

## Section 1

# Realizing a Society of Advanced Information and Communications Networks

### 1 Promotion of the national ICT strategy

Recognizing that the first-phase targets of the ICT strategy are in the process of being achieved, the IT Strategic Headquarters evolved the strategy into the second phase—the expansion of IT use—and in July 2003 formulated e-Japan Strategy II. For the realization of an “energetic, worry-free, exciting, and more convenient” society, e-Japan Strategy II takes up seven areas for leading efforts including medical care, food, and administrative service.

In an effort to securely implement e-Japan Strategy and e-Japan Strategy II, the IT Strategic Headquarters has formulated the e-Japan Priority Policy Program every year, clearly indicating the concrete measures, the competent ministries and agencies, and the time limit for the implementation. In June 2004, the e-Japan Priority Policy Program - 2004 was drawn up. The e-Japan Priority Policy Program - 2004 has two aspects: a priority policy program to ensure the achievement of the 2005 goals (last program) and a priority policy program to serve as strategic steps for goals in 2006 and beyond (pre-program). Furthermore, since 2005 is the year for attaining the goals of the e-Japan Strategy, the IT Strategic Headquarters laid down the IT Policy Package - 2005 in February 2005 to put forth the last spurt from a user perspective without slowing down the efforts to date. This package mainly contains measures in fields familiar to people’s lives, such as administrative service, medical care, and education.

### 2 u-Japan Policy

In order to study measures and challenges toward achieving u-Japan, the MIC established the Policy Roundtable for Realizing a Ubiquitous Network Society in March 2004 and compiled the “u-Japan Policy” in December of the same year.

The basic concept of the u-Japan Policy stands on the following three principles.

First is the development of ubiquitous networks. While conventional infrastructure development had centered on wire communications, a shift from narrowband to broadband such as DSL, CATV, and optical fiber, the u-Japan Policy aims at building seamless ubiquitous networks where users need not be conscious of whether the communication is wired or wireless.

Second is advanced use of ICT. Conventionally, use of ICT was often intended for pioneering digitization or boosting up digitization wherever lacking. However, the u-Japan Policy focuses on using ICT to resolve social problems.

Third is upgrading an enabling environment. The spread of ICT to all areas of daily life could further increase concerns and obstacles that are already emerging in the cyber society and generate new unexpected problems. In order to clear these problem in advance, the u-Japan Policy includes drastic measures in the area of use environment.

Through implementation of the policy based on these three principles, the u-Japan Policy aims to achieve a “value-creating” society where ICT penetrates every corner of life like grassroots and various new values are generated through creative ICT use.

## Section 2

# Development of Information and Communications Policies

### 1 Development of Telecommunications Policies

#### (1) Study on ideal method of calculating connection charges from fiscal 2005 onward

The diffusion of mobile phones and rapid rise of IP phones have dramatically changed the environment surrounding fixed line telephones, such as the considerable and continuous decrease in the traffic from fixed line telephones. In light of this situation, the MIC consulted

the Telecommunications Council in April 2004 about an ideal method of calculating connection charges from fiscal 2005 onward. In response, the council submitted a report on the calculation method of connection charges and the handling of the non-traffic sensitive (NTS) costs (the costs that arise irrelevant to the amount of traffic), among other matters.

Based on this report, the MIC revised the regulations for interconnection charges and started applying the new connection charges in April 2005.

### **(2) Study on ideal basic monthly charges and installation fees**

Upon consultation with the Telecommunications Council in April 2004, a study was also conducted on the ideal basic monthly charges and installation fees in order to examine the handling of NTS costs. The council compiled a report on ideal basic monthly charges and installation fees among other matters in October of the same year. Based on this report, NTT East and NTT West revised their basic monthly charges in January 2005 and their installation fees in March of the same year.

### **(3) Study on the ideal Universal Service Fund System**

The Universal Service Fund System was introduced in June 2002 to ensure provision of telecommunications that are essential for national life throughout Japan. It had been decided from the beginning that the system should be reviewed about two years after its introduction, with necessary measures to be taken based on the results. Since then, the number of mobile phone subscribers has exceeded the number of fixed line telephone subscribers and the use of IP telephones has rapidly become widespread. In addition, competition in the telecommunications field is likely to further intensify in the future due to the expected growth of new fixed-line telephone services called chokushu-type services, in which subscribers call without using NTT's switching network, and the reduction in the basic monthly charges and the installation fees of NTT East and NTT West. Against this backdrop, in November 2004, MIC requested advice from the Telecommunications Council on future policies for an ideal Universal Service Fund System, including issues such as the scope of universal service, the method of calculating the cost for providing universal service, and the method of financing this cost.

### **(4) Implementation of the competition review in the telecommunications field**

The MIC started a measure called "the competition review in the telecommunications field" in fiscal 2003 in order to accurately understand the competition status of the telecommunications field, which is becoming ever complex with the introduction of IP and broadband networks, and to reflect it in the policy. The competition review in fiscal 2004 covered not only "Internet connectivity" and an "intra-company network," which had been subject to the fiscal 2003 review, but also "mobile communications" and "IP telephones" for analysis and evaluation. Since increased convergence of these services would affect not only terminals but also network configurations, the MIC analyzed and evaluated the competition status while watching the future relationship among the three services—broadband, mobile phones and IP telephones.

### **(5) Dispute settlement between carriers**

The telecommunications field is seeing the occur-

rence of complicated disputes between carriers in line with the advancement/diversification of services and increased use of IP networks. Therefore, the Telecommunications Business Dispute Settlement Commission presents flexible and reasonable resolutions for individual dispute cases from the viewpoint of the public benefit status of telecommunications services and user protection even if there were no existing rules. Furthermore, when the commission finds that rules have yet to be developed in the course of dispute settlement or deliberation of matters consulted on by the Minister for Internal Affairs and Communications, it recommends to the minister that new rules be developed, as well as expects the minister to develop new rules based on precedents accumulated by the commission. The commission processed 37 cases and made two recommendations to the Minister for Internal Affairs and Communications by the end of fiscal 2004.

Such formal dispute settlement procedures have accomplished certain results, but in order to enhance the system for offering information on a dispute settlement prior to entering such formal dispute settlement procedures and to provide appropriate advice to telecommunications carriers that come to seek opinions on various matters, the commission opened the "Telecommunications Business Dispute Settlement Consultation Desk" in December 2004, and offers appropriate suggestions on dispute settlement means.

## **2 Development of broadcasting policies**

### **(1) Promotion of digital broadcasting**

The digitization of broadcasting will dramatically change the conventional viewing mode where viewers received one-way services, and generate a viewing style in which people, or viewers, actively take part in the service. By providing a wide array of advanced services that could not be provided through conventional broadcasting, the digital broadcasting enables various viewing modes that could not have been imagined in the analog technology phase, as well as significantly improves the usability of the radio spectrums, which are people's common resources, and opens up the possibility for yet more advanced use.

In order to realize a complete shift to digital broadcasting in 2011, the MIC is promoting digitization of all broadcasting, while coordinating with the National Conference for Promotion of Terrestrial Digital Broadcasting.

### **(2) Advanced use of terrestrial digital broadcasting in the public service field**

The MIC sought advice from the Telecommunications Council on ideal future use of terrestrial digital broadcasting in a wide range of fields, challenges and solution measures toward achieving such use, and the role that should be played by administration in January 2004, and received an interim report in July

of the same year. In response to this report, the MIC plans to construct a model system assuming advanced use of terrestrial digital broadcasting, and implement pilot projects for developing new services that utilize the advanced functions of terrestrial digital broadcasting, such as broadcasting for mobile terminals and server-type broadcasting.

### **(3) Addressing various challenges pertaining to digitization of broadcasting**

It is expected that advanced use of a digitized broadcasting infrastructure, development of new services in collaboration with sophisticated information and communications networks, enhancement of ubiquitous environment for using broadcasting, and use of contents such as broadcast programs under a digital environment will all make smooth progress, and that broadcasting will greatly contribute to increasing convenience in people's lives, constructing a vigorous economy and society, and creating new culture through its digitization. Under such an environment, the MIC set up the Study Group for the Development of Digitization and Broadcasting Policy in July 2004, and examines the development of digitization and new broadcasting services, public broadcasting in the age of digital broadcasting, and broadcasting contents in the digital age, so as to smoothly shift to digital broadcasting and develop broadcasting that can precisely meet the diverse needs of the people/viewers.

### **(4) Future of radio broadcasting in the digital age**

While many local stations face severe business conditions amidst rapid changes in the environment surrounding terrestrial radio broadcasting, test broadcasting for practical application of digital radio broadcasting was launched in Tokyo and Osaka in October 2003, and expectations are growing for digitization of terrestrial radio broadcasters. In light of this situation, the MIC has been studying the basic role of terrestrial radio broadcasting in the digital age, measures for the development of a business model for terrestrial radio broadcasting in the multimedia and digital age, and the future of terrestrial radio broadcasting that takes the above into consideration at the Consultative Group on the Future Image of Radio Broadcasting in the Digital Age since September 2004.

### **(5) Review of the restriction of foreign investment at broadcasting stations**

Terrestrial broadcasting, using public radio spectrums which are national assets, is finite and scarce in nature, and plays a large role in conveying information that is indispensable to people's lives at times of disaster, etc. It is even positioned as a designated local public institution in the Disaster Measures Basic Law.

In response to the changes in situation in recent years, such as an increase in incoming investment in Japan and rapid changes in the styles of shareholding and capital contribution, the MIC submitted a bill par-

tially amending the Radio Law and the Broadcast Law to the 162nd session of the Diet in April 2005 in order to introduce regulations on indirect investment in addition to the current regulations on direct investment with regard to foreign investment in terrestrial broadcasting.

## **3 Promotion of policies concerning effective radio spectrum use**

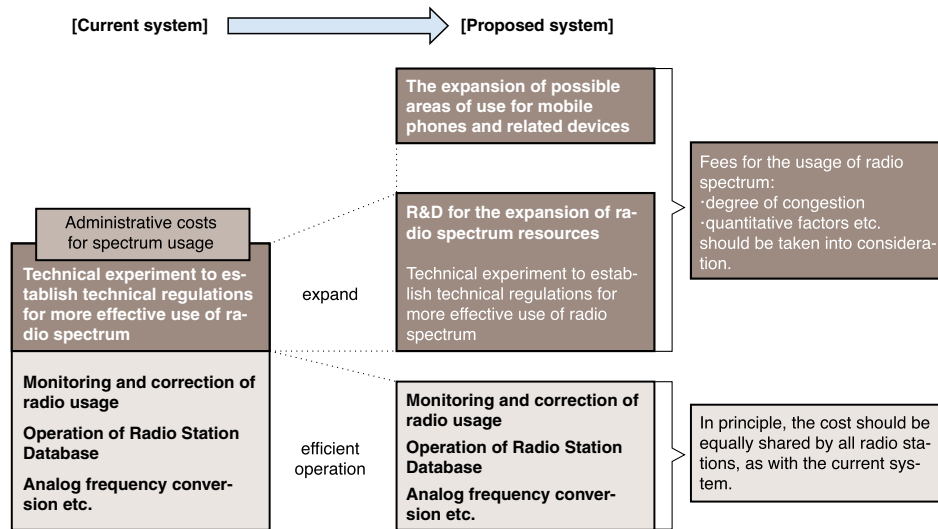
In order to build a wireless broadband environment, it is essential to enable the use of large amounts of radio waves for mobile communications systems, wireless LAN, and other core elements of the environment. Therefore, MIC formulated and released the "Guidelines for Radio Spectrum Reallocation" in October 2003, setting forth the basic concepts of the radio spectrum reallocation. In this policy, MIC indicates its plan to examine reallocation to secure a spectrum of about 330 to 340 MHz in bandwidth, mainly in the 1.7 GHz band and 2.5 GHz band, for mobile communications systems in the medium term (within five years).

In addition, the Radio Law was amended in 2004 in order to introduce a benefit system for existing radio spectrum users whose frequency use will come to an early end to assist with expenses that normally arise when the said period of use comes to an early end, from the viewpoint of facilitating prompt frequency reallocation.

With regard to wireless systems for joint use such as high-output outdoor wireless LAN, the MIC implemented deregulation and introduced a post-check registration system in place of the existing pre-check licensing system, while maintaining the spectrum order. With the introduction of the registration system, it becomes possible to register radio stations with the same mode of use in a batch while radio stations had to be individually licensed based on detailed information in the past. In addition, individual radio stations can be freely established based on registration (reporting detailed information *ex post facto*). In this manner, this revision will dramatically expedite and simplify the procedure for opening a radio station, and is expected to promote free use of radio spectrums.

With respect to the Spectrum User Fee System, more than 12 years have already passed since its introduction, and circumstances surrounding radio spectrum user fees have dramatically changed, including development of businesses that use radio spectrums for such devices as mobile phones or wireless LAN. Therefore, the MIC examined the revision of the Spectrum User Fee System at the Study Group on Policies Concerning the Effective Radio Spectrum Use, and based on the proposals by the study group in October 2004, submitted a bill to amend the Radio Law to the 162nd session of the Diet in February 2005 (**Figure 3-2-1**).

Figure 3-2-1 Review of the Spectrum User Fee System



## Section 3

### Upgrading Information and Communications Networks

#### 1 Promoting improvement of the network infrastructure

##### (1) Development of advanced infrastructure befitting a frontrunner

The MIC has implemented demonstration tests on a shift of the whole Internet infrastructure from IPv4 (Internet Protocol version 4) to IPv6 since fiscal 2003 (Internet Protocol version 4) to resolve problems in network operation and secure interconnectivity between various equipment, and formulated a model for a smooth shift to IPv6. In addition, the MIC also engages in promoting the shift to IPv6 on a global scale by sending out the results of these demonstration tests to other countries and contributing to the IPv6 Ready Logo program, which is an international effort to certify compatibility with IPv6 specifications. In fiscal 2005, the MIC plans to promote full-fledged diffusion of IPv6 based on the achievements to date by investigating attractive applications that use the characteristics of IPv6, such as a facility management system, in cooperation with local governments.

##### (2) Study on construction of next-generation network infrastructure

The MIC has been convening the Study Group on Next-Generation IP Infrastructure since February 2004, and compiled the first report in June 2004. The report pointed out the current situation where Japan's backbone

traffic is centralized in Tokyo, and proposed countermeasures against a future surge in traffic, such as the need for the development and commercialization of technology for reinforcing networks, the need for efforts/technical development on traffic control and quality assurance, and the need for examining technical challenges in decentralizing traffic, in order to strengthen the next-generation IP infrastructure. Based on this report, the MIC launched "R&D on the Next-Generation Backbone Circuit" in fiscal 2005 and has been promoting this effort, while it also continues to examine various challenges related to next-generation IP infrastructure development.

##### (3) Management of IP addresses and domain names

Due to the increasing penetration of the Internet in society and the economy worldwide, including in developing countries, and the growing importance of the Internet, wide-ranging challenges related to the Internet including an ideal international management framework for domain names and IP addresses are currently being discussed at the Working Group on Internet Governance (WGIG) of the United Nations. The WGIG, of which establishment was requested of the U.N. Secretary General during the first phase of the World Summit on the Information Society (WSIS), has been making active efforts since its establishment in November 2004 in order to contribute to the discussions in the second phase of the WSIS. The MIC is proactively participating in