## New Policies Can Unleash Entrepreneurship in Rural Telecoms

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India can ill afford to continue with its head in the 21<sup>st</sup> century while its tail remains in the 19<sup>th</sup>, but by improving access to information and communication technology – especially in rural areas – we can move all Indians into the modern realities of a global knowledge economy. By releasing the shackles on India's entrepreneurs imposed by current communication regulations, we can catalyze widespread improvements in rural access at Internet speeds. In doing so, the government and BSNL will be largely relieved of the awesome and unmet challenge of offering quality telecommunications access at affordable prices in rural areas. Truly progressive regulation is required, and it is required now, if the government is to take advantage of the unique state of the current voice and data services markets. We believe that a policy that creates and promotes community-based Rural Service Providers will fundamentally change the economies and realities of access for rural India.

Currently, more than half of India's villages lack telephone connectivity let alone Internet access; the arrival of the information revolution to India is in doubt. The 26 million phone lines (mostly business-owned) and 1 million Internet subscribers that do exist nationwide are highly concentrated in urban areas, leaving rural areas out of the loop and harming the interests of both groups. If over 55 million televisions were wired with cable in less than a decade, imagine how many homes and villages could be wired with the Internet, a system that offers a far wider range of services, generates more earnings, is more flexible in design, and is essential to social and economic development. Sadly, rural Internet and telephony is not taking off like cable television because the regulatory environment, rather than promote universal access, actually serves to discourage it.

Overall, the private sector is doing well, even in the presence of problems posed by the dominant providers, in building out the information and communication technology (ICT) infrastructure and services in the class I cities (top 300 cities). Since the opening of voice telephony, private Basic Service Operators (BSO) have moved into the 20 largest cities, and the liberalization of Internet licensing has led to a large number of private Internet Service Providers (ISPs) working in urban areas. A variety of private companies are rolling out optical fibre backbones (technically suitable for voice and data) between major cities across the country.

However, no private sector ICT company is deploying into rural areas and BSNL is losing money (or at best breaking even) everywhere in the country except class I cities. Indeed, the cost structure of BSNL (and BSOs in general) means that for the foreseeable future it will be impossible for them to earn a profit on investments in the rural market. While investing in rural service is a core part of BSNL and the BSO's mission, and a legal requirement under universal service obligations, it is a poor financial proposition today.

With the creation of a myriad of local, small, entrepreneurial, fast, and flexible Rural Service Providers (RSP) India can fundamentally alter the economics of rural access and in doing so network the entire country. Because their operating costs are less than half BSNL's, small private RSPs can provide quality telephone and Internet service at affordable prices – but only if the policy environment allows them. Entrepreneurs will roll out reliable service quickly, help meet universal service obligations, add to BSNL's (and other BSOs and backbone providers) revenues, and reduce costs. If we have learned anything from India's cable television experience, now is the time to apply it.

At a bare minimum, the policy environment should offer initiatives such as:

• RSP licenses for operation outside of class I cities. Current telephony licenses require operation across an entire state thus limiting providers to large corporations. An RSP should be permitted to provide telephone and/or Internet service to any sized area outside major cities, whether a few villages, a taluk, or block. The RSP must be

allowed to connect to BSNL or some other existing BSO, as well as an Internet backbone.

- Barrier-free entry for RSPs. Entering today's national ISP market requires an Rs 100,00000 bank guarantee, and BSOs pay a one-time entry fee (plus revenue sharing) to offer phone service. For rural providers all such requirements should be waived or substantially reduced.
- Revenue sharing terms for RSPs that are as attractive as the ones BSOs enjoy. The current model allows for a BSO to retain roughly 80% of long distance call revenues when it connects to BSNL's network. RSPs should receive an equal share of income. This is a fair agreement given the added revenue BSNL stands to generate from the RSP and the fact that the RSP is responsible for building out and maintaining its own infrastructure.
- Fee-free spectrum licensing for RSPs using wireless technologies. The current spectrum charge structure discriminates against rural areas; for instance, the annual cost per mobile phone subscriber in Delhi is Rs 100-150 versus Rs 2000 in rural areas. Annual satellite spectrum charges can reach Rs 50000. Wireless technologies will play a key role in offering quality economical service to rural areas in the immediate future, and current spectrum fees are unreasonable. A spectrum license fee holiday for wireless technologies used in rural areas should be put in place for the next ten years.
- Rationalized and reduced taxes and duties on ICT goods. Current levees including excise, sales tax, custom and import duties, etc. can reach 35% for basic computer and telecom technologies and 50% for satellite technologies. RSPs should receive substantial relief from these taxes. Furthermore, in this era of convergence, the taxation framework should be technologically neutral telecom and Internet technologies should all be taxed at an identical and predictable rate.

India cannot truly advantage itself of its growing strength in the field of information technologies without servicing its own domestic needs first, particularly those in rural areas. Whether it's to meet the rapid growth in rural consumer and durable goods consumption, create new educational opportunities, stem the flow of people to urban areas, improve market functioning, better rural health care, or slow birth rates, ICTs have a significant role in the solution. India's advantages lie in its population density, the potential size of its network, economies of scale, understanding of rural poor needs, and its cultural and geographic diversity. By addressing these challenges and connecting up rural communities, India can boost its efficiency and economic competitiveness. The world economy is moving with increasing speed, and the last things India can afford is to leave most of its population disconnected from the high-speed global knowledge network.

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