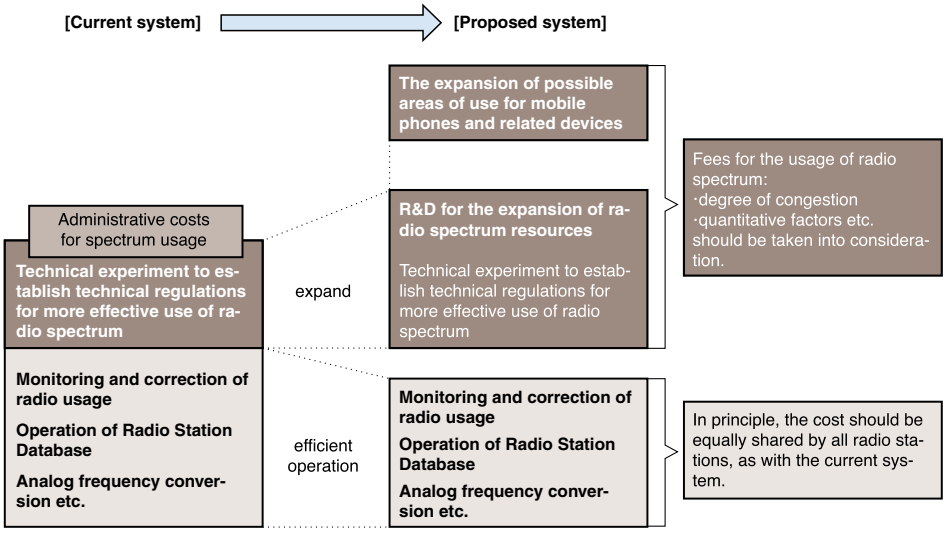
Figure 3-2-1 Review of the Spectrum User Fee System



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 (Internet Protocol version 6) since fiscal 2003 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

international discussions, mainly in the WGIG.

(4) Study on mobile phone number portability

From November 2003 discussions were held by the MIC's Study Group on Mobile Number Portability, which compiled a report in April 2004. In response to this report, the MIC created and published "Guidelines Concerning Introduction of Mobile Number Portability" in May of the same year.

(5) Efforts toward upgrading mobile communications systems

In response to the report by the Radio Regulatory Council in March 2005 on formulation of technical standards for the high-power passive tag systems using the 950 MHz band, the partial amendment of the Rules for Regulating Radio Equipment concerning frequency assignment, and the draft partial amendment of the Frequency Assignment Plan, the MIC amended the relevant ministerial ordinance, etc. in April of the same year. With this amendment, RFID tags became usable not only in the conventional 135 kHz, 13.56 MHz, and 2.45 GHz bands, but also in the 950 MHz band, which allows relatively long-distance communications and has the potential for new usage.

(6) Upgrading wireless access systems

Since the 5 GHz band frequency was globally allocated for wireless access systems at the World Radiocommunication Conference (WRC-03) in July 2003, the MIC consulted with the Telecommunications Council on the technical requirements in October of the same year in order to institutionalize the use of the new band, and received a partial report in November 2004. Based on this partial report, the MIC sought advice from the Radio Regulatory Council in April 2005 on the draft of the necessary stipulations. The MIC received the advice in the same month, and based on that advice, it institutionalized the use of the new band in May of the same year.

(7) Promoting intelligent transport systems (ITS)

As a measure to promote the diffusion and upgrade of ITS, the MIC promotes dedicated short-range communications (DSRC) in cooperation with the DSRC Forum Japan (Secretariats: Association of Radio Industries and Businesses (ARIB), Highway Industry Development Organization (HIDO), and Japan Automobile Research Institute (JARI)), the ITS Info-Communications Forum (Secretariat: ARIB), the Smartway Project Advisory Committee, and the Study Committee for Practical Application of Smart Plates (Secretariat: Ministry of Land, Infrastructure and Transport). At the same time, the MIC diffuses/develops ITS in local communities, and provides international cooperation by using Japan's ITS technology in Asia, particularly in China.

In terms of R&D of ITS, the MIC engaged in "R&D of Internet ITS" until fiscal 2004, and plans to launch and promote "R&D of ubiquitous ITS" in fiscal 2005 in cooperation with the Study Group for Promotion of Advanced Safety Vehicles (ASV) and autonomous movement support projects in order to achieve a ubiquity for ITS.

2 Promoting advances in broadcasting

(1) Promoting digitization of terrestrial broadcasting

In the three major metropolitan regions, the MIC began countermeasures for transmitters in August 2002 and countermeasures for individual households and others in February 2003. It also implements countermeasures in other areas, and steadily promotes the respective measures according to the plan, launching countermeasures in 353 regions and completing countermeasures for about 2.3 million households (about 54% of the total) by the end of fiscal 2004.

Under the cooperation of the National Conference for Promotion of Terrestrial Digital Broadcasting and Local Councils to Promote Terrestrial Digital Broadcasting, the MIC drew up the concrete target time for starting broadcasting at the prefectural capitals nationwide, the implementation of which is planned by the end of 2006, and published the result as a roadmap for the opening of new terrestrial digital television broadcasting stations (prefectural capitals).

(2) Upgrading satellite broadcasting

Based on the report by the Study Group on Protecting Personal Information in the Field of Broadcasting and Satellite Broadcasting in the Age of IT compiled in February 2005, the MIC announced the results of the invitation to comment on applying the Law Concerning Broadcast on Telecommunications Services to the use of left-hand circular polarization that is transmitted from communications satellites at 110 degrees east longitude in March of the same year, and plans to make necessary institutional improvements.

(3) Upgrading cable television

As the cable television networks become more and more sophisticated, new modes of services such as FTTH have been started. In light of this situation, the MIC sought advice from the Telecommunications Council on the technical requirements for cable television networks mainly based on optical fiber cables as "technical conditions for improving cable television networks with FTTH" in July 2004 in order to smoothly provide the transmission characteristics specific to optical fiber and services that converge broadcasting and communications, and received a report from the council in March 2005. The MIC plans to formulate technical standards based on the report.

3 Convergence of communications and broadcasting

On the basis of the "Law Concerning Promotion of the Development of Technologies for Communications and Broadcasting Convergence," which went into effect in November 2001, the MIC grants subsidies to private developers of technologies used for services that converge communications and broadcasting, and it establishes telecommunications systems for the common use of such developers, thereby supporting the developers of such technologies and accelerating and promoting the development of services that converge communications and broadcasting.

Section 4

Promoting ICT in Private Companies

1 Measures for improving credibility of electronic data

(1) Promotion of use of time business

The time business, which involves time distribution services (distribution of accurate time information on networks) and time certification services (certification of the time at which the electronic data existed and non-tampering thereafter by certifying the validity of the time stamp attached to the electronic data), is becoming increasingly important recently for improving the credibility of distributed or stored electronic data in various fields such as e-commerce. The MIC is making active efforts to promote the use of the time business by, for example, formulating and releasing "Guidelines on Time Business" in November 2004, which would enable users of private-sector time businesses to use their services with confidence.

(2) Digitization of documents obliged by statute to be stored

The statutory obligation on private business operators, etc. to store documents on paper had been an impeding factor for increasing the efficiency of business activities and operational management in the private sector. Therefore, it was set forth in the e-Japan Strategy II Acceleration Package (decided by the IT Strategic Headquarters in February 2004) to enact a uniform law, which basically allows electronic storage of documents and account books in the private sector, while ensuring the accuracy, readability, etc. according to the content or nature of the documents. In response to this, the Law for the Use of Information Communications Technology for the Storage of Documents by Private Sector Companies and the Law on Improvement of the Related Laws in Line with Entry into Force of the Law for the Use of Information Communications Technology for the Storage of Documents by Private Sector Companies (e-Document Law) were established in November 2004 and entered into force in April 2005.

2 Establishment of environment for promoting the creation and growth of ICT venture companies

The creation of new businesses is believed to be important for achieving sustainable development of the Japanese industry and stimulating the Japanese economy. On the other hand, many recently started ICT venture companies face such problems as a lack of business accomplishments, lack of established technical evaluation, and lack of physical collateral and credibility, and often have difficulty in procuring funds, securing staff, and finding clients, which makes it hard for them to turn an excellent technology into a new business. Therefore, in order to promote the startup and growth of ICT venture companies, the MIC provides various support measures in the areas of fund supply, human resources, know-how, and so on in cooperation with the related ministries and agencies.