

Connecting Afghanistan's Villages to the World

A Conversation with Amirzai Sangin, Minister, Ministry of Communication and Information Technologies, the Islamic Republic of Afghanistan

Few public servants have made as big a difference to their countries as Amirzai Sangin. Trained in the UK and Sweden, he helped found Swedish Telecom's international unit (now known as Telia International) before returning to Afghanistan in 2002. First as an advisor and then as Minister of Communications, he led development of the first modern communications network in the nation's history and the creation of the nation's first independent telecom regulator.

Globecomm has been privileged to work with Minister Sangin and his Ministry since 2003, when we developed a Government Communications Network (GCN) providing voice, data and video links between 42 government offices in the capital and 34 provincial offices. We went on to build a District Communications Network (DCN) linking 337 legislative district offices as well as international gateways for voice and video. Along the way, we and our Afghan partners provided training to a new generation of telecom technicians, so that the capacity to maintain and grow the network became as much a national asset as the network itself.

In this interview, Minister Sangin discusses the unexpected path that led from these government communications projects to a true telecommunications revolution at the local level.

Globecomm: Minister Sangin, could you tell us about the origin of the Village Communications Network?

Sangin: While the Government Communications Network was being developed, we seized on an opportunity to improve mobile telephone service. A previous administration had purchased CDMA mobile switches and placed them in our largest cities. City dwellers who could afford it had mobile phones, but they could only use them to call others in the same city. They were telecommunications islands. So we asked you to connect these switches to the GCN and to host switching and international services for them.

It's probably hard for you to appreciate what a difference this made to people's lives. Before this, people had to travel to Pakistan or Iran to

make an international phone call. Even in our biggest cities, they were cut off. Now they could have a phone in their pockets that connected them to the world. We now have more than 17 million mobile phones in Afghanistan, reaching about 60% of the population, after just seven years.

Globecomm: We were very proud to be part of that transformation. But what about people who do not live in cities?

Sangin: That was question I asked myself. Most of our people live in rural areas. Afghanistan is a very big country, very mountainous. People can be terribly isolated from each other, the north isolated from the south, provinces cut off from the



Minister Amirzai Sangin (left) with Globecomm Chairman and CEO David Hershberg

rest of the country. What about them?

When we switched on the District Communications Network, we began to extend mobile coverage out of the biggest cities and into smaller urban areas. That gave me an idea. Why not go the rest of the way and put a phone into every village?

Globecomm: Satellite makes that possible, but not necessarily easy.

Sangin: We had to leap over many technical and business hurdles before we could install the first village phone. We asked you to redesign the DCN hub in order to serve a large number of individual phones instead of major network nodes.

Globecomm: The solution was to use demand-assignment to allocate a pool of satellite bandwidth among the terminals. It's very efficient compared with traditional single-channel-per-carrier links.

Sangin: Then there was the challenge of the terminal. It had to be inexpensive, extremely rugged and able to operate from a car battery or small solar panel. We didn't want bells and whistles: we simply needed two voice lines and two Internet circuits. Hughes turned out to have the right terminal but they are produced in limited quantities. So we have had to be patient. We have ordered 1,000 terminals but so far have only 850 installed in the villages. Our goal is to have 2,000 in place by August 2012.

Globecomm: The technology works but, as always, isn't it the business model that determines the success of the project?

Sangin: Correct. We thought very carefully about how to make the Village Communications Network succeed in the context of a rural village. Our concept is a public-private partnership. We have put together a package for the phone that includes a satellite modem, antenna and receiver, everything that a user needs. The price is 100,000 afghanis or about US\$2,000. We sell the unit to a person in the village, who produces revenue from selling the voice services to villagers at an agreed price. The revenue is shared equally between Afghan Telecom for hub services and the villager who owns the phone. Part of that goes to pay the loan that makes the village phone so inexpensive to acquire.



Globecomm: How is it working?

Sangin: We are monitoring it closely. On average, the units are doing very well: \$700-800 per month, which is very good. At that rate, the phone is doing much more than providing telecom services. It is creating economic development in the village – directly for the man who owns it, and indirectly from the ripple effect of his prosperity and the improvements that communication brings to the village.

Globecomm: How hard is it for a local entrepreneur to get a phone and start up in business?

Sangin: It was definitely a logistics challenge to get the units out to these villages. We were not about to ask people to journey to Kabul for a phone. We resolved the problem by distributing the units through our network of government centers. Afghan Telecom takes the initial responsibility to train the owner for installation – which is quite easy – or actually installs the unit in the village, aligns the antenna and makes sure it works. If there are technical problems, the same office takes care of maintenance. But fortunately, the problems are few because the technology is so rugged.

Globecomm: These are challenging times in Afghanistan right now. The security situation is serious. How has this affected your work?

Sangin: We moved very fast in 2003 and 2004, with the help of international agencies and companies like Globecomm, to get networks into place and start delivering service. The Afghan people want these services very much. They need them in order to make progress in so many areas. Unfortunately, the security situation has worsened since then and particularly in the southern part of the country. It has made telecommunications development uneven: more developed in the north and less in the south. But we believe that the Village Communications Network will continue to grow. It is something that villagers own. We provide the unit to somebody in a village and it becomes an asset for everyone there. This makes our job a little bit easier. ■



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