

Publication: [Telecomasia.net](http://www.telecomasia.net)

Monthly Unique Users: 3,971

Date: 30th June, 2009

URL: http://www.telecomasia.net/article.php?id_article=14028

telecomasia.net

Global slump drives Asian telcos to network sharing

June 30, 2009

By Simon Kong, Omnix Software

telecomasia.net

With the current economic climate taking its toll around the world, mobile network operators are considering new tactics to improve customer service and reduce churn while also lowering costs. One idea that has struck a chord with operators worldwide is network sharing, which sees competitors partnering to lower their expenditure on infrastructure.

Network sharing can take many forms and may involve the sharing of either active or passive network assets. Active infrastructure sharing includes all the electronic components deployed by operators, such as microwave radio equipment, switches, antennas and transceivers for signal processing and transmission. Unfortunately, active infrastructure sharing has proven notoriously difficult to implement.

Meanwhile, passive infrastructure sharing refers to "dumb" network assets like towers, air-conditioning equipment, generators, technical premises and pylons. Even then, passive network sharing has the potential to deliver huge cost savings to Asian mobile operators by reducing both their opex and capex. Effective passive network sharing can reduce the number of new masts that operators need to deploy, while also spreading the cost of any new sites that do need to be created between multiple companies.

Yet, if there were no difficulties associated with network sharing, operators across Asia would already have instituted it. One problem is that the business case for network sharing remains to be proved and it is difficult to accurately predict when operators are not legally permitted to know the exact details of each other's opex.

In many Asian countries, the incumbent fixed line and mobile operators are either partially or completely government-owned, such as Telkomsel in Indonesia. Such operators tend to have a majority share in their country's network infrastructure. While Western operators would welcome network sharing agreements, government-linked operators in Asia want to have full control of their network infrastructure for fear of losing ground to these new competitors.

The rapidly expanding and lucrative Asian market also means that domestic operators do not need to give ground to foreign telcos in exchange for investment. For example, Business Week data show that China Telecom earned \$3.3 billion in profits last year, with total revenue of \$25.8 billion. This success has given many Asian operators the freedom to heavily restrict foreign investment in domestic networks.

However, network sharing in the Asian market saw an immediate boost with the rollout of 3G services in countries like China. Both Western and Japanese operators, who had already implemented 3G services in their home markets, were able to provide China with essential technology and experience and this allowed them to make in-roads into the Chinese market.

This has left many Asian telecoms regulators now facing increasing pressure from foreign mobile operators with lucrative 3G contracts for network infrastructure sharing in light of the deregulation of the telecoms industry. This situation is complicated still further by the strict laws in many Asian countries governing the ability of foreign organizations to own land.

Governments' lead needed

As with the issue of number portability, Asian markets will need governments to push the agenda forward and the incumbent operators will follow. Yet, Asian operators also face a number of technical challenges in implementing any network sharing solution.

Merging networks is made more complex for Asian operators because they will want to decommission a roughly even number of towers, so that one of them does not risk severely compromising their network capacity. The greater complexity of a shared network will also result in higher infrastructure management costs.

Asian operators will thus require bespoke asset management software that can process confidential information from both parties and provide the necessary answers based on undisclosed figures. This software needs to understand who is allowed to know what information, while also comparing the old opex costs with the new opex costs and the increased capex – thus allowing both operators to monitor the value of network sharing. This type of system necessitates that operators already possess some form of estates management software that can provide an accurate register of what their assets are. Asset management software can also be indispensable in advising the automatic planning tools that are used to calculate the optimum configuration for the new network structure and the order in which it should be reconfigured.

Network sharing may be a key way that operators can cope cost-effectively with the increasing demand on their networks. The Asia-Pacific region is forecast to account for about 33% of all mobile data traffic by 2013 due to the proliferation of wireless broadband-enabled laptops and mobile broadband handsets with higher than 3G speeds. A single high-end phone (such as an iPhone or Blackberry) generates more data traffic than 30 standard mobile phones, as data from Cisco's Visual Networking Index show. According to Gartner, smartphone sales in Asia Pacific have recorded a 2.3% sequential growth, reaching 7.5 million units in 2008.

Therefore, despite the obstacles to network sharing in Asia, the current economic climate and slowing revenue growth is likely to increase the incidence of operators participating in network sharing.

It is an attractive proposition: with passive infrastructure sharing, operators are expected to save close to 30% on capex and opex. Currently passive infrastructure account for about 60% of an operator's cost of doing business as Express Computer found. While the falling price of electronic components is lowering the cost of active infrastructure, rising property and material prices is increasing the capital cost of passive infrastructure.

As network sharing and outsourcing increases throughout Asia, operators will increasingly be able to focus more on branding and customer service to differentiate from the competition. By reducing the financial burden on Asian operators, network sharing can also accelerate the introduction of new services and facilitate the deployment of new networks, while lowering barriers to market entry and reducing call tariffs. This is, by any measure, a very positive step forward for subscribers.

Simong Kong is business development director for the Asia-Pacific region at Omnix Software.