

## **Natioanl Government as an Incubator for Broadband Distribution in South Korea**

**GeunHo Lee (u-City Forum)**

South Korea is the world's most wired nation. There are 12 M high speed internet subscribers and 37 M mobile phone subscribers out of 48 M total population. Many households have broadband internet connections at the speeds of 10 Mbps or higher.

Koran government deserves receiving most of the credit for this success. Since the first master plan for informatization promotion has been established in 1996, the government worked closely with telecom operators on providing the communication infrastructure (155 Mbps ~ 5 Gbps) that connects 144 main cities in 2000 to deliver broadband services to the citizens. After the government announced that CDMA would be the standard for mobile services, SKT which is one of three major mobile telecom operators launched the world first commercial CDMA service in January 1996. Since then, Korea became a country with one of the world's highest mobile phone penetration rates.

The Korean government's continuing deregulatory telecommunication policy facilitated the rapid penetration of broadband internet service in Korea. The Korean government provided an environment for broadband growth by privatizing Korea Telecom and encouraging competition between different telecom operators. This lowers the service prices while delivering high quality internet services. Even rural areas could have broadband connections. Government also significantly invested to R&D of key technologies such as TDX exchange systems during mid 80's.

In addition to government's active policy support and investment, there are some aspects of Korean society which make the most wired country possible. Between 1998 and 2002, over 25,000 PC Roms emerged, providing the enefits of broadband to young adults; the place to play and enjoy gaming and multimedia with friends. Players want to upgrade the speed of their broadband connection to ensure the best level of play. Strong collaboration relationship between the public and private sector was also one of the key success factors.

Following the second master plan for informatization promotion -“e-Korea vision”- in 2002, the Korean government announced the third master plan for the broadband IT Korea -“u-Korea vision” - in 2004.

The u-Korea vision is looking for the next stage digital revolution -ubiquitous computing and communications era- that people can communicate and access information anywhere, anytime and anydevice. To support the u-Korea vision, Korean government launched a new national ICT strategy -IT839 initiative- outlining ambitious goals for eight services, three infrastructures and nine technologies. Under the IT839 initiative, the government encourages private sector’s investment and participation.

Highlight in IT839 strategy is the establishment of broadband convergence network (BcN) infracture and the deployment of wireless broadband Internet (Wibro) service using the 2.3GHz frequency band and based on the same standard proposed for WiMax.

BcN is the government`s most notable attempt to create an enhanced digital environment to keep pace with the new trends of media convergence. BcN will provide high speed connections at speeds of 50 Mbps to 100 Mbps for voice, data and video on a single platform. By successfully integrating the broadband convergence network with advanced end-user applications, Korea will be at least five years ahead of other developed countries in ICT based services.

WiBro service is for broadband internet connections with mobility. It is jointly developed by Electronics and Telecommunications Research Institute (ETRI) and Samsung Electronics. WiBro allows users to work with a word processor or watch a movie while trucking along at near-highway speeds. WiBro promises much higher data rates than one can get from the third-generation (3G) cellular system -an initial rate of 1 to 3 megabits per second, versus the 384 kilobits per second typical in advanced mobile phone networks today. The Korean government has already set regulatory guidelines for commercial WiBro services, and the telecom giant KT and SKT will be in full deployment of the service by mid-2006.

With the succesful launch of the BcN and WiBro, South Korea will be the most digitally dynamic society triggering drastic changes in a wide spectrum of social and economic activities.