

Counter Comments to the Consultation Paper on Proliferation of Broadband through Public Wi-Fi Networks

Introduction

Following our initial comments on the Consultation Paper on Proliferation of Broadband through Public Wi-Fi Networks, below are our set of counter comments that serve as responses to the comments made by Telecom Service Providers (hereinafter referred to as “TSPs”) and TSP associations. Though a number of substantive proposals have been made in response to the Consultation Paper, owing to the large volume of comments, we have identified some common themes found across the submissions made by major TSPs and TSP associations and presented our responses accordingly.

Wi-Fi Providers: The Need For A Lightweight Regulation

A common theme that came out of all the comments made by major TSPs and TSP associations was that Wi-Fi providers should somehow be integrated in the current licensing regime and suggestions varied from how Wi-Fi providers may be treated as an agent or franchise of the TSPs/ISPs to others pointing in the direction of Unified License (Virtual Network Operator) [UL (VNO)] regime. These suggestions were backed by pointing to potential benefits, such as ease of authentication and payments, better interoperability, and also by highlighting some drawbacks within the existing system, including how only TSPs/ISPs can provide Wi-Fi services to the public because they are licensed entities or how the practice of setting up of hotspots and offering Wi-Fi as complimentary service by non-Telecom players would be discouraged under a licensing regime.

From our understanding, the TSPs and TSP associations have taken such strong stands against Wi-Fi providers because they see them as unlicensed entities, working in their line of business and adding on to the competition and thus, they want that providing of Internet access to people should only be in the hands of Telecom players. However, we do not agree with this stand as providing Internet access to the unconnected is a prerogative of all stakeholders involved such as the Government, commercial and non-commercial players. The United Nations too had observed in its resolution passed in July 2016, the importance of “applying a comprehensive human rights-based approach when providing and expanding access to the Internet and for the Internet to be open, accessible and nurtured”.¹

1 UN Resolution A/HRC/32/L.20, available at: https://www.article19.org/data/files/Internet_Statement_Adopted.pdf

It is also important to point out that The UL (VNO) licensing regime as suggested by many TSPs, necessary entails² that apart from the Entry Fee and Application Processing Fee, VNOs that enter the network would have to do so based on arriving at a mutual agreement with a Network Service Operator (hereinafter referred to as “NSO”), including the terms and conditions for sharing infrastructure. Apart from this, they also have to comply with the Department of Telecommunications (hereinafter referred to as “DoT”) instructions³ of 2009 directing them to adhere to certain procedural mandates, such as the identity verification of Wi-Fi users either by retaining copies of their photo IDs, or by delivering login details via SMS, thus retaining their phone numbers as a means of identity verification.

The above mentioned regulatory framework would be more suited for bigger players that want to join the telecom, but the same framework would acts as a roadblock for smaller players, who would be forced to license themselves as ISPs in order to provide Wi-Fi services. It hampers and discourages the smaller Wi-Fi providers, such as shop owners and unemployed youth envisioned in the Constultation Paper, who would work akin to Public Call Offices (PCO). The real reason for the success of the PCO model in India was that regulatory and entry barriers were low, which enabled and empowered the PCO boom of the 1990s.

Thus, the need of the hour is to have a separate lightweight regulation for Wi-Fi providers that focuses on easy entry for smaller players and enables them to empower not only themselves by becoming self-employed but also empower the general population by bringing broadband Internet access to the unconnected. Such a regulation should not only help in proliferation of Public Wi-Fi services in the country, but should also help in addressing and removing the ambiguities that have been created by the DoT instruction of 2009 and the Information Technology (Guidelines for Cyber Cafe) Rules of 2011. As far as the authentication issues are involved, if the Government decided to go ahead with the PCO model, we would suggest that the Government can work on developing a Free and Open Source Software that can be freely installed by Wi-Fi providers in their respective kiosks or PCOs that can take care of authentication and requirement of the users.

The Importance of Unlicensed Spectrum

It was also submitted by majority of the TSPs and TSP associations that there is no need for additional de-licensing of the spectrum. The justification given for this by major TSPs and their associations was that any spectrum that can be made commercially available should not be de-licensed as it would lead to inefficient utilization of spectrum. It was said that the focus should be more on increasing availability of licensed access spectrum for quality broadband services, as any provision of unlicensed commercial services, apart from having security implications, will also cause a huge losses to exchequer. TSPs like Vodafone have gone so far as to suggest that incentivising entities who are not investing or which are trying to prove that they can provide

2 As per the Guidelines for Grant of Unified License(Virtual Network Operators), issued on 31st May 2016, available at: http://www.dot.gov.in/sites/default/files/u75/2016_06_06%20VNO-%20AS-I.pdf

3 Department of Telecommunications, Instructions under the UASL/CMTS/BASIC Service Licence regarding provision of Wi-Fi Internet service under delicensed frequency band, February 23, 2009, available at: <http://www.dot.gov.in/sites/default/files/Wi-%20fi%20Direction%20to%20UASL-CMTS-BASIC%2023%20Feb%2009.pdf>

cheaper service, without complying with due-diligence criteria and regulatory impact analyses, will be anti-consumer in the long run.

We do not agree with the above stand taken by TSPs and their associations as their views are completely unfounded without any substantiative evidence regarding the same. Such a stand heavily undervalues the importance of unlicensed spectrum. As pointed out by us in the comments to the consultation paper, de-licensing of spectrum leads to innovation and entrepreneurship as there are fewer regulatory barriers. One of the biggest reasons of the success of Wi-Fi technology is rooted in the fact that it runs on unlicensed spectrum, resulting in cheaper and more easily available technology with lower operational and maintenance costs. This is the reason why world over many countries have unlicensed so many spectrum bands over the years so as to promote innovation flexibility and low entry costs for entrepreneurs.

The argument of the TSPs that the Government might have to sacrifice revenue that they otherwise would have made by licensing of the spectrum through auction, is not necessarily true, as de-licensing of spectrum reduces the supply of licensed spectrum and raises its economic value. This is triggered by the fact that by making more unlicensed spectrum available leads to the growth and development of complementary, demand-enhancing services, which in effect raise the economic value of licensed spectrum networks.⁴ Furthermore, the unlicensed spectrum itself is of immense economic value and can also contribute towards a country's GDP. As per a recent report⁵, the sum of consumer and producer surplus of the technologies operating in unlicensed spectrum bands in the United States amounted to a total annual economic value of \$222 billion in 2013 and contributed \$6.7 billion to their country's GDP. It has been further estimated that by 2017, the unlicensed spectrum and associated technologies will amount to at least, \$547.22 billion in economic value and contribute \$49.7 billion to the country's GDP and this is in United States alone. Thus, contrary to what the TSPs and their associations suggest, de-licensing of spectrum may significantly add to the revenue generated by the Government in one way or the other.

It was also noted that many TSPs have argued against the de-licensing of TV UHF band (470 - 590 Mhz). However, we would like to reiterate our submission in this regard that de-licensing of TV UHF band is highly significant for middle mile connectivity. The Government has an ambitious initiative to ensure high-speed connectivity up to Panchayat level using National Optic Fibre Network, but to ensure Internet access for the entire village, middle-mile and last-mile connectivity needs to be improved. If the TV UHF band (470 – 590 Mhz) is de-licensed it could be utilized for middle-mile connectivity up to the village level and then Wi-Fi infrastructure could be utilized for the last-mile.⁶ This model will result in stimulating local enterprise and entrepreneurship to operate village level networks and the Government could also support such village level networks by providing affordable subscriber authentication systems built using Free and Open Source Software (FOSS) and general purpose hardware. In this regard, Canada has been very successful in utilizing

4 Paul Milgrom, Jonathan Levin and Assaf Eilat, The Case For Unlicensed Spectrum, October 12, 2011, available at: <https://web.stanford.edu/~jdlevin/Papers/UnlicensedSpectrum.pdf>

5 Raul Katz, Assessment Of The Future Economic Value Of Unlicensed Spectrum In The United States, August 2014, available at: <http://www.wififorward.org/wp-content/uploads/2014/01/Katz-Future-Value-Unlicensed-Spectrum-final-version-1.pdf>

6 Kumar Aminesh et. al., Towards Enabling Broadband for a Billion Plus Population with TV White Spaces, March 2016, available at: <http://arxiv.org/pdf/1603.01999v1.pdf>

TV white spaces to improve broadband coverage in rural areas through its Remote Rural Broadband Systems (RRBS) initiative.⁷

Personal Data and Advertisements

Some TSPs such as Vodafone and MTS have suggested that since Public Wi-Fi is generally considered a free service where monetization is a challenge, the Government must allow TSP/ISPs to monetize through digital advertisements, location based services and other services, using the personal data given by users at the time of log in. Use of digital advertisements for giving free Wi-Fi service might be a good way to monetize using Wi-Fi services, but it does not require collection of personal data of users. If a TSP/ISP uses such a model and uses personal data of users it would in effect lead to monetization of personal data and we are strongly against such practices, as they are gross violations of users' privacy. As we have already pointed out in our comments to the Consultation Paper, we would reaffirm our submission in this regard that in light of the Government's intent for proliferation of broadband through public Wi-Fi services, it is important that any large scale efforts at deploying public Wi-Fi networks in India, irrespective of the model, should at its foundation safeguard the privacy and security of the user's data.

As of now India lacks an overarching, all encompassing law on privacy and data protection. Even though there have been efforts towards drafting a privacy legislation, an ongoing process for the past 6 years no concrete bill has been laid down in front of our Parliament for consideration. Although, there are certain provisions under the Information Technology Act, 2000 that attempt to protect and safeguard processing of data, their limited scope of application deems these clauses insufficient to qualify as the data protection regime for the country. In July this year, the United Nations passed a resolution⁸ on "promotion, protection and enjoyment of human rights on the internet", affirmed that "the same rights that people have offline must also be protected online". Thus a successful public Wi-Fi network deployed on a mass scale will have to ensure the security and privacy of not only user's personal information that is used for login purposes, but also be mindful of safeguarding the content that is accessed by user's over these public Wi-Fi networks.

Conclusion

In the end we would like to we would like to thank TRAI for initiating this consultation and for letting the various stakeholders indulge in a fruitful discourse. The Internet has long been identified as one of the greatest technological advancements of recent times, and has proven over the years to be a critical enabler of social and economic change. The Internet revolution in India is largely fueled by mobile devices and to ensure proliferation of broadband, optimum use of wireless technologies, especially Wi-Fi is essential. India too has formally recognized the importance of the Internet, and placed it at the heart of the Government's flagship Digital India Programme with broadband being one of the main pillars of it. Although Wi-Fi networks are affordable and scalable,

⁷ Licensing procedure for Remote Rural Broadband Systems, CPC-2-1-24, available at: <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf10062.html>

⁸ Supra 1

there are technical and legal obstacles that have to be surmounted to ensure effective adoption of this technology as a means for bridging the digital divide.

All of the above being said we would like to recapitulate our submission for the counter comments to the consultation paper. Firstly, there is need for a separate lightweight regulation for Wi-Fi providers that focuses on easy entry for smaller players and enables them to empower not only themselves by becoming self-employed but also empower the general population by bringing broadband internet access to the unconnected. Such a regulation should not only help in proliferation of Public Wi-Fi services in the country, but should also help in addressing and remove the current regulatory ambiguities. Secondly, importance of unlicensed spectrum should not be undervalued and the authority should consider de-licensing and utilizing TV White Spaces for the middle mile connectivity. Thirdly, under no circumstance should the Government allow for monetization of user's personal data in any form and endeavor to protect the privacy of users in the digital sphere.