Aiming at Successful Introduction of the Next-generation Network

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In November 2005, under the title “Promoting NTT Group’s Medium-term Management Strategy”, NTT announced the roadmap for building the next-generation network and developing ubiquitous broadband services. An important item is to begin field trials in the second half of fiscal 2006. The aim is to verify the technical feasibility of the next-generation network in a real network environment and to solve any problems that are identified. NTT Information Sharing Laboratory Group has been developing the technologies necessary for the next-generation network, from network architecture to element technologies, and regards these field trials as an important step towards the integration of all its R&D results and the implementation of near-commercial systems. The laboratories will have to harness all their technical capabilities to successfully complete the field trials, which will be watched closely to see if they prove their worth.

While we are taking the fullest advantage of the outstanding technologies available to us both inside and outside the laboratories to build the next-generation network, there are still issues, important to network users, that must be verified in the field trials. Let me elaborate on two of them.

This first issue is quality. Dynamic quality management from a network-wide perspective is essential to providing a level of quality that is satisfactory for users of different types of communications, ranging from Internet access through speech communication to TV-quality and even high-definition-quality video communication. We will verify the effectiveness of dynamic quality management and also develop new technology for broadband service quality management. This technology will be developed from the voice quality management technology that has been developed and refined over a long period in the operation of the telephone network.

Network cost reduction is also a critical issue. To achieve the migration of 30 million users or about half the current telephone users to the new optical IP network to be built, we need to keep communication charges affordable. They need to be set at a level that recoups not only the up-front cost of building the network but also the recurring cost of operation and management. In November 2005, NTT Access Service Systems Laboratories announced the development of an “optical fiber cord that can be easily bent” and an “optical wiring pre-installation kit for FTTH”. These technologies are very promising for making affordable communication charges a reality. In the field trials, we will apply these technologies and also verify other means of reducing the cost of building, operating, and maintaining the entire network.

We believe that the field trials will accelerate our R&D initiatives aimed at the successful introduction of the next-generation broadband network services.

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