Providing Universal Access: FITEL, Peru

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FITEL in Peru offers an early and successful example of a universal access fund adopting an innovative approach to achieving access in rural areas, now widely replicated: the lowest-subsidy auction. This is an efficient mechanism for minimising the subsidy required for commercial telecoms companies to extend the network into non-commercial areas, by awarding the contract to the bidder seeking the lowest subsidy. Despite shortcomings, this pioneering programme brought a number of social benefits, and activities have since expanded from public telephony to include internet access.

Introduction

When Peru's telecommunications companies were privatised in 1994, it was estimated that more than 70,000 rural localities lacked telephone service. However, most of the people living in these localities lived in poverty. Their communication needs were unlikely to be met by private companies, since the tariffs agreed during the privatisation process were beyond their means.

To address this issue, the privatisation model included the creation of the *Fondo de Inversión en Telecomunicaciones* (Telecommunications Investment Fund), known by its Spanish initials as FITEL. OSIPTEL, the regulatory agency, administered FITEL and assigned a director to manage the fund and design projects. Companies providing public telecommunications services contributed 1% of their gross revenue to FITEL.

OSIPTEL faced the challenge of designing a model for FITEL's operations that was consistent with privatisation and which expanded telecommunications service coverage with the funds available. As a result, OSIPTEL designed a market mechanism through which to allocate its funds: the lowest-subsidy auction.

Through this mechanism, FITEL's managers designed projects to maximise the social profitability of the allocated funds. These had to be approved by the Ministry of Transportation and Communications, which was responsible for granting concessions for the operation of services. Once they were approved, OSIPTEL oversaw a bidding process to turn over implementation of the projects to private companies. The company that requested the lowest subsidy for installing and operating the project in underserved areas won the bid.

Between 1998 and 2001, there were four lowest-subsidy auctions which resulted in the expansion of public telephone coverage to 5,000 localities that had previously not been connected to the telephone network. From 1998 to 2006, FITEL received USD 240 million and committed USD 127 million to different projects.

Provision of public telephones

OSIPTEL defined the type of service to be provided and the number and location of the localities to be served by each project. It was initially decided to provide exterior public telephone services. To reduce the commercial risk for the operating companies, public telephones were installed that used phone cards. However, the use of phone cards has presented a number of serious problems:

- It was necessary to purchase a card to use the telephone to make calls. However, the smallest denomination phone card (equivalent to USD 1) was still

a significant amount for poor rural users with little cash. Poor rural users have a household income of, on average, USD 105 per month; extremely poor households make only half that amount.

- People in the service area were unfamiliar with how to use the cards. They had to press more than ten numbers to get a dial tone before they could then dial the number they wished to call.
- Even if a person did have the money to buy a card, distribution of the cards was limited. The operating companies could not guarantee efficient channels for selling the cards. This meant that, despite the problems with operating the cards, user demand exceeded supply.

Although the system of using phone cards to pay for calls has not changed, in some places the owners of the stores where the public phones are installed sell minutes from a card that they manage instead of selling the whole card.

FITEL's lowest-subsidy auctions allowed the operator to structure the local business model. This included the maintenance of the required equipment, including the telephone apparatus and a solar panel to provide the necessary electricity, since rural communities often are not connected to the electricity grid. The problem of how to maintain this equipment was solved by asking local residents to find a business where the equipment could be installed. The local business owner's source of income would be the fee for receiving calls and for informing residents that they had received a call, and a small percentage of the price of the phone cards. Each individual owner would decide the amount of the fee, which was, on average, around USD 0.17.

The installation of these public telephones is considered to have had a positive impact. They have enabled people to save on transportation costs, by reducing the distance to the nearest public phone from more than twenty kilometres to less than five kilometres for over one million people.

There is also anecdotal evidence that the installation of public phones has increased and diversified the income of store owners who hosted the public phones.

At the same time, however, those who use this public phone service find that the quality of communication is poor and the payment mechanism is an obstacle. The technological solution preferred by companies has been satellite, which has meant that there is sometimes a delay when communicating. This has been an inhibiting factor for users. However, more recently, for projects which include internet connectivity, other technologies have been promoted.

The way forward

FITEL has opened a small window for the implementation of small-scale pilot projects. These have diversified the types of applications used. For instance, they have included the use of radio communication for a health project in the Amazon basin and internet for an agricultural information project on the coast. They have also included the expansion of telephone and internet access in certain districts which were not connected to the network, along with local private initiatives expanding local fixed telephony coverage for households.

In 2000, FITEL started an initiative to provide the capitals of rural districts with internet connectivity, which was finally implemented in 2005. This was followed by the formulation of a number of projects that incorporated internet connectivity, including projects which were more ambitious in terms of the number of localities included and the requirement that telecentres be installed to provide internet access.

The most recent projects for expanding internet access now include the allocation of resources for training local residents, creating local content, and fostering the development of micro enterprises responsible for the management and operation of the telecentres. Through initiatives like these, FITEL's resources are allocated to telecommunications service operators and to private entities, such as NGOs, which are responsible for activating demand for services.

In 2007, FITEL underwent a significant institutional change when its administration was transferred from OSIPTEL, the regulatory agency, to the Ministry of Transportation and Communications. This change is consistent with the concept of universal access as part of a social or sector policy, instead of the original vision that accompanied the privatisation process, which saw it as a tool for modernising the telecommunications sector.

Lessons learned

- The government has been able to establish a fund which has ensured transparency in the use of resources for universal access and which does not depend on allocations from the national treasury (these are usually subject to spending restrictions and political negotiation).
- The government successfully used market mechanisms, such as the lowest-subsidy auction, to attract technically efficient operators.
- The business model implemented by the operators could have responded better to the consumers' experience. The use of cards inhibited consumption and therefore limited the commercial success of the operators and the businesses associated with the installation of public telephones.
- Models for providing internet access to poor populations with little education must include motivation, training and ownership of the new communications technology.
- The fund should have allowed greater flexibility in accepting and sponsoring pilot projects. Moreover, no evaluation of these has been made so far.