



What Can We Learn From Asia?

One can come away from this month's exhaustive look at the international broadband scene with the thought that economic and regulatory conditions vary enough from country to country and region to limit the portability of ideas and business plans. One can also come away with a sense of amazing uniformity:

- Fiber is the "gold standard," common in Japan and Korea, aspired to by everyone, even if they can't come up with a good present-day business case.
- Technical standards for hardware and software are amazingly uniform. Yes, there is active and passive, but the packets are Ethernet and the protocols, wireless spectrum and management software are all the same. Compare that with cellular standards, even today.
- Fiber to the premises makes sense of green-field developments everywhere, because it allows higher bandwidth and lower maintenance costs with only a modest penalty in first cost.
- Cost per home passed has been cut in half over the past 18 months; the telcos forced vendors to standardize and placed big production orders to smooth the way. Standards-setting organizations like IEEE and ITU stepped up their pace. Construction companies got more efficient as they gained experience.

But what can American operators actually learn from other countries? For one thing, bypassing lower-income, working-class communities in favor of high-income areas may not make sense after all. In Europe and Asia, usage is higher in working-class areas. Why? There's more working at home. Less time spent commuting to a distant city. Working-class households in many regions are more likely to be multi-generational and larger. High-income suburban areas are also less dense. That means more fiber to lay, more expensive weather hardened terminations,

more territory to cover when the service truck has to roll.

In work-at-home communities, upload volume is the same (or slightly greater than) download volume. More and more video, audio, and gaming is peer-to-peer, contributing to that trend. The phenomenon probably won't survive the day when HDTV feeds will go to all three bedrooms in a family home or apartment.

MDU Friendly

Europe and Asia also lead in MDU-friendly technologies and strategies. They use a lot more microduct, little tubes waiting for fiber to be blown in. How little? As little as 3 mm (1/8 inch) in diameter. They have more diversity of customer premises equipment, and plenty of experience hardening it for extreme climates (if a box can survive a Norwegian winter, it should survive in New York.) They feel comfortable using existing Cat5 coaxial wiring within a large multiple dwelling unit structure or office complex, bringing fiber to the basement. They feel comfortable transmitting broadband signals on light beams and 5+ GHz radio waves.

No one organization can do it all. The Europeans and to some extent the Asians encourage partnering, both on technology and on projects. North American firms are involved in many of those technology partnerships, and the trend is increasing.

As for projects, consider Amsterdam. It's building a municipal network, open access. That sort of thing is common in North America, and would be even more common if the incumbent carriers wouldn't fight so hard against public investment even where they have little incentive to invest themselves. But there's more. Amsterdam has five corporate partners. Vienna is trying to use the same model.

Programming Ideas

And after all the fiber is in, what about

programming? Japan and Korea have a great deal of youth-oriented programming, it is true – educational materials, interactive gaming, socializing on line. But Asia and Europe are also paying more attention to new needs. If the elderly are to live at home, for instance, they need quicker and less expensive access to nurses and to monitoring technology. Two-way high-def video over broadband does the job.

Europe and Asia, in less homogeneous language environments, also push for multilingual, multicultural programming. The market here for Spanish programming is strong. But the majors here have cut back on international programming, to take an example, even as the number of immigrants here has grown and as black and Hispanic residents have gained wealth and buying power. Would a middle-class black family really be totally uninterested in African events, and totally absorbed with personality TV? Yes, say the major networks and cable news shows... as their audiences shrink. Not in Europe and Asia!

Many smaller countries, worried about having their cultures submerged in a flood-tide of North American English, will indeed run American programming such as the History Channel's group, and then encourage viewers to upload their own histories to the common horde.

None of this adds up to the one "big thing" that will make a company's fortune. But taken together, it adds up to a feeling that even 100 Mbps won't be enough in only another five or ten years. As the activists used to say, "Think globally, act locally!" ♦

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