Consultation paper on Implementation Model for BharatNet

Suggestions

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Comments / Suggestions to the Consultation paper on Implementation Model for BharatNet

We appreciate the efforts put forward by the competent authority to discuss about the possibilities of expediting the implementation of BharatNet.

We are pleased to suggest the following in two areas:
- alternative implementation strategies
- wider adoption by the end users

I. Alternative Implementation Strategy

To overcome the risks associated with the proposed three models, we suggest the following:

BBNL should serve as a planning and monitoring authority, rather than taking prominent ownership. As it is a SPV, sustained leadership support is essential for long term ownership, management and operation from both state and central governments[1].

BBNL should also create a complete architectural blueprint with routes/standards for the entire national network including the backbone, middle mile and access networks. This will eliminate interoperability problems and ease management from a central unit.

This blue print shall be based on sound scientific practices, especially related to optimization models including least cost design, maximum benefit design, and cost-benefit designs. Public opinion of experts and state governments of this blue print shall be sought for validation.

The implementation of blue print at the state level shall be done in a PPP model with state, Center and private partners coming together in a consortium. Possible lessons can be sought from Airport authority of India joining hands with State governments and private firms in building and managing the airports. The consortium, through a BOOT company/consortium (e.g. like an L&T) who will build out, keep operational and maintain the complete network in the state (backbone, middle mile and access) as per the BBNL blueprint. However, this BOOT candidate should <u>not</u> be a retail service provider or conflict of interest will happen. Like in their Bangalore airport example, the BOOT organization (BIAL) has set up the retail stores infrastructure in the airport and maintain it but the stores are operated by a FabIndia, Haldiram etc.

The BOOT organization shall also be responsible for marketing the bandwidth to government or private service providers who could choose to procure end to end bandwidth. The access to bandwidth shall be made transparent. Australia seems to have a clear legislation on nondiscriminatory open access and transparent pricing in Australia when compared to India, Malaysia and Indonesia which are facing delays in implementation[2].

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[1] Please see here for further details, Srinivasan, N and Ilavarasan, P. V. (2015). White Elephant or a Game Changer? An Analysis of National Optical Fibre Network of India. *Economic and Political Weekly*, 50 (42), 59-66.

[2] Please see here for further details: Gunaratne, R. L et al., (2015). National broadband networks of Malaysia, India, Indonesia and Australia a comparative study. *Competition and Regulation Network Industries*, 16(1), 23-46.

As the revenues earned by the BOOT organization could be shared with the state government, there is incentive for state governments to actively participate in the project. This will also help in overcoming present challenges in Right of Way approvals.

II. Wider Adoption by the end users

After laying the infrastructure by the BOOT organization, the service providers could be incentivized by the BOOT organization to provide services to low demand areas. The incentive structure shall be more of lowering the infrastructure access cost to the service providers rather than subsidizing the services to the users.

The Service Providers should be encouraged to collaborate with end customer organizations like Banks, Agri Procurement organizations for services with guaranteed service levels. They should have also back to back service level agreements (with penalties) with the BOOT organization in the state and BBNL. Thus the overall service efficiency gets better, resulting in increased use of broadband.

The existing efforts by the government to increase the digital literacy should also include information on BharatNet. For instance, Scheme for Mass IT Literacy programme offers 20 hours of subsidized IT training programme to million households[3]. This programme can include a module of BharatNet to spread the awareness and likely future use by the end users.[4]

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[3] See here for details: http://www.ndlm.in/overview-of-ndlm.html
[4] Preliminary findings of a study by an independent think tank shows that awareness about BharatNet is low in pilot Gram Panchayats. The study is likely to suggest ways by which wider adoption of broadband could be achieved. Please see here for details: http://lirneasia.net/projects/bba/