Lessons from local council

By Kirill Reztsov

University of Melbourne economist Joshua Gans, writing in the journal Public Policy in 2007, theorised that instead of a national approach to broadband, local communities would be better at building the right internet infrastructure for their needs and means.

The Sunshine Coast Regional Council in Queensland has already rolled out an optical fibre and wireless network in a project called Connecting the Coast. In doing so, it has learnt valuable lessons that could be applied around the country.

The network consists of a 155Mb/s optical fibre cable following the train line from Brisbane with a 29km connection from Palmwoods to Maroochydore and a 5km connection to Cooroy, and seven wireless WiMax base stations. The cable serves major business centres, the hospital and the University of the Sunshine Coast, while wireless broadband covers more than half of the coast's small businesses and households.

Construction of the network was recently completed and telecommunications company Allegro Networks is now selling it to subscribers. The project was carried out as a public-private partnership funded by the council, its commercial partners, the university and a grant from the federal government's Clever Networks program. Allegro owns the wireless stations and operates the cable network jointly with the council and the university.

A worker installing an optical fibre conduit on Queensland's Sunshine Coast.

PHOTO: SUNSHINE COAST REGIONAL COUNCIL

The council had to build the network from scratch because it could not access optical fibre previously laid down by telecommunications companies. "There are fibres that exist across the Sunshine Coast but accessing them is not easy," the council's principal economic development officer for telecommunications, Michael Whereat said.

He believes the current telecommunications regulations are insufficient and should be overhauled to open up existing networks. This would allow more competition and avoid duplication of expensive infrastructure. "Australia does not have the luxury of being able to afford multiple telecommunications utilities," he said.

After having to dig up roads to put in the cables, the council is urging engineers to lay down telecommunications ducts whenever they build a new road or repair an existing one. According to the council, at least one 100mm wide duct with regular access pits is needed.

The council is starting to require developers to incorporate optical fibre in all greenfield developments. It has drafted a plan for a new town of 18,000 people called Palmview where residences will be equipped with optical fibre plus sufficient pits and pipes for future upgrades, as well as wireless coverage for mobile telephony and broadband.

Whereat said the network could be eventually expanded to include more of the region's schools, businesses and households. Optical fibre connections to each home would allow people to work and study remotely, he said. The network may also free up hospital beds as doctors could monitor patients in their homes. The fibres may also carry free-to-air and pay TV signals, eliminating the need for dishes and antennas.

One day the network may allow speeds of up to 1000Mb/s, which are already becoming available overseas, Whereat said. ■