

I. Next-Generation Mobile Communications

Next-generation mobile communications is a technology that enables transmission of a wide array of high-quality multimedia information at high-speeds to standstill users or those on the move using mobile and satellite communication networks. It is a comprehensive concept that encompasses an upgraded IMT-2000 service, WiBro service, broadband wireless LAN and next-generation mobile access technology.

The next-generation mobile technology will enable high-quality, high-speed multimedia transmission of all kinds and type; Korea hopes to secure the world's best mobile communications technologies by 2007

Korea will develop a 30Mbps WiBro service and a 50Mbps WiBro service using smart antenna technology. At the same time, industry and research institutes will work together to develop wireless transmission technology for 3G Evolution and technologies for base stations and terminals. In doing so, Korea plans to secure the world's best mobile communications technologies by 2007.

Korea also plans to develop High-Speed Downlink Packet Access(HSDPA) Time Division Duplex(TDD) prototypes for use in hot spots as a dual mode of the HSDPA Frequency Division Duplex(FDD) system by 2006. It will also develop components for next-generation portable handheld devices to deliver user-friendly multimedia services by 2005. Development will also commence on prototypes of low-power Radio Frequency Intergrated Circuits(RFIC) solutions for portable handheld devices, RF Micro Electro Mechanical Systems(MEMS) duplexers, switch elements, and wireless security chip sets. Development will proceed according to lego-style open technology with plug and play capabilities.

II. Digital TV & Digital Broadcasting

Korea aims to become one of the world's best digital broadcasting nation and provide the highest-quality, cutting-edge services anytime, anywhere, with any devices. The nation aims to expand coverage of terrestrial DTV services across cities and towns by 2005, and start nationwide terrestrial DTV broadcasting services in 2006. DMB technology is designed to offer voice, video and data services on the move. One-way DMB transmission and terminal systems will be available by 2004 with the goal of commercializing interactive DMB transmission and terminal systems by the end of 2006.