Chapter 3

Outlook for Information and Telecommunications Policies

Section 1

Formation of an Advanced Information and Telecommunications Network Society

1 Promotion of national strategy

The government set up the Advanced Information and Telecommunications Society Promotion Headquarters (IT Strategic Headquarters) in January 2001 and announced its "e-Japan Strategy" with the aim of making Japan the world's most advanced IT nation within five years. During the five years of the "e-Japan Strategy" and other pro grams, Japan has successfully achieved the most advanced level in the world in terms of the development and penetration of broadband infrastructures, the diffusion of high-functional mobile phones, and the development of an environment for e-commerce. Japan has also become one of the world's leading nations in terms of the level of ICT users, and is now "the world's most advanced IT nation" which has the most advanced infrastructure and technological environment.

On the other hand, there remain various issues to be resolved: for example, to improve the satisfaction in receiving administrative, educational and medical services through ICT, to narrow the regional and generation gaps in the use of information, to promote security measures and disaster prevention/anti-disaster measures, to use ICT in corporate management, to strengthen the international competitiveness of industries, and international contributions.

In the future, Japan should, from the users' viewpoint, effectively use ICT by taking advantage of its characteristics in an attempt to improve peoples' lives and industrial competitiveness, as well as to address serious social issues it is facing. A primary objective to that end is to achieve ubiquitous network society - a society that allows to connect networks "anytime, anywhere by anything and anyone", while giving due consideration to ensure security and to protect privacy. In this way, Japan will continue to be the most advanced ICT nation with the world's most advanced infrastructure, ability to use ICT, and technological environment. Furthermore, Japan should send its achievements to the world. By accomplishing these goals, the use of ICT from people's viewpoints, the improvement in peoples' lives, and the enhancement of its industrial competitiveness will be achieved.

To accomplish these goals and to contribute to establishing an Asia-centered international community which makes it possible to co-exist and co-prosper as a front runner who leads the ICT revolution of the world, MIC is promoting the "u-Japan Policy." In addition, the IT Strategy Headquarters formulated "the IT New Reform Strategy" on January 19, 2006 as a national strategy.

2 u-Japan policy

To examine measures and challenges for achieving a ubiquitous network society, MIC established the "Policy Roundtable for Realizing a Ubiquitous Network Society" from March to December, 2004, and adopted the "u-Japan Policy".

With the purpose of leading the world as the world's most advanced ICT nation in 2010, a policy package with the following basic points will be promoted under the "u-Japan Policy".

The first is the development of ubiquitous networks. The development of infrastructure in the past mainly centered on wired connections, ranging from narrowband to broadband such as DSL, cable networks, and fiber optics. However, under "the u-Japan policy," a seamless ubiquitous network environment will be created in which people can receive services without being conscious of the networks (wired or wireless), and the development of broadband infrastructures will be continued to be promoted nationwide in order to close the digital divide between urban and rural areas.

The second is an enhancement of the ICT usage. ICT usage in the past had emphasized pioneering informatization and supported the fields where the informatization had not been developed. Now, the "u-Japan Policy" focuses on resolving various social problems such as the falling birthrate and the aging population, and aims to establish society in which 80% of the population evaluates the ICT is useful to resolve various problems.

The third is improving the user environment. As ICT has penetrated deeply into peoples' lives, worries and disturbances over privacy and information security that are emerging in cyber society have increased, and at the same time, there is a possibility that new unpredictable issues will emerge. In order to prevent in advance such problems from arising, the Policy aims to establish society in which 80% of the population feels secure about ICT.

By developing policies in line with these three basic points, the Policy aim to realize a value-creation oriented society in which ICT penetrates deeply into peoples' lives, and new values emerge one after another through creative ICT usage.

Section 2

Development of Information and Communications Policies

1 Development of telecommunications policies

(1) Competition review in the telecommunications business field

MIC has conducted the competition review in the telecommunications business field, since FY 2003 to evaluate the market situation as it moves toward IP and broadband so that the current market situation can be reflected in government policies.

In FY 2004, MIC evaluated the area of the mobile communications and the IP phones in addition to the area of the internet access and the intra-company network that had been evaluated in FY 2003.

The main results of the competition review for FY 2004 include:

● In the mobile communications market, it is unlikely that the NTT DoCoMo will exercise its market power by itself; however, there is a concern that some carriers may exercise market power together based on their coordination.

● In the ADSL market of the area of the Internet access, it is unlikely that NTT East/West will exercise its market power either alone or in a coordinated manner with their competitors.

● The FTTH market in the area of the Internet access is divided into two submarkets, that is, "collective housing" and "detached housing". In the former submarket, it is unlikely that NTT East/West will exercise its market power either alone or by coordinated with their competitors. In the latter submarket, which is a duopoly with NTT East/West and a group of subsidiaries of electric power companies, it is also unlikely that NTT East/West will exercise its market power either alone or by collusion.

(2) Consideration of the framework for competition rules to address the transition to IP-Based Networks

Telecommunications networks in Japan is in the rapid transition from Public Switched Telephone Networks to the IP (Internet Protocol)-Based Networks and the environment surrounding the telecommunications businesses is changing drastically toward the coming IP era. Along with this, advancement and diversification are taking place in business models of the telecommunications carriers which go beyond the traditional framework.

Thus, MIC holds meetings of "the Study Group on a Framework for Competition Rules to Address the transition to IP-Based Networks" since October 2005 in order to discuss the basic concepts of competition rules as of around the beginning of 2010s when the transition to IP will be substantial, in preparation for the coming era of full-scale IP services and to clarify the direction of discussions on policies for connections and tariffs.

(3) Ensuring universal services

The universal service system is a cost-bearing system introduced in June 2002 by a partial amendment to the Telecommunications Business Law in June 2001 to ensure provision of universal services throughout the country.

After the introduction of the system, market competition in the telecommunications sector has drastically changed in the following ways:
1) competition throughout voice services is promoted due to the penetration of mobile and IP phones;
2) competition in basic fee for fixed-line phones is expected due to the introduction of the new subscriber telephone service using dry copper dedicated lines; and
3) basic fee cost increase due to transferring NTS (Non Traffic Sensitive) cost to the basic fee cost.

Responding to such changes, MIC consulted the Information and Communications Council on "the framework of universal services fund system," and the discussions were made on the scope of the universal service, cost calculation methodology, and the framework of contribution. In response to the report submitted by the Council in October 2005, the ministerial ordinance was revised and a new system has been implemented since FY 2006.

(4) Introduction of Mobile Number Portability

Mobile Number Portability (MNP) is system under which mobile phone users can retain the same phone number before and after they change mobile phone carriers. It is then expected to increase user convenience and promote competition among carriers. On the other hand, since the operators have to incur substantial costs for the reconstruction of networks by the introducing of the system, MIC had held "the Study Group on Mobile Number Portability" comprising experts and related parties to discuss users' view and effects of the system since November 2003. As a result, a report was finalized in April 2004, including some issues to be paid attention, and commented that the MNP should be introduced at the earliest possible time in fiscal 2006. In response to the report, MIC compiled and issued "the Guidelines for

the introduction of Number Portability for Mobile Phones" in May 2003, including the framework, timing, and methods of introduction, cost sharing system, and usage procedures, and so forth which are issues that mobile phone service providers and other telecommunications service providers should pay attention for the introduction.

Furthermore, MIC consulted the Information and Communications Council on draft ordinance on partial amendment of "Regulations for Telecommunications Numbers" in November 22, 2005. The draft ordinance stipulated that telecommunications service providers (mobile phone service providers), who will be assigned with telecommunications numbers to identify terminal transmission line facilities for mobile phones, should take necessary measures to make number portability possible since November, 2006.

(5) Dispute settlement between carriers

The Telecommunications Business Dispute Settlement Commission, established in November 2001, undertakes procedures such as mediation and arbitration, in order to smoothly settle disputes between carriers, and at the same time, conducts deliberations on administrative punishment by the Minister of Internal Affairs and Communications, such as orders for consultation concerning connections.

The Commission has settled 40 cases and made two recommendations to the Minister of Internal Affairs and Communications as of the end of 2005.

While making steady achievements in official dispute settlement, the Commission established "the Consultation Window for Telecommunications Business Dispute Settlement" in December 2004 to improve the information provision system concerning dispute settlements and to provide appropriate advice on various consultations made by the telecommunications carriers at a preliminary stage before proceeding to official dispute settlement procedures.

2 Development of broadcasting policy

(1) Protection of Personal Information in Broadcasting field

Prior to the enforcement of "the Law concerning the Protection of Personal Information" on April 1, 2005, MIC enacted "the Guidelines regarding the Protection of Personal Information on Broadcasting Receiver" (Ministry of Internal Affairs and Communications Report No. 695).

With a partial amendment (entered into force April 1, 2005) to "the Examination Standards for the Broadcast Law (Ministerial ordinance No.68, January 6, 2001)" and an enactment (entered into force April 1, 2005) of "the Standard Contract Tariffs for Pay Digital Broadcasting Services Using Artificial Satellites" (Ministry of Internal Affairs and Communications Report No. 236), the Ministry supports effective implementation of protection of personal information in the broadcasting field.

Furthermore, the Ministry authorized "the Broadcasting Security Center" on April 12, 2005, as an authorized organization for protection of personal information. The Center, among other operations, provides service providers with information that would contribute to resolving claims concerning the handling of personal information and ensuring appropriate handling of personal information.

(2) Review of restrictions on foreign investments in broadcasting

In response to recent changes, including an increase in domestic investment and drastic changes in the shareholdings and investment, MIC submitted to the Diet a bill for "the Partial Amendment to the Radio Law and the Broadcast Law" in April 2005 to introduce regulations on indirect investment in addition to the ongoing regulations on direct investment. The Bill was enacted on November 2, 2005 and entered into force on April 1, 2006.

(3) Revision of the principle of excluding multiple media ownership

MIC inspected and investigated broadcasting carriers for an alleged violation of the principle of excluding multiple ownership of media stipulated in the ordinance of MIC (Article 9 of the Fundamental Standard of the Establishment of Broadcast Stations) based on the Radio Law, Article7, Paragraph 2-4, that restricts the upper limit of investment in broadcast stations. It was then found that 73 companies were investing the amount beyond the limit, and these companies were given administrative guidances.

Responding to these underlying factors, and at the same time, with an aim to reinforce the inspection system concerning re-licensing of broadcasting stations, MIC revised the principle of excluding multiple ownership of media (promulgation/enforcement, July 15, 2005).

3 Promotion of policy for effective use of radio spectrum

(1) Promotion of Frequency Open Policy

MIC is promoting Frequency Open Policy as a means to prepare a scheme to open frequencies drastically and allocate them to new fields toward the realization of "wireless broadband service" which is a key to establish ubiquitous network society in Japan.

(2) Review of frequency allocation (expansion of frequency use for cellular phones)

MIC formulated and published "the Guidelines for Spectrum Reallocation" regarding basic policies for the reallocation of frequencies in October 2003. It mentioned that frequency reallocation should be considered over the midterm (within 5 years) to ensure frequencies of 330-340 MHz bandwidth, primarily in the 1.7GHz,

2GHz and 2.5GHz bands, for mobile communication systems.

In response, MIC considered the use of frequencies in the 1.7GHz and 2GHz bands which was made newly available for cellular phones, based on the opinions exchanged at "the Study Group on the Expansion of Spectrum Uses for Cellular Phones" and comments from the public, and set up the licensing policy in August 2004, which stipulated the number of operators who would use the allocated frequencies and examination standards for the 1.7GHz and 2GHz bands.

Furthermore, MIC formulated "the Action Plan for Frequency Reallocation" which was an action plans to follow up frequency reallocation smoothly and surely on August 2004. This Action Plan is to be sequentially reviewed based on the evaluation results of an annual survey on radio spectrum usage and the changes in the environment for radio spectrum usage. In response to the evaluation result of the annual survey on radio spectrum usage of FY 2004 (published on April 13, 2005), the Ministry revised and published the Action Plan in October 2005.

(3) Efforts for timely radio spectrum reallocation

By the amendment to the Radio Law in 2004, a scheme was adopted to compensate existing radio spectrum users whose periods of frequency use are shortened for costs uncollected by shortening of the period of frequency use for facilitating timely reallocation of radio spectrum.

By utilizing this scheme, in the 4.9-5.0 GHz band (which is used by fixed stations for telecommunications business), the termination date of the existing radio stations, which had been set at the end of November 2007, was brought forward by two years, and thus the usable radio spectrum was ensured, in order to provide an environment to use freely High Power Wireless LAN in the metropolitan areas of Kanto, Tokai and Kinki.

In response, the Radio Station Registration system was introduced in the metropolitan areas above for the wireless access system in the 4.9-5.0 GHz band on December 1, 2005.

(4) Drastic review of Spectrum User Fee System

It has been more than 13 years since the introduction of the spectrum user fee system and the situation surrounding spectrum user fees has drastically changed, represented by the growth of businesses using radio spectrums, such as cellular phone service and wireless LAN service. Thus, MIC had considered on the review of spectrum user fee system at "the Study Group on Policies for Effective Radio Spectrum Use." Based on the result of study made by the Study Group in October 2004, MIC submitted the legislation for "the partial amendment to the Radio Law and the Broadcast Law" in September 2005, which was then promulgated in November 2005.

(5) Promotion of wireless broadband

MIC held "the Study Group for Wireless Broadband Promotion" from November 2004, and considered specific measures to realize wireless broadband system which was the key to establish ubiquitous network society in Japan.

The Study Group conducted active discussions widely and openly by cooperation between industry, academia and government, including call for proposals on wireless broadband systems to be introduced in the future (72 system proposals from 44 parties), and compiled a specific introduction scenario, promotion measures, and specific measures for frequency reallocation based on "the Guidelines for Spectrum Reallocation" (Final Report: published in December 2005).

Section 3

Advancement of Information and Communications Network

1 Development and promotion of network infrastructures

(1) Efforts for the diffusion of IPv6

Based on "the e-Japan Strategy" that states the transition to the IPv6, MIC has been making efforts for three years from fiscal 2003 to solve the issues associated with network construction and operations in order to facilitate smooth transition to the IPv6 and to ensure interoperability of various equipment and services. At the same time, it has conducted empirical tests to inspect the IPv6 application that is attractive to local governments, communities and homes.

"The IT New Reform Strategy" adopted in January 2006 by the IT Strategy Headquarters stipulates that efforts shall be made to transfer the systems to IPv6 in principle by fiscal 2008 in line with the renewal of information and communications equipment by each government agency toward the realization of the world's most convenient and effective e-Government. It is expected that this will contribute to the international dissemination of the IPv6.

(2) Study Group on Telecommunications Numbers in the IP Era

MIC had held "the Study Group on Telecommunications Numbers in the IP Era" since December 2004 to discuss measures for available telecommunications numbers that may be used up due to the changes in the business environment surrounding fixed phone services and required role of telecommunications numbers. The Study Group issued the first report in August 2005.

The Study Group is continuing deliberations on the following issues: availability of numbers for new services such as FMC (Fixed-Mobile Convergence) which converges fixed communications and mobile communications; the use of three-digit 1XY telecommunications numbers for administrative inquiries such as call centers; issues related to competition policies on the use of three-digit 1XY (116) numbers for the application for new services including broadband services; and forwarding calls to the Internet phones. The Study Group will compile the second report regarding these issues.

(3) Promotion of development of the world's most advanced broadband networks

Based on the u-Japan Policy in which the major objective is to lead the world as the most advanced ICT nation in 2010, the Final Report of "the Study Group on the Development of Nationwide-balanced Broadband Infrastructures" (released in July 2005) mentions an elimination of the digital divide and the development of the world's most advanced broadband networks as the purposes of developing the next generation broadband environment. It also advocates "the Next Generation Broadband Strategy 2010" which includes necessary measures toward 2010.

Also in "the FY 2006 ICT Policy Principles," the objective is set "to offer more than 90% household coverage rate for the Ultra-high-speed Interactive Broadband Networks (UIBN) with transfer rates for 30Mbps or higher, with a view to strengthening international competitiveness. The government then has been promoting the installation of optic fibers to eliminate zero-broadband regions by 2010 based on "the IT New Reform Strategy" (decision by the IT Strategy Headquarters, January 2006).

Based on these facts, MIC has extended the valid date of the Provisional Measures Law for Telecommunications Infrastructure Improvement (May 31, 2006) by five years to May 31, 2011, in order to continue to implement measures to promote the development of information and communications infrastructures.

(4) Management of IP address and domain names

The IP address system in Japan is such that end users use the ones which are allocated to the Internet service providers by the Japan Network Information Center (JPNIC).

The domain name ".jp" is managed by the Japan Registry Services and can be acquired through registered operators such as the Internet service providers 811,000 ".jp" domain names were registered as of April 1, 2006. Of these, ".co.jp" for general companies were registered 288,000 names, "jp" which allows to use optional alphanumeric codes were registered 341,000 names, and "jp" which allows to be registered in Japanese characters (e.g. 総務省.jp) were registered 119,000.

(5) Efforts toward the transition to IP-based networks

MIC consulted the Information and Communications Council on the technical requirements for telecommunications equipment in line with IP networks in October 2005. The Council is scheduled to compile a report in October 2006 through the deliberations.

Under the recognition of the importance of a flagship to promote industry-academia-government collaboration, "the Next Generation IP Network Promotion Forum"

was established in December 2005, comprising 211 members including universities, telecommunications carriers, manufacturers, and application production companies, which was led by the National Institute of Information and Communications Technology.

(6) Mobile communications systems

With the aim of realizing the practical application of the so-called fourth generation mobile telecommunications systems around 2010, following the third generation mobile telecommunications system (IMT-2000: International Mobile Telecommunications-2000), MIC actively promotes efforts for R&D and international standardization with industry-academia-government cooperation.

(7) Ultra Wide Band (UWB) radio systems

The Information and Communications Council conducted deliberations on the technical requirements for the UWB radio systems, while taking account of usage environment, impact analysis to other radiocommunication services needs of users, and international trends. As a result, the report was compiled partially in March 2006 on the technical requirements for the UWB radio systems using microwave bands for the purpose of communications. Based on the report, MIC revised the related ordinances in August 2006.

(8) Radio Frequency Identification (RFID)

The Information and Communications Council conducted deliberations continuously on technical requirements for frequency sharing technologies (carrier sense, transmission time control) which enables an effective use of frequencies and for a low-power passive tag system using 950MHz band (952-955MHz) which is used in relatively small areas and can be widely used by general users without requiring licenses. Then the Council compiled the report partially on October 12, 2005, followed by promulgation and enforcement of the revised related ordinances on January 25, 2006. A high-power passive tag system using 950MHz band has been equipped with frequency sharing technologies, which now satisfies the requirements as a registered station. Thus, institutional revision to deal with the system as a registered station has been carried out concurrently.

(9) Wireless access system: realization of ultra high-speed wireless LAN

The 5GHz band frequency was newly allocated for wireless LAN internationally at the World Radiocommunication Conference (WRC-03) in July 2003. In response, MIC introduced 5.25-5.35 MHz bands in May 2005, in addition to the existing 5.15-5.25GHz bands for wireless LAN.

(10) Promotion of the ITS (Intelligent Transportation System)

As the second stage for the ITS which is expected to be greatly advanced in the near future, MIC has been making efforts to implement measures for promotion, advancement, R&D, and standardization of ITS, while working with industry and academia, including related private organizations and government agencies. The objectives of these measures are to establish a ubiquitous environment in the ITS field and to realize safe and secure road and transport society where anyone can move comfortably and freely.

2 Promoting the broadcasting advancement

(1) Promoting the transition to the digital terrestrial broadcasting

Following CS broadcasting, BS broadcasting and cable television broadcasting, terrestrial digital TV broadcasting was launched in three largest metropolitan areas, Tokyo, Nagoya and Osaka, in December 2003. Terrestrial digital TV broadcasting will gradually expand its coverage area. It is scheduled to start in every prefectural capital by the end of 2006, and analogue TV broadcasting will be terminated and digitization will be completed in 2011.

To surely implement a nationwide launch of digital terrestrial broadcasting by 2006 and complete digitization by 2011, examinations were made at "the Study Group on the Promotion of Terrestrial Digital Broadcasting," which is the Information and Communications Policy Group of the Information and Communications Council, and the second interim report was compiled on July 29, 2005.

Toward a smooth transition to the digital broadcasting and the development of broadcasting that could accurately meet viewers' needs, MIC set up "the Study Group for the Development of Digitization and Broadcasting Policy" in July 2004 to conduct deliberations on the progress of digitization, the development of new broadcasting services, public broadcasting in the digital broadcasting era, and broadcasting contents in the digital era. The Study Group issued the interim report in August 2005.

(2) Responding to environmental changes surrounding satellite broadcasting

Based on the report issued in February 2005 by "the Study Group on Protecting Personal Information in the Field of Broadcasting and Satellite Broadcasting in the IT Era," MIC partially amended the Enforcement Regulation of Law concerning Broadcast on Telecommunications Services in June 2005 to widen the scope of the regulation and include the broadcasting using left-hand circular polarization at the east longitude 110 degrees wide band communication satellite.

Furthermore, with a view to the future direction of satellite broadcasting, MIC has convened "the Study Group on the Future Direction of Satellite Broadcasting" since October 2005 to discuss policies to improve users'

benefits and widely examine international broadcasting policy in the prospect of future satellite broadcasting.

(3) Advancement of cable television

The environment surrounding cable television has drastically changed in recent years, including the digitization of broadcasting and intensifying competition with telecommunications carriers due to the development of broadband networks, and problems are increasingly recognized.

Thus, in February 2006, MIC set up "the Study Group on Cable TV in the 2010s" to conduct discussions regarding perspectives on the cable television in the 2010s, future challenges, and comprehensive measures for the development of cable television, and the report is scheduled to be finalized by March 2007.

Section 4

Establishment of a Safe and Secure Network

1 Consumer administration in relation to telecommunications services

(1) Efforts to counter illegal and harmful information on the Internet

While the rapid diffusion of Internet allows provision of various telecommunications services, the circulation of information that infringes the rights of others has increased. As an effort to counter this situation, "the Guideline for Defamation/Privacy based on the law concerning the Liability of Internet Service Providers" which had been compiled by "the Council on the Guidelines for the law concerning the Liability of Internet Service Providers" which comprised industry associations and experts was revised in October 2004. The Council also adopted "the Guideline for Trademark based on the law concerning the Liability of Internet Service Providers" in July 2005 which stipulates specific cases of trademark infringement, integrated procedures/formats of deletion requests to the hosting providers, and deletion requests via credibility confirmation organizations. In September of the same year, one credibility confirmation organization was accredited based on the Guidelines.

MIC had held "the Study Group on measures against Illegal and Harmful Information on the Internet" which comprised experts and telecommunication business associations since August 2005 to deliberate on voluntary efforts by hosting providers against illegal and harmful information on the Internet, and systems and measures to effectively support such efforts. The middle report was released in January 2006.

(2) Measures against spam and phishing

Based on the Final Report of "the Study Group on a Framework to handle Spam," MIC has been taking comprehensive measures against e-mails delivered to mobile phones and PCs for advertisement and commercial purposes without consent of receivers (so-called "spam"). These measures include (1) effective law enforcement by Government; (2) self-regulation by the private sector; (3) developing technologies; (4) enhancing awareness and (5) seeking international cooperation.

Against phishing which illicitly obtains personal information by luring mail receivers to access a fake Web site by disguising itself as a financial institution, MIC has held regularly "Contact Group to Promote Countermeasures Against Phishing" since January 2005 in cooperation with the Internet service providers (ISP) to share information and to deliberate on effective measures.

(3) Measures against fraud

As a result of efforts to eliminate the anonymity of prepaid mobile phones which are often used for criminal purposes, mobile carriers have completed the verification of the subscribers of all prepaid mobile phones currently in operation by 31 March 2006 and have also ter-

minated their services to approximately 300,000 lines used by unknown subscribers.

2 Promotion of measures for information security and privacy protection

(1) Information security measures of the government

The government has been promoting information security measures by establishing "the National Information Security Center (NISC)" in the Cabinet Secretariat in April 2005 as the core organization to implement information security measures, and "the Information Security Policy Council" (chairman: Cabinet Secretary) in the IT Strategic Headquarters in May 2005.

(2) Realization of an environment for safe and secure use of the Internet

An improvement in information security is essential to promote ICT society in the future. Based on the efforts in information security measures of the government and the discussions at "the Security Working Group of the Study Group on Next Generation IP Infrastructure" which was established in December 2004, MIC has been making efforts to reinforce information security measures from three viewpoints: "network", "users", and "facilities".

(3) Ensuring important communications in the telecommunications services

There are growing needs to develop an effective system to ensure important communications in cases of emergency such as disasters in cooperation between the government, telecommunications carriers, and industry in order to response to the development of telecommunications services and diversification in the usage patterns along with the diffusion of mobile and IP phones. Responding to such facts, MIC had held "the Study Group for Ensuring Important Telecommunications in the Telecommunications Business" since April 2002, and the Study Group compiled a report in July 2003. Based on the recommendations in the report, subsequent major efforts by mobile carriers were released in January 2005 and in December of the same year.

(4) Promotion of safety evaluation and advancement of cryptographic technology

The CRYPTREC (Cryptography Research and Evaluation Committee) by study groups co-hosted by MIC and the Ministry of Economy, Trade and Industry, continues to monitor e-government recommended ciphers, and to study, research, and set standards to ensure the safety and reliability of the e-government recommended ciphers in fiscal 2006. In addition, it promotes discussions on response procedures and implementation systems in the case that e-government recommended ciphers become uncertain.

(5) Protection of personal information in the information and communication field

With respect to protection of personal information in the all areas comprehensively, the Act on the Protection of Personal Information was promulgated in May 2003 and has been fully enforced since April 2005.
In order to strictly implement appropriate handling of personal information, in August 2004, MIC revised again "Guidelines on the Protection of Personal Information in the Telecommunications Business" which had been compiled in 1991 and revised in 1998. The Ministry also formulated "the Guidelines concerning Protection of Personal Information of Broadcasting Receiver". These guidelines have been applied since April 2005.

3 Efforts to ensure the reliability of electronic data

In order to further promote socio-economic activities using the network such as e-commerce by ensuring a smooth use environment for electronic signatures, "the Act on Electric Signatures and Certification Services" was enforced in April 2001. By the Law, optional certification systems by the government were introduced to authentication services which satisfy certain standards.

As of the end of fiscal 2005, 19 specific authentication services had been accredited.

4 Development of radio use environment

(1) Protection of the human body from health effects from radio wave exposure

The former Telecommunication Technology Council compiled "Radio-Radiation Protection Guidelines" to create an environment where people in Japan can use radio frequencies safely and securely and introduced regulations based on the Guidelines, which included basic principles to judge whether the radio frequencies were within a safe range, not causing undesirable effects on human health, and reference levels based on the principles.

(2) Measures against unnecessary radio frequencies

MIC has established the CISPR Committee within the Information and Communications Council to contribute to formulation of international standards of the Comité International Spécial des Perturbations Radioélectriques (CISPR) and has formulated national standards, while seeking consistency with the international standards of the CISPR. In fiscal 2005, the national standards were set forth to add the limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment in the frequency range 150kHz or below.

(3) Appropriate monitoring and control of radio frequencies

With the expansion of radio usage, inappropriate use of radio frequencies by unlicensed radio stations has increased and much harmful interference to licensed radio stations have been reported. In order to conduct effective detection of unlicensed radio stations, the government has been developing the Detect Unlicensed Radio Stations (DEURAS) since 1993.

Section 5

Promotion of Content Distribution and Efforts to Promote Creation and Fostering of Information and Communications Venture Businesses

1 Promoting production, distribution and preservation of content

(1) Promoting production and distribution of broadband content

To promote the distribution of multiple content in the ubiquitous network era, efforts have been made since fiscal 2005 to develop and verify the technology for the use of multiple content in order to realize appropriate protection of rights associated with content at every level of usage in personal communications networks, while ensuring high flexibility and convenience which allow unrestricted and seamless mobility between various equipment as well as between audiovisual services regardless of the type of equipment or the place.

Also, with respect to super-high resolution images (next generation visual contents), research and development activities have been undertaken since fiscal 2005 to develop the technology to transmit real-time images everywhere around the country, while ensuring security and production support technologies which allow divisional cooperation in editing by uncompressed materials which cause no delays in remote areas or quality degradation.

(2) Promoting advanced use of digital archives

The digital archive is a collective term for a system to accumulate and preserve digital content, and has increasingly become part of the important infrastructure to establish a cycle of creation and accumulation/conservation, utilization and further creation. MIC, in response, has been making efforts to promote the creation of archives of website information and network use of the archives.

(3) Efforts to promote production and distribution of high quality content

In response to the proliferation of illegal and harmful information on the Internet, MIC has been conducting surveys and studies on a framework under which webmasters themselves would assure the safety of the site since fiscal 2004. Discussions have been held about the practical use of such a framework at the Council for the Promotion of Contents Advice Mark (tentative) (Secretariat: the Association of Media in Digital) consisting of academic intellectuals, parents and guardians, content producers, and Internet service providers.

In fiscal 2005, empirical tests were performed, in cooperation with the said Council on the system in which information senders (webmasters) would self-rate the expression level of content and to place a mark on the website after screening by a third party.

Efforts will continue to support the private sector in ensuring the safe and secure use of Internet content in fiscal 2006 and onwards.

2 Development of an environment to promote creation and fostering of information and communications venture businesses

As measures to support promotion of creation and fostering of information and communications venture businesses, MIC established the Information and Communications Venture Exchange Network, a membership-based society for large corporations and venture capital (supporters) and venture companies. The Ministry also established a forum to deliver business plans, providing opportunities for technical collaboration, financial assistance, business cooperation, people to

people exchange, and information exchange.

In addition, the Ministry will examine measures to ensure the availability of human resources in accordance with the development stage of the information and communications ventures and will conduct support and PR activities through various events, as a new scheme from fiscal 2006 onwards.

Section 6

Efforts Contributing to Informatization of Administrative and Public Services

1 Promotion of Informatization of administrative and public services

(1) Realization of e-Government

The government has thus far steadily promoted the establishment of e-Government based on Program for Building e-Government, the Future Administrative Reform Policy, and the IT Policy Package-2005, with the aim to provide user-oriented administrative services and realize a cost-effective and simple government. In the future, efforts will be made to achieve a 50% online application rate and realize a small and effective government based on the New IT Reform Strategy, which follows the e-Japan Strategy, in pursuit of the most convenient and efficient e-Government in the world.

(2) Realization of e-Local Governments

Using such infrastructure as Local Government Wide Area Networks (LGWAN), the Resident Registration Network System, and the Public Certification Service for Individuals, MIC has been promoting effective e-Local Government and taking various measures from the financial and human resource viewpoints, to improve local services.

(3) Promotion of regional informatization

MIC has convened meetings of the Study Group on the Promotion of Regional Informatization since December 2003, in order to study the progress in regional informatization, systematically organize the nature of future public networks linking municipalities, prefectures and the country, the nature of applications to upgrade the administrative services using the given public networks, and examine the deployment of measures from 2005. The Study Group issued a report in March 2005.

(4) Promotion of Telework

Telework is intended to improve business efficiency through a home office using information and communications technologies, while maintaining a healthy balance between work and personal life. It is expected to contribute toward resolving various issues, including ensuring of equal opportunities and treatment between men and women in the employment (formation of a gender-equal society), measures to address the declining birthrate and the aging population, and reduction of the environmental burden.

Thus, MIC has been taking promotional measures such as setting up the “Telework Promotion Forum”, developing an environment for private companies to adopt Telework, and implementation of a Telework program for government employees.

Section 7

Elimination of the Digital Divide and Human Resources Development

1 Elimination of geographic digital divide

In order to achieve the goal of u-Japan Policy, or specifically, that of 100% of the population having access to Broad band Internet by 2010, MIC, in the "ICT Policy Principles of 2006", announced the support measures to develop broadband infrastructure in relation to the Provisional measures Law for Telecommunication Infrastructure Improvement and the support for developing and promoting the use of regional ICT infrastructure, as specific measures to eliminate discrepancies between urban and rural areas.

2 Promotion of information barrier-free

The "Study Group on Ensuring/Improving Accessibility in the Public Sector" was launched in November 2004, so that everyone including older persons and persons with disabilities can use public websites and web-systems. The Study Group compiled the "Operational Models to improve accessibility of public websites" in December 2005 which presents specific operation models for maintaining and improving web accessibility. MIC will continue its efforts to promote active use of the Operation Models by holding seminars for local government officials in charge of websites.

3 Human resource development

To develop human resources with specialized knowledge and skills in the information and communications field, MIC is implementing a support scheme for ICT human resources development programs, and at the same time, has launched a support scheme in FY 2004 for human resources development centers for ICT security to assist the quasi-public organizations in the development of practical training facilities in order to effectively and intensively train human resources with the capability to accurately respond to information security incidents, such as illicit access and cyber attacks.

In addition, the Ministry has been working on the study/research of advanced ICT human resources development programs, under the cooperation between industry, universities and governments, on abilities required for high-level ICT personnel, such as project managers and Chief Information Officers (CIOs) who are capable of being engaged in strategic informatization in corporations, and on practical methods for training, as well as to development model teaching materials for the development of such human resources.

Section 8

Promotion of Research and Development

1 Development of R&D Policies in the information and communications field

In order to realize a society in which the economy of Japan can grow sustainably and everyone can live safely and comfortably, it is necessary to maintain and boost the competitiveness of industry by making proactive and strategic investments in the priority areas in which research and development should be undertaken. From this point of view, the Third Science and Technology Basic Plan (approved by the Cabinet in March 2006) takes two basic stances: 1) science and technology to be supported by the public and benefit society, and 2) an emphasis on fostering human resources and a competitive research environment. The Basic Plan also identifies four prioritized areas, including the information and communication area, and calls on the government to invest intensively in the four prioritized areas, as it did in the Second Basic Plan.

In addition, in the Promotion Strategies for each area during the execution of the Basic Plan, strategically focused science and technologies are to be selected

under the policy of selection and concentration.

In the meantime, MIC consulted Telecommunications Council in July 2004 about the ICT R&D Programs for the Ubiquitous Network Society. The Council set up the R&D Strategic Committee under the Information and Communications Technology Sub-Council to conduct deliberations and the report was issued in July 2005.

2 Selective and strategic promotion of research and development in the information and communications area

(1) "Strategy for New Generation Network Technology" aimed at maintaining and strengthening international competitiveness

Amid the progress in the re-construction of core networks on an international scale, MIC promotes research and development activities to realize next generation network technologies as an infrastructure in a ubiquitous society based on optic fiber or mobile communications. The R&D activities include the development of a next-generation backbone (core communications networks), basic technologies for ubiquitous networks, ultra-high-speed photonic network technology, terabit super networks, advanced utilization technologies for information appliances, Wideband InterNetworking engineering test Demonstration Satellite (WINDS), and the engineering test satellite VIII, etc.

(2) "Safe and secure ICT strategy" aimed at establishing a safe and secure society

In order to develop ICT infrastructures which can resist cyber attacks and large scale disasters and also create a safe and secure society that can overcome such social problems as global environmental issues and the falling birthrate and aging population through the use of ICT, MIC is promoting research and development activities: specifically, ubiquitous sensor networks, systems to ensure child safety using ubiquitous network technologies, information and communications technologies for advanced utilization of RFID, and for practical application of quasi-zenith satellite systems and a mobile 3D GIS, next-generation high-functionality network infrastructure, integration of robots and a ubiquitous network, and information security technologies.

(3) "Universal Communications Technology Strategy" to develop intellectual creativity

MIC promotes research and development activities to realize communications technologies that promote intellectual creativity and communications technologies friendly to people, including the elderly and disabled, who can then overcome the age, physical, language and cultural barriers through the use of the most advanced ubiquitous networks in the world. The Ministry set up the "Study Group on Universal Communications Technologies" in April 2005, and a final report was issued in December 2005. As a "comprehensive research and development effort, involving networks, people, and interfaces", the Ministry conducted research and development activities from fiscal 2003 to 2005 with the purpose to establish basic technologies. Such activities include the development of a practical and mobile Multilingual Automatic Speech-to-Speech Translator system which is linked to the network, and technologies to avert harmful effects of the optical stimuli of visual contents on living organisms.

(4) Development of a research and development environment to promote the UNS Strategy Program

To create needs for information and communications technologies, improve research and development capabilities, improve the quality of researchers and create the world's leading intellectual property by building a competitive environment for research and development, MIC has set up the "Strategic Information and Communications R&D Promotion Program (SCOPE)" (competitive research funding system), which is to promote R&D activities full of creativity and innovation in line with strategic and prioritized objectives and substantial efforts have since been made to further enhance the SCOPE.

The Japan Gigabit Network (JGN II) is the advanced test-bed network for research and development operated by the NICT, and it has installed advanced light switching devices to conduct research and development at the level of optical wavelengths. In addition, access points have been installed at prefectures throughout the country, which are used by universities, research institutions, private companies and local governments as a basis for industry-university-government cooperation and regional cooperation on a nationwide scale.

Section 9

Promotion of International Strategy

1 Promotion of international policy

(1) Promotion of the Asia Broadband Program

As an action plan to build a broadband environment in the Asia region, MIC and related ministries formulated the "Asia Broadband Program" in March 2003 on the basis of the "e-Japan Priority Policy Program-2002" and "Basic Policies for Economic and Fiscal Policy Management and Structural Reform 2002." This Program aims to make Asia an information hub by 2010. In addition "the e-Japan Strategy II", "e-Japan Priority Policy Program 2004", and "IT Policy Package 2005" promote efforts to achieve this goal.

(2) Bilateral and Multilateral Efforts

Between Japan and the United States, for example, the Japanese and the US governments exchanged recommendations in variety of fields including telecommunications in December 2005 concerning regulatory reform and competition policy initiatives. In June 2005, the fourth Japan-US ICT Dialogue was held aiming at exchanging a wide range of opinions on appropriate regulatory decisions and cooperation concerning ICT in Japan and the US in the course of broadband deployment and rapid technology development.

Furthermore, "An Action Plan for EU-Japan Cooperation," which sets forth concrete fields and content for ten years of cooperation starting in 2001, was adopted in the EU-Japan Summit Meeting held in Brussels (Belgium) in December 2001. This Action Plan specifies fields of cooperation and details of cooperation between the EU and Japan. In June 2004, the "Joint Statement on Cooperation on Information and Communication Technology" was issued in the joint press statement of the 13th Japan-EU summit meeting. On the other hand, multilateral efforts have also been made in the various stages including the New Round of negotiations within the framework of the WTO, Asia-Pacific Telecommunity (APT), Organisation for Economic Co-operation and Development (OECD), Asia Pacific Economic Cooperation (APEC), G8 Summit, and ASEAN +3 (Japan, China, Korea) Telecommunication and IT Ministers Meeting.

(3) Cooperation and coordination between Japan, China and Korea

In September 2002, the First China-Japan-Korea ICT Ministers' Meeting was held in Marrakesh, Morocco, with the aim of promoting cooperation among Japan, China, and the Republic of Korea in the information and communications field and with the attendance of representatives from private companies and research institutes in the three countries. The Third China-Japan-Korea ICT Ministers' Meeting was held in Sapporo, Japan in July 2004. From the viewpoint of further promoting cooperation among Japan, China, and the Republic of Korea in the information and communications field, the "arrangement on cooperation in information and communication sector" that had been agreed to in 2003 was revised, and "cooperation on RFID tags/sensor networks" and other matters were included as new cooperative items.

(4) World Summit on the Information Society (WSIS)

The World Summit on the Information Society is a UN Conference under the leadership of the ITU (International Telecommunication Union) with the aim to formulate a common vision of the global information society and to examine specific measures to realize this vision.

The second phase of the WSIS took place in Tunis, Tunisia in November 2005 to discuss specific implementation measures for the Plan of Action adopted in Geneva, key elements of Internet governance, and elimination of the digital divide. As a result, the Tunis Summit adopted the Tunis Commitment and the Agenda for the Information Society.

Meanwhile, the Japanese government has been actively contributing by, for example, holding a WSIS thematic meeting on a ubiquitous network society in Japan in May 2005, and drawing up the proposal on foreseeable problems toward the realization of a ubiquitous network society and specific measures to overcome such challenges.

2 Promotion of international cooperation

Information and communications are attracting high expectation as a form of infrastructure that, among other things, leads to economic development, the expansion of employment, and improvement of the national life. In developing countries though, there are still, for example, about 30 countries in which the telephone diffusion rate does not even reach one unit per 100 persons, and the international digital divide is widening. Therefore, there is a growing need to construct information and communication networks around the world, including in developing countries. The MIC supports human resource development in the ICT field, assists with the formulation of ICT policies and systems through policy dialogue with information and communication ministries in devel-

oping countries, assists with development of information and communications infrastructure through implementation of joint international experiments and so on, and supports international and regional organizations that promote global cooperation for eliminating the international digital divide. At the same time, it contributes to the sustainable development of the information and communications field in developing countries in cooperation with such organizations as the Ministry of Foreign Affairs, the Japan International Cooperation Agency (JICA), and the Japanese Bank of International Cooperation (JBIC), mainly through official development assistance (ODA).

3 Promotion of international standardization activities

The ITU (International Telecommunication Union) plays a key role in international standardization in the field of information and communications. The standardization activities within the ITU are undertaken by the ITU-T (ITU Telecommunication Standardization Sector) and the ITU-R (ITU Radiocommunication Sector). The ITU-T conducts standardization work for various technical issues in the telecommunications field. In the current session (2005-2008) emphasis is being made on the promotion of standardization of the optical transmission network and next generation network (NGN) which is the next-generation all-packet network that can replace the existing telephone network. In addition, discussions have been undertaken about the standardization plan for new issues such as home networks and radio frequency identification (RFID).

Japan has made a positive contribution to the Study Groups (SGs), which undertake specific standardization activities, by appointing two Chairmen and eight Vice-Chairmen of the SGs from Japan.

The tasks of the ITU-R include revision of radio regulations, research and formulation of recommendations for issues such as technologies and operations of radiocommunication, and allocation and registration of frequencies. The standardization work has currently been taking place for the fourth-generation mobile communications system, broadband wireless access system, Emergency Warning System, and disaster radio system.

Japan is making a positive contribution to the work of the ITU-R during the current session (2003-2007); for example, Japan assumes a number of key positions, including appointing four Vice- Chairmen to the SGs and the participation of a number of experts in SG meetings.

Section 10

Development of Postal Service Administration

1 Efforts of Japan Post

(1) Overview and privatization of Japan Post

Regarding the postal business, the Basic Law on the Administrative Reform of the Central Government (enacted in 1998), which was established to lay down the basic principles for reforming government ministries, stipulated that a new state-run public corporation should be established that would operate in accordance with policies, such as to enable autonomous and flexible management under the self-supporting accounting system, an introduction of corporate accounting principles, and a shift from ex-ante control through Diet approval of its budget to ex post facto evaluation of the formulation of mid-term management goals. Japan Post was then inaugurated in April 2003 after the enactment of the Japan Post Law (2002).

Based on "the Basic Policy on the Privatization of the Postal Services" (issued in September 2004), the government submitted the bills on postal services privatization to the Diet, which were then enacted on October 14, 2005. Japan Postal Services Holding Company was established on January 23, 2006 as a preparation and planning company to formulate the implementation plan concerning the inheritance of services of Japan Post and prepare the establishment of four companies that would inherit the services: Postal Service Company, Post Office Company, Postal Savings Bank, and Postal Insurance Company. Japan Post will be privatized in October 2007, and the final state of privatization will be realized within a 10-year transitional period.

(2) Discussions about measures to promote competition in postal services

With the establishment of Japan Post, the "Law concerning Correspondence Delivery Provided by Private-Sector Operators" was enforced in April 2003, allowing private businesses to conduct correspondence delivery services, which had been conducted solely by the state. Delivery services by private businesses are classified

into two groups: the general correspondence delivery business that provides services nationwide and the special correspondence delivery business that provides services in a specific area of interest. No companies have entered the general correspondence delivery business while 159 companies (as of the end of March 2006) have entered the special correspondence delivery.

In light of the fact that no company has entered the general correspondence delivery business, MIC set up the "Study Group on the Reserved Area and Competition Policies in Postal Services" under the auspices of the Minister of Internal Affairs and Communications in January 2006 in order to conduct a wide range of discussions about measures to diversify the services and to realize higher returns for the people through promotion of competition in postal services. The Study Group is scheduled to compile a report six months following its creation.