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## Don't waste public money on telecom infrastructure

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Why are multi-million dollar large government projects that will most certainly fail being promoted when the more effective, simple and inexpensive regulatory actions are not being taken? Is there a danger that the large projects will distort existing markets?

### **Telecom services for the underserved**

On the face of it, provision of affordable telecom services to underserved populations is a compelling reason for governments to intervene in the market. The logic of the argument is that socially desirable level of service is less than what is commercially feasible. This difference can be explained using a two-gap model. The "market efficiency gap" is the difference between what markets can achieve under existing conditions and what can be achieved if market barriers are removed. This gap can be bridged through effective competition and regulation [in markets where competition will not work by itself]. Because spectrum that is needed for the effective provision of telecom services is not available in unlimited quantities and similar factors, the effective functioning of telecom markets requires regulation.

The "access gap" refers to people and places that remain beyond the limits of the market due to inadequate income levels and or geographical location. A number of countries have used "smart subsidies"; a process used to provide minimum subsidies to bridge a pre-defined access gap using a competitive bidding process. These are known as least-cost subsidy [LCS] auctions. Here bidders are forced to consider the most cost effective technology and other cost-saving options to bid for the lowest required subsidy.

Auctions differ from the provision of subsidy using a comparative evaluation scheme; known as a "beauty contest" where the award is determined on a supposedly merit-based assessment of the applicant. In countries with poor governance frameworks with political interference in awarding tenders, it is much safer to use the smart subsidy approach where only a single number; usually a dollar or rupee figure, is evaluated than the alternative that gives significant discretion to a tender board that evaluates bids.

### **Smart subsidies can turn real stupid**

Smart subsidy programmes to bridge the access gap in telecom services have succeeded in several South American countries; Chile in particular. More than anything, sound regulatory frameworks made these subsidies "smart". Evidence shows that the key success factor in the South American cases was good regulatory practices in pricing, interconnection and in the prevention of anti-competitive practices by the incumbent. Smart subsidy programmes have also failed miserably. Nepal is a recent and proximate example. With very low rural connectivity the Government of Nepal embarked on a

supposedly smart subsidy programme to provide telecom services to its Eastern Development Region [where Mount Everest is located]. Having failed in the first attempt due to political turmoil in 2000, the second attempt succeeded in 2003. A USD 12 million subsidy was given to the winning bidder to provide specified services, mostly payphones, to the region.

Note however, that there was only one eligible bidder in the final round. But troubles started from the word go because of the inability/unwillingness of the government to keep its promises regarding regulation. The incumbent began violating the exclusivity conditions given to the subsidy winner with the full knowledge of the regulator. The pricing was in no way competitive. An anti-competitive interconnection charge was imposed on the subsidy winning new operator by the incumbent driving up its tariffs to some 18 times what the incumbent was charging for a similar telephone call. The international license that was promised for the subsidy winner was delayed no end. The regulatory regime, which had to be more or less exemplary for the project to succeed, was absolutely unsatisfactory.

In addition to the regulatory nightmare, the Nepali conflict was taking its toll on the project as well. At one point, the government shut down the entire operation for “security reasons” and only much later allowed resumption in a trickle. Then the military arbitrarily reallocated the villages the subsidy winner had agreed to provide services based on demand estimates. The subsidy winner was seemingly bleeding. However, the subsidy winner was in fact a very small aperture terminal [VSAT] manufacturer, who had proposed a pure VSAT solution instead of a hybrid with other cheaper technology in the plains of the Eastern Development Region.

Technical experts subsequently calculated that a hybrid solution would have cost half of what the operator was paid as a subsidy, notwithstanding the fact that as a VSAT manufacturer the subsidy winner would have been able to procure the equipment at an even cheaper price. Hardly any of the quality criteria were met and village phone facilities were shut for days when they were supposed to be open daily for 8 hours. The general view in conclusion was that the massive subsidy given to the new operator to provide cheap telephone services to the rural poor of Nepal had turned out to be perhaps the most expensive in the world! The smart subsidy had become a stupid subsidy.

### **Sri Lanka’s original smart-subsidy plan**

Let us now turn to the Sri Lanka case. Having implemented reforms in the telecommunications sector in 2003 by introducing competition in the international services hitherto monopolized by the privatized incumbent Sri Lanka Telecom, the Government imposed a levy on incoming international calls, to be paid by foreign originators of calls terminated in Sri Lanka, to be made available to local operators in Sri Lanka on a competitive basis to extend telecom services. Known as the Vishva Grama

Fund [VGF], this was to be a fully transparent operation which would have been administered by a financial institution not owned by the Government in order to ensure the funds would not be misused. Overall, the regulatory regime was to have been improved based on new legislation that was drafted.

In addition, as a component of the e-Sri Lanka project, the Government also proposed a smart subsidy to extend the backbone to the deep-south and northeast regions of Sri Lanka. Two regional telecom network [RTN] and backbones to connect with the existing Sri Lanka Telecom Limited [SLTL] optic fibre backbone were to be built on a subsidy granted on a competitive least cost auction. At that time, the solution was appropriate because the SLTL optic fibre backbone was a restricted circle connecting Colombo with Chilaw, Kurunegala, Kegalle, Matale, Kandy, Nuwara Eliya, Hatton, Nawalapitiya, Avissawella, Ratnapura, Kalutara and back to Colombo whereas the objective of e-Sri Lanka was to take the dividends of ICT to every village in the country. The plan was to provide an affordable telecom infrastructure to leverage the soon-to-emerge rapid growth in the IT enabled services industry. A rural telecentre programme known as the Vishva Gnana Kendra [VGK] was also envisaged where local entrepreneurs were to have been selected on a competitive basis to run them on a sliding subsidy for accessing the backbone [subsidy to be phased out over four years]. The fundamental premise was regulatory frameworks that encouraged competition and avoided anti-competitive behaviour.

### **A dramatic change in the storyline**

However, with the change of Government in 2004, the e-Sri Lanka programme fell apart for all practical purposes. The administration of the VGF was taken over by the Government and the VGK was renamed “nena sala” [a Sinhala only meaning from the previous Sanskrit term understood by both Sinhala and Tamil speakers] and instead of competitive assignment, many of these “nena salas” were administratively allocated to political henchmen.

Others were built at numerous temples where the setting was not conducive to Internet use and at locations where there was no justification for subsidized access to the Internet. The proposed content was not developed and existing content, for example market prices for farmers, not uploaded. The regulatory environment deteriorated dramatically with licenses and frequencies being allocated with no transparency whatsoever. For instance, many questions have been raised on the transparency of the WiMax licenses and numerous radio and TV licenses that have been issued. A recent study by LIRNEasia provides independent evidence on stakeholder perceptions on the telecom regulatory environment for Sri Lanka for the year 2006. In comparison with India, Pakistan, Indonesia and the Philippines, Sri Lanka scores the lowest on a combined assessment of both fixed and mobile telecom services. The bottom line is that the necessary condition for success in smart subsidies, a well-functioning regulatory regime does not exist in Sri Lanka.

### **Now a new story, but totally out of context**

It is in this context that the rumors have emerged of plans for a large telecommunications backbone project involving the Government. The current telecom scenario in Sri Lanka is very different to what existed in 2003. The number of fixed line subscribers [including CDMA; which is categorized as mobile in most countries] has increased from under 1 million to over 2 million. Mobile subscribers have increased from under 1.5 million to over 6 million. All operators have invested heavily in infrastructure and have taken their backbones to places far and wide. Business models have been turned upside down from being “exclusive” to being “inclusive” as recently mentioned by the CEO of Dialog Telekom based on the concept of “fortune at the Bottom of the Pyramid.” The telecom sector has become the driving force of Sri Lanka’s growth despite the weak, unfair and incompetent regulatory regime. But, that does not mean everything is fine. There are numerous issues with backbone connectivity: capacity lies unused in SLTL’s fiber rings, while competitors use expensive microwave because they cannot buy capacity from SLTL on non-discriminatory and cost-oriented terms; despite having lost its international monopoly SLTL continues to hinder optimal use of the SEA-ME-WE 3 cable connecting Sri Lanka to the outside world. The earlier mentioned TRE assessment therefore is justifiable in understanding why the telecom sectors of all other countries in the comparative sample are growing much faster than Sri Lanka.

### **A recipe for disaster**

It is rumored that Sri Lanka Railway [SLR] will become a partner in the project to lay optic fibre cables along its tracks. Railway authorities have successfully partnered with telecom operators on such ventures in a number of countries with a good regulatory regime and there surely is precedent. Therefore, the idea may seem appropriate at first glance, but within a dreadful regulatory environment it must be understood that SLR is a one of the largest drains of public funds registering losses that are said to be 3 times its revenue. It provides a barely usable service, has no investment funds to improve the same and has no proper management even though the new General Manager may be able to make a small dent. In short the SLR is a badly run and debt ridden monster that sucks out public money and continues to refuse to work in partnership with the private sector; which by the way all telecom operators belong to. The last time a fiber proposal was made to the SLR, they insisted that free connections had to be given from each station, which would have destroyed the economics of the project.

Even if all of the above is ignored, it is prudent to examine if SLR reaches the underserved areas of the country; where access gaps need to be closed. Perhaps except for Batticaloa, Vavuniya and Mannar, the remaining terminal points of the railroads, namely Avissawella, Matale, Badulla, Trincomalee and Matara are not the type of locations that are unserved by fiber, now or within months.

A combined project that would include the current telecom regulator, the current e-Sri Lanka management and Sri Lanka Railway will be a classic recipe for disaster; perhaps even greater than the Nepali example.

### **Is there an alternative?**

There is a better way to achieve the objective of an affordable and available backbone. That is to regulate shared access of available infrastructure. Unlike in 2003, SLTL has [or will by end of this year have] a comprehensive, almost nationwide optic fibre backbone network, as publicly announced recently. Besides the 2003 ring earlier mentioned, the new Northeast-Central ring connects Kurunegala to Anuradhapura, Trincomalee, Polonnaruwa and Kandy. The East-Uva-Central ring connects Polonnaruwa with Batticaloa, Kalmunai, Ampara, Badulla and Bandarawela with Nuwara Eliya. The Southern ring connects Kalutara with Galle, Matara, Hambantota and back through Ratnapura. Then there are two linear networks connecting Anuradhapura via Vavuniya to Mannar and to Jaffna. Not only breadth, the network also consists of high capacity.

But, the issue is that SLTL, for all practical purposes, enjoys exclusive access to this nation-wide backbone. The challenge therefore is to figure out how others could also be allowed to access this backbone on a basis that is profitable to SLTL and at the same time cost-effective to the other operators. Such access is not something unique to Sri Lanka and many countries with progressive regulatory regimes mandate such infrastructure sharing.

The story is the same with access to the undersea cable as well. SLTL must be mandated to share this infrastructure on a non-discriminatory basis. There must be effective regulation to ensure this happens in an equitable manner. The need to share is not only for SLTL, it has to be mandated for other operators too. There is no need to build two roads going to the same place when one road can be shared. It is the same principal here.

An effective access regime that will allow optimal use of the existing backbone, better interconnection enforcement throughout the country, transparent licensing that would remove the pall of corruption or allegations of corruption hanging over the Telecom Regulatory Commission and the licensing authorities, more transparent and efficient spectrum management including the complete unlicensing of WiFi frequencies; deregulation of tariffs to the extent possible like in India are the low-cost option that will enable more people to use telecom and Internet services, not high-cost and low-thought subsidy schemes. There is no need for Sri Lanka to repeat the errors of Nepal.

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## Sri Lanka Telecom's high capacity optic fibre network



Source: Sri Lanka Telecom Group Investor Forum, March 2007