

First Person

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'Father of broadband', South Korea



South Korea is a world leader in broadband deployment. What were the principal plans to achieve this and how were they modified over the course of time?

From 1994, the Korea Information Infrastructure Development Plan (a 3 phase plan) was established and implemented; this was the government led, long-term master plan and had a vision to 'provide broadband access for the whole nation at a reasonable price by 2015'.

Those objectives were completed in 2008, which was 7 years ahead of the timeline with 'real broadband' universal access becoming available to 99.9% of the whole country at relatively the same price throughout all areas of the country.¹

In addition, policies continue to be supplemented to reflect changes in society and the technological environment in order to prepare for the expansion of broadcasting-communications convergence services. The *Broadband Convergence Network Construction Plan (BcN)* to provide connection speeds of over 50Mbps was formulated in 2004, and this

¹ Before the broadband network was built, South Korea enjoyed Internet penetration one thirtieth of that of the United States in 1990. In 1999, South Korean ADSL retail charges were around USD 40 per month. In 2009, 100Mbps access cost USD30 per month. Cheapest tariffs for baseline speeds are approximately USD10 per month.

forms the basis of delivering future converged services.

From 2009, the FN2020 (Future Network 2020) plan was established to prepare for next generation network needs.

How did Korea ensure a favourable policy climate - generally considered a key area?

In the case of Korea, during the early stages of broadband construction, government agencies and public organizations started investing and creating demand first with private sector investment. After a free market was formed, the government focussed its investment into rural and agricultural regions that were neglected previously due to low profitability, and promoted broadband construction as a universal service throughout the country.

Due to changes in the social and technological environment, updates to ICT policy were inevitable. At the beginning, it was government-driven but with the onset of free market, the emphasis became one of lowering entry barriers for new service providers.

At the same time, *Broadband Quality Evaluation and Disclosure* and *Broadband IT Building Certification* plans were introduced in order to promote competition in the private sector. In

addition, as mentioned before the BcN and FN2020 plans were also established.

In this case, all relevant stakeholders realized that much like water supply, electricity and roads in an industrial society, broadband in an information society is more than just a tool for communication, it is a social asset that actually comprises a nation's core functions, provides many services and should be made available to all members of society.

What have been the big picture lessons learnt in the Korean experience? Would you advise other countries to do the same?

First, it needs strong leadership from the very top level of government. Without that leadership, it may be difficult to see a broadband network as a national priority. In the case of Korea, this will result in the Korean government establishing the Presidential Informatization Promotion Council and the Ministry of Information and Communication (MIC) which included broadband as a major national policy.

Second, it needs a social consensus to realize that broadband is a social asset to be used by all members of society - the population as a whole. In Korea, we made a collaborative framework consisting of representatives from industry, government,

academia and research institutes and we developed policies for broadband construction. The Presidential Informatization Promotion Council deliberated and co-ordinated the relevant policies. This process made it possible to form a national consensus. In terms of funding, the government was able to secure the necessary funds for the broadband plans by laying aside income from frequency allocation, and also by appropriating part of the turnover of telecommunication operators as R&D funds according to the Framework Act on Informatization 1995.

Third, the Korean government needed to establish a virtuous cycle through government investment and demand creation. The government invested in the building of broadband networks for the public sector in 1995 when broadband services began to be deployed, creating an initial demand that naturally led to the private sector's investment in broadband. Later, the government adopted a low-interest loan program to help build broadband networks in under-served areas.

Another stimulus to engage the private sector was to allow some telecom service providers to acquire other players in exchange for their promise to deploy broadband networks to rural villages. As for the rural communities with less than 50 households, a matching-fund

programme, co-financed by the central and local governments was introduced as those areas in the past did not benefit from private sector involvement for broadband investment due to perceived low profitability of operations. The government also contributed to creating demand for broadband networks by working together with the private sector to develop pilot programmes such as e-government, e-learning and e-health services.

We made specific efforts with digital literacy for vulnerable groups who lack access to IT. In 2000, we wanted to make 10 million people digitally literate under the slogan "The world's most skilled computer users." We had another programme called "Internet education for a million housewives". These kind of programmes made their mark - digital literacy for underserved groups reached nearly 70% in 2009, compared with 45% in 2004.

Finally, free market competition should be set up for telecom service providers to compete and thrive. We continued to drive adoption of free competition in this market, and the removal of entry barriers to operators, whilst we openly evaluated broadband quality and disclosed these results to the public. We encouraged voluntary quality competition between providers and affordable flat rate usage fees.

In terms of international development, I would say that each country probably needs to implement diverse policies on the basis that its situation will always be unique, particularly in terms of the current status of ICT take-up.

What do you think the communications and broadband landscape will look like in 2 years' time?

Convergence of communication and broadcasting will accelerate. As communication and broadcasting converge, consumers will be able to receive the best quality services at reasonable and affordable prices without distinction between communication and broadcasting services. In addition, vertically-integrated service providers will be able to save costs and provide consumers with high quality converged services that are affordable.

Dr Seang-Tae Kim is President of the National Information Society Agency (NIA), South Korea, which has been designated the Agency responsible for most of the Korea broadband plan. He is generally regarded as the Father of Broadband in South Korea and was actively engaged in promoting the idea of a national broadband plan from the early 1990's in the country. A recipient of many awards, he is also a Broadband Commissioner at the ITU/UNESCO Broadband Commission for Digital Development.

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