July 16, 2010

Shri S.K. Gupta, Advisor (CN), TRAI
Mahanagar Doorsanchar Bhawan,
Jawahar Lal Nehru Marg,
New Delhi-110 002

Sub: **Comments on Consultation Paper on "National Broadband Plan"**

Dear Sir,

This has reference to the TRAI Notice dated 10th June, 2010 and the subsequent notice on July 2, 2010 seeking the stakeholders' comments on consultation paper on National Broadband plan.

At the outset, WTTIL-Quippo wishes to thank TRAI for the initiative taken by them for seeking comments for coming out with a consultation paper on a subject which is critical to the growth of Internet as well as the growth of the economy as such vis-à-vis the telecom industry.

WTTIL-Quippo, having an IP-1 registration from Department of Telecommunications-Government of India, is a leading provider of telecom infrastructure. Our response is enclosed. If there is any other contribution that you feel we can make in this direction, please do let us know.

Thanking you,

Very truly yours
for **WTTIL-Quippo**

Naresh Ajwani
Chief of Regulatory & Government Affairs
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1. **Do you agree that existing telecom infrastructure is inadequate to support broadband demand? If so, what actions have to be taken to create an infrastructure capable to support futuristic broadband?**

   Yes, the existing infrastructure for broadband is seriously inadequate. Efforts must be made to strengthen the broadband eco-system in the following ways:

   a. Expanding capacity of existing wireless and wireline networks by deploying technologies such as 3G, BWA as well as the conventional approach,
   b. Increasing supply of applications and services that can run effectively on broadband networks,
   c. Improve availability, affordability, quality of service & transparency etc.,
   d. Remove barriers faced by users wishing to subscribe to broadband,
   e. Encourage platforms facilitating effective competition to help promote efficiencies, protect customers and grow broadband markets,
   f. Help build sustainable business models for different parts of the ecosystem with the help of infrastructure providers for the operators & value added service players.

2. **What network topology do you perceive to support high speed broadband using evolving wireless technologies?**

   a. The key is to enable the huge wireless traffic off loads through open access FTTP network. Thus, while UASPs and CMSPs continue their roll out for 2G, 2.5G, 3G, 3.5G, 4G services etc., high speed wireless Broadband traffic must be given a provision for localized off load arrangement. This is where open access FTTP providers come in handy. Here IP-1 players can align with UASPs and CMSPs for the same on revenue share."

3. **Do you see prominent role for fibre based technologies in access network in providing high speed broadband in next 5 years? What should be done to encourage such optical fibre to facilitate high speed broadband penetration?**

   a. Current trends in connectivity, e.g. growth of social networking, the proliferation of people, devices, appliances and other systems connected to the web, suggest that demand for bandwidth can only be expected to surge in the days to come. It is, therefore, reasonable to assume that the huge capacity of fibre will be an important means of carrying large amount of data traffic. However, it is easy to see that the fibre may not be sufficient to deal with demands of mobility; users will demand and expect the comparable access and level of support to services when they are on the move. Fibre and wireless will need to go hand in hand at all times.

b. Deploying fibre to every home or building entails a much higher cost than the wireless infrastructure where a tower can provide coverage to areas of several square kilometres in one go. The rollout of fibre across the country cannot be a short term option as it is commercially unviable to deploy fibre in the short run. Since this could delay infrastructure creation in geographically spread-out rural areas even more than the other places, therefore the need for subsidies and their magnitude may be greater. Given that wireless infrastructure will be faster and cheaper to deploy, subsidies for infrastructure creators – IP1 players would facilitate "Neutral host platforms" ensuring cost benefit for the operators and more options/choice for the subscribers.

4. Is non-availability of optical fibre from districts/cities to villages one of the bottlenecks for effective backhaul connectivity and impacts roll out of broadband services in rural areas?

a. Yes, to a degree. But new broadband wireless technologies can help to mitigate this disadvantage. With 3G/BWA spectrum, the wait for fibre will be unnecessary. Wireless infrastructure will cost less to deploy and will serve several operators. This will ensure rich and poor consumers, including those who do not have “pucca” dwellings where fibre access will be difficult, will enjoy service as well as, importantly, robust competition among the service providers. This has been the key to market growth and affordability in India.

5. If so, is there a need to create national optical fibre network extending upto villages?

a. Yes, but in the longer term. Given the cost and time required to do so and its inherent limitations in providing broadband access on the move, there is a need to accelerate deployment of wireless network infrastructure to enable broadband technologies to play their role in India’s development, especially in rural areas.

6. What precautions should be taken while planning and executing such optical fibre network extending upto villages so that such networks can be used as national resource in future? What is suitable time frame to rollout such project?

a. There will be a need to control costs, avoid duplication and delays. Since multiple networks may be wasteful, transparent rules to ensure fair and affordable access to the fibre network for all competing players will be critical. It is unlikely that such a nationwide network can come about in the next 5 years.

7. **What specific steps do you feel will ease grant of speedy ROW permission and ensure availability of ROW at affordable cost?**

    a. Effective coordination agency between the Centre and state will be the key. There is a need to identify the best practices followed by the States/Municipalities in faster deployment of telecom infrastructure leading to win-win for all the stakeholders & set example for the others.

8. **What measures do you propose to make Customer Premises Equipment affordable for common masses? Elaborate your reply giving various options.**

    a. There is a significant role here for reducing tariffs and duties on manufactures & vendors. However, the experience with mobiles has shown that economies that result from a surge in demand lead to much higher price drops. The lesson, therefore, is to work on the ecosystem as a whole - Infrastructure as well as operators, to ensure quick expansion of demand and supply of broadband services.