

Section 3

Upgrading Information and Communications Networks

1. Promoting Improvement of the Network Infrastructure

The Telecommunications Council of the MPHPT organized its second interim report in August 2002 about the "ideal Internet policies in the 21st century." In the second report, the council created roadmaps toward shifting to IPv6 networks for the respective entities including ISPs, households, companies, and the government, and presented the need to implement demonstrative experiments in model environments so as to accelerate the shift to IPv6.

As a system improvement measure for further diffusion of IP telephones, the MPHPT partially amended the telecommunication numbering regulations in June 2002 in order to enable use of 11-digit numbers starting with "050" as numbers for dialing from general subscriber telephones to IP telephones. In response to the enforcement of the amended regulations, applications for the number allocation started in September of the same year. At the same time, the MPHPT launched the "Study Group on Telecommunications Number" in March 2002 to examine problems that can be assumed when providing IP telephone services and a desirable method of number management in Japan among other issues.

Japan presented its vision of the fourth-generation mobile communications system, which follows the third-generation mobile communications system, to the International Telecommunication Union (ITU). Japan's vision was adopted as a draft recommendation by the ITU in February 2003 and is planned to be officially approved in June 2003.

With regard to wireless Internet access, there are growing expectations toward enhanced development and introduction of new systems that use radio. Thus, in order to promote the introduction and upgrading of wireless LANs, the MPHPT amended the ministerial ordinances related to the 2.4 GHz and 25/27 GHz spectrums in February 2002 and the 5 GHz spectrum in September 2002.

Furthermore, the MPHPT takes actions regarding Internet governance and measures to further diffuse intelligent transport systems (ITS).

2. Promoting Advances in Broadcasting

The digitization of broadcasting leads to many merits for audiences and allows for a drastic saving in frequen-

cies used as compared to analog broadcasting, making it possible to respond to the new need for frequencies such as is required for mobile communications.

The MPHPT is taking various measures to prepare the environment toward introduction of terrestrial digital television broadcasting. In order to emit radio waves for digital broadcasting under the crowded frequency circumstances in Japan, there is a need to change the frequencies of existing analog broadcasting in some locations prior to the shift to terrestrial digital broadcasting. Accordingly, the Radio Law was partially amended in July 2001 with the aim of dealing with the expenses necessary for changing the frequency used for analog broadcasting through introduction of a Spectrum User Fee System. In the three major regions (Kanto, Kinki, and Chukyo), the MPHPT launched measures on the senders' side in August 2002 and measures on the reception by individual households in February 2003. In September 2002, it enacted a licensing policy for radio stations that were to conduct terrestrial digital television broadcasting, and granted pre-permits in April 2003. The broadcasters are scheduled to start terrestrial digital broadcasting services in December 2003. Furthermore, the MPHPT provides tax benefits and financial support to broadcasters whose implementation plan has been certified under the Advanced Television Broadcasting Facility Development Promotion Temporary Measures Bill in order to encourage establishment of facilities for conducting terrestrial digital broadcasting.

3. Convergence of Communications and Broadcasting

Digital broadcasting, which is highly compatible with the Internet, allows easier distribution of conventional broadcast contents on various media other than broadcasting, particularly through a combination with the IPv6 Internet, expanding the possibilities for new services that converge communications and broadcasting. Therefore, the MPHPT grants subsidies to private developers of technologies used for services that converge communications and broadcasting and establishes telecommunication systems for common use of such developers under the Promoting the Development of Technology for the Convergence of Broadcast and Telecommunication Act enacted in November 2001, so as to support developers of such technologies and to accelerate/drive development of services that converge communications and broadcasting.

In fiscal 2002, a test bed that links facilities in Osaka City and Okayama City was established and operated for demonstrating the effectiveness of convergence technologies.

Furthermore, the rapid progress in the widening of bandwidths through the use of communications satellites and optical fibers in recent years has enabled use of broadband telecommunications circuits of carriers not only for communications, but also for broadcasting. Thus,

with the aim of responding to such increased convergence of transmission lines for communications and broadcasting, the Laws Concerning Broadcast on Telecommunications Services, which provides for broadcasting that utilizes telecommunications services, went into force in January 2002. In March 2003, cable television broadcasting through ADSL was launched based on this law.