

Response to TRAI Consultation Paper on National Broadband Plan, June 2010

In India, because of the lack of copper loops, the bulk of the projected 100M household and SME broadband connections will have to be provided over wireless. This means that the telecom policy in India would need to encourage and incentivize fixed-wireless substitution for broadband, something which has not happened in a significant way in either the developed or middle income countries.

The average rate at which data is sold over a DSL connection in India is approximately Rs 0.10/ Mbyte. For wireless broadband to be an effective alternative for fixed, the pricing and availability should be effectively as close to a DSL connection as possible. If the same spectrum is used for mobile voice services as for data, competitive pressure is likely to drive broadband revenue realization closer to that of voice services. Voice services today yield approximately Rs 2.4/Mbyte (assuming an average voice call takes up 16+16 kbps on the air and costs Rs0.6/min). This does not take into account the costs of international bandwidth included in data services or the termination cost in voice calls, but the differences are still very wide in terms of revenue realization of spectrum.

We do not think it would be the right thing to do to regulate the type of service or type of technology that should be used in the BWA spectrum. That should be left to market forces and already frozen licensing terms. However, it should be recognized that the BWA spectrum is a scarce national resource and offers the only near term possibility for India to achieve reasonable broadband penetration targets. Hence, we feel that TRAI should propose a certain minimum broadband service package that will stimulate demand and ensure that the BWA spectrum can indeed make up for the lack of copper and fiber access lines in the country.

Globally broadband uptake is fastest when the service is

-fast [the current 256 kbps definition is outdated because video services are rapidly becoming an essential part of the broadband usage experience]

-always on [or connects with minimum perceptible delay, and user does not have to pay per minute]

-low cost [a family will typically pay equal to one person's monthly voice bill for a shared broadband bill]

-unlimited usage [or high data allowance with fair use policy]

Our key recommendations therefore are:

*1. A **Minimum Broadband Package** that must be mandatorily available. An example of such a plan in the Indian context is-*

- *Connection charge:Rs1000 (one time)*
- *Speed:512 kbps*
- *Connection time: Always on, or < 1sec connect time*
- *Monthly Rental:Rs200*
- *Monthly Data Limit: 2GB*
- *Fair Use Policy: drop to 256kbps or Rs 0.10/Mb beyond data limit*
- *Associated quality of service parameters like latency, burst duration, contention ratios to be standardized to ensure comparability across services.*

The specific numbers may be agreed post deliberations with the operators and stakeholders. Operators should be free to offer cheaper or more expensive plans, in addition to the above to create differentiation.

2. Annual Subscriber Targets

BWA spectrum holders should, in addition, have annual subscriber targets equally apportioned between the three licensees in each circle. Inasmuch as these obligations are above and beyond the terms of the spectrum conditions, there should be an incentive (perhaps from the USO fund) to operators to achieve these targets. The targets and incentives should be such that they enable us to reach a national goal of 100 million broadband subscribers by 2014.