *Are there any regulatory issues, licensing restrictions or other factors that are hampering the growth of public Wi-Fi services in the country?*
- Q2.** *What regulatory / licensing or policy measures are required to encourage the deployment of commercial models for ubiquitous city-wide Wi-Fi networks as well as expansion of Wi-Fi networks in remote or rural areas?*

AUSPI's Response

We feel that there is no major impediment for regulatory and licensing restrictions for the spread of broadband service through Wi-Fi hotspots in the country. Licensed TSPs are deploying public hotspots as per feasibility. However, certain miscellaneous impediments exist hampering the growth of Wi-Fi Services in the country and our suggestions in this regard are as follows:

- a. Adoption of e-KYC should be fast tracked for ease of authentication of subscribers over the Wi-Fi Networks.
- b. Wi-Fi equipment that is compliant with international standards such as IEEE, Wi-Fi Alliance etc.
- c. Promulgation of uniform RoW guidelines would go a long way in promoting public



- d. Provision of building of ducts, along the roads, for extending backhaul links and power lines to the Wi-Fi equipment deployed on the street furniture on affordable cost.
- e. Mandatory sharing of IBS / Wi-Fi solutions deployed within a building shall provide the impetus for proliferation of public Wi-Fi services.
- f. If there is a Wi-Fi service provider, then it should be integrated as reseller of TSPs / ISPs bandwidth as that shall facilitate single point of billing for the customers.

Q3. *What measures are required to encourage interoperability between the Wi-Fi networks of different service providers, both within the country and internationally?*

Q4. *What measures are required to encourage interoperability between cellular and Wi-Fi networks?*

AUSPI's Response

- a) It is brought out that provisioning of access service through Wi-Fi is similar to any other form of access service and needs to be regulated as per the regulations and guidelines established under the Indian Telegraph Act, 1885. Therefore, it is recommended that **provisioning of Wi-Fi services should be permitted only through the agreements with the TSPs / ISPs instead of through Wi-Fi hubs.**
- b) **Interoperability between Wi-Fi Networks and Cellular Networks.** Wi-Fi is just another mechanism for provisioning access to the services of the cellular network. Therefore, Wi-Fi hot spots are inherently interoperable with the backhaul cellular networks. However, interoperability of Wi-Fi hotspots of different cellular networks would entail establishment of interconnections and conclusion of interconnection agreements amongst the cellular operators, once again for the purpose of detection, selection, authentication and subsequently billing.
- c) We feel that regulations for deciding the ceiling price of packs for Wi-Fi services or the interconnection issues / pricing or any QoS requirements should be left to the market forces.
- d) Access services being licensed in India, provisioning of Wi-Fi services should be permitted only through the agreements with the licensed TSPs / ISPs instead of through unlicensed and unregulated Wi-Fi hubs.



Q5. *Apart from frequency bands already recommended by TRAI to DoT, are there additional bands which need to be de-licensed in order to expedite the penetration of broadband using Wi-Fi technology? Please provide international examples, if any, in support of your answer.*

AUSPI's Response

The present allocation of unlicensed spectrum is sufficient and therefore, no further frequency bands be de-licensed for Wi-Fi, apart from the frequency bands that are stipulated in the NFAP.

Q6. *Are there any challenges being faced in the login / authentication procedure for access to Wi-Fi hotspots? In what ways can the process be simplified to provide frictionless access to public Wi-Fi hotspots, for domestic users as well as foreign tourists?*

AUSPI's Response

The present arrangement of login by TSPs providing OTP on the registered mobile number of the subscriber is adequate and this may be continued.

Considering the various strategic requirements, certain simplified process for providing access to the public Wi-Fi hotspots including for the foreign tourists are as follows:-

- a) **Adoption of e-KYC.** Adoption of e-KYC should be fast tracked for ease of authentication of subscribers over the Wi-Fi Networks.
- b) **Mandated deployment of Wi-Fi equipment that is compliant to international roaming and automated authentication standards.**
- c) **Usage of Credit Cards for Authentication.** Individuals who can pay for the Wi-Fi access using a credit card can be authenticated based on the credit card usage itself. This shall facilitate the usage of Wi-Fi services by the foreign customers.
- d) **e-CAF/ Online CAF**
- e) **Prior Registration of Customers who Intend Using Non-SIM Devices.**
- f) **Prior Authentication of the Customers, Over Secure Channels, Through an App.**



- Q7.** *Are there any challenges being faced in making payments for access to Wi-Fi hotspots? Please elaborate and suggest a payment arrangement which will offer frictionless and secured payment for the access of Wi-Fi services.*
- Q9.** *Is there a need for ISPs/ the proposed hub operator to adopt the Unified Payment Interface (UPI) or other similar payment platforms for easy subscription of Wi-Fi access? Who should own and control such payment platforms? Please give full details in support of your answer.*

AUSPI's Response

No challenges are being faced in making payments for access to Wi-Fi hotspots. The billing system of the Wi-Fi service providers should be integrated with that of the TSPs/ISPs so that payment deductions from the core balance are included in the monthly post-paid bills in order to have most secure and smooth transactions.

- Q8.** *Is there a need to adopt a hub-based model along the lines suggested by the WBA, where a central third party AAA (Authentication, Authorization and Accounting) hub will facilitate interconnection, authentication and payments? Who should own and control the hub? Should the hub operator be subject to any regulations to ensure service standards, data protection, etc?*

AUSPI's Response

- a) A hub-based model may be adopted where a central third party Authentication, Authorization and Accounting hub will facilitate interconnection, authentication and payments and the hub operator be subject to the regulations and guidelines of telecom services, especially for UL with Internet Service Class 'A' Authorization and compliance to DoT's instructions for provisioning Wi-Fi services.
- b) The hub can be controlled by a private party under authorisation from the government similar to the Mobile Clearing House (MCH) for facilitating Mobile Number Portability.
- Q10.** *Is it feasible to have an architecture wherein a common grid can be created through which any small entity can become a data service provider and able to share its available data to any consumer or user?*



Q11. *What regulatory / licensing measures are required to develop such architecture? Is this a right time to allow such reselling of data to ensure affordable data tariff to public, ensure ubiquitous presence of Wi-Fi Network and allow innovation in the market?*

AUSPI's Response

It is feasible to have an architecture wherein a common grid can be created through which any small entity can become a data service provider and able to share its available data to any consumer or user, but this local Wi-Fi service provider shall have to comply with the KYC norms of the DoT.

Wi-Fi service provider can become reseller of the TSPs/ISPs bandwidth/data through UL (VNO) with internet service authorisation which allows reselling of data to ensure affordable data tariff to public, ensure ubiquitous presence of Wi-Fi Network and would allow innovation in the market.

Q12. *What measures are required to promote hosting of data of community interest at local level to reduce cost of data to the consumers?*

AUSPI's Response

We do not advocate hosting of data of community interest at local level due to non-availability of backhaul and escalation of cost of data to the consumer.
