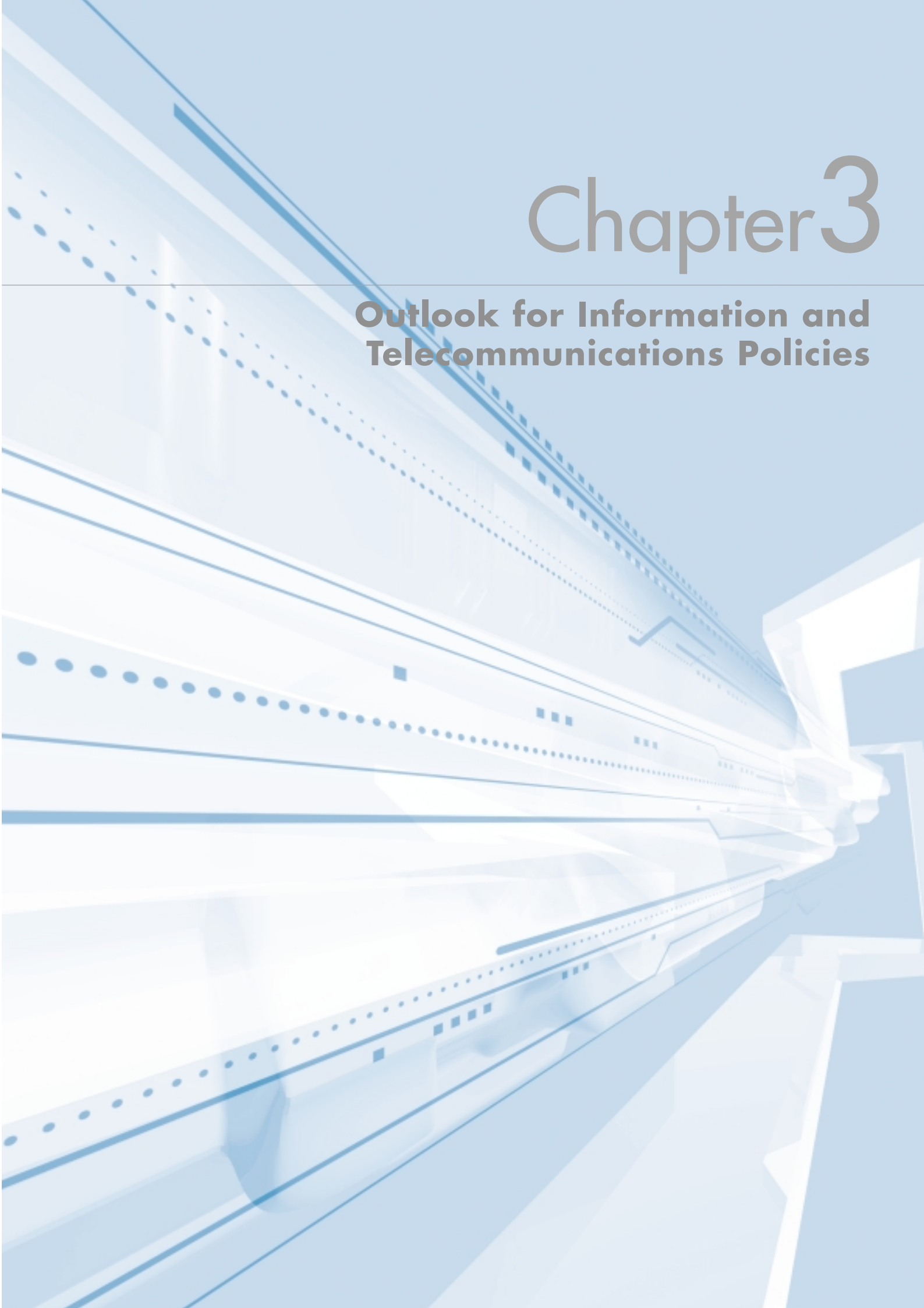


# Chapter 3

## Outlook for Information and Telecommunications Policies





# Section 1

## Section 1 Promotion of Comprehensive Strategy

### 1. Promotion of national strategy

Japan has developed “ubiquitous network society” with due consideration to security and privacy protection, etc. The IT Strategy Headquarters announced the IT New Reform Strategy in January 2006 as Japan’s new national strategy to keep the position as the most advanced ICT nation with the world’s highest infrastructure, ability to use ICT, and technical environment. Under this strategy, Japan aims to “realize vitality for its aging society with fewer children”, “suggest a solution to environmental/energy issues”, “realize safe and peaceful society”, “create a new concept for the government, businesses and individuals”, “eliminate the digital divide” and “become a proud nation that sends information across the world”.

Basic Policy – 2006 was formulated (July 2006) as the first basic policy of this IT New Reform Strategy. Now, various plans established under this policy are being promoted.

### 2. u-Japan Policy

The Ministry of Internal Affairs and Communications formulated the systematic ICT policy called “u-Japan Policy” in December 2004 in order to achieve “the world’s leading nation for ubiquitous network society” by 2010, with the understanding that a ubiquitous network society will be essential to resolve a wide range of social issues in the coming years for the aging society with few children. Also, while comprehensively promoting the u-Japan Policy, the Ministry integrated the ICT Policy into the respective plans and established an ICT Policy Outline, including the u-Japan Promotion Plan which specifies fields to be focused on according to the situation, and annual priority plans (budget, tax system, and system reform, etc) in the information and communication field. Based on this ICT Policy Outline, various plans are now being promoted.

### 3. Promotion of reform in communication and broadcasting fields

To promote reform in the telecommunication and broadcasting fields, the government and the ruling parties formulated an “Agreement between the government and the ruling parties on regulatory frameworks for communications and broadcasting” (June 20, 2006). The Ministry of Internal Affairs and Communications is promoting a reform in telecommunication and broadcasting fields based on this agreement. For example, in

September 2006, the “Process Program for the Reform of the Communications and Broadcasting Field”, which includes concrete plans to be executed within the next 5 years (by 2010), was established to ensure the reform in the said fields. This program covers: 1. NHK, 2. Broadcasting, 3. Integration, and 4. Telecommunication, and reviews the contents depending on the progress status of each.

### 4. Enhancement of International Competitiveness

Under the “e-Japan Strategy”, Japan has established the fastest and most reasonable broadband environment, offers highly advanced and diversified cell phones, and makes further effort on setting up digital broadcasting and the next generation network. However, as for network related products, Japan still does not occupy a high share in the global market. Hence, expanding global presence, obtaining standardization and intelligence property rights, and developing human resources should be challenges to be tackled in the future.

The Ministry of Internal Affairs and Communications held ICT International Competitiveness Meetings from October 2006 to April 2007, establishing a basic policy for enhancing international competitiveness in the ICT industry. Based on this policy, the Ministry formulated the “ICT International Competitiveness Enhancement Program” in May 2007 in order to achieve the expected international competitiveness in the ICT industry by 2011, Japan’s first digital year.

Also, in January 2007, the “ICT Office for International Promotion” was established within the Ministry of Internal Affairs and Communications to develop a system to support and execute various international activities conducted by our ICT companies in the following three fields: digital broadcasting, the next generation IP network and mobile communications.

### 5. ICT Reform Promotion Program

The Ministry of Internal Affairs and Communication established the “ICT Reform Promotion Program” in April 2007 to accelerate the structural reform of the ICT field to improve convenience for users and enhance the international competitiveness in the ICT industry, which contributes greatly to economic growth in Japan, where population decrease is a serious social problem.

This program focuses on 1. enhancement of international competitiveness, 2. promotion of telecommunication

tion and broadcasting reform, and 3. fundamental enhancement of international strategic systems relating to information communication.



## Section 2

### Development of Information and Communications Policies

#### 1. Development of telecommunications

##### (1) Establishment of fair competition rules

###### A. New competition promotion program 2010

The Ministry of Internal Affairs and Communications has hosted meetings of the Study Group on a Framework for Competition Rules to Address Progress in the Move to IP since its onset in October 2005 in order to discuss the basic concepts for key elements of competition rules in preparation for the coming era of full-scale IP services at the beginning of 2010 and to clarify the direction of discussions on policies for connections and tariffs. This Study Group summarized the details into a report in September 2006.

Based on this report, the Ministry of Internal Affairs and Communications formulated the “New Competition Promotion Program 2010” in the same month, documenting the plan to establish fair competition rules by the beginning of 2010. This program includes a wide range of actions to be conducted: promotion of facility competition, review on assigned telecommunication systems (Dominant restriction), promotion of competitiveness in the mobile communications market, review on the universal service system, and evaluation on network neutrality.

###### B. Evaluation of competition in the telecommunications field

The Ministry of Internal Affairs and Communications has made efforts to evaluate the state of competition in the telecommunications field (hereinafter called “competition evaluation”) since fiscal 2003 so that the current state of competition between telecommunications operators, which has become increasingly complicated along with the advancement in IP and broadband services, can be understood and then reflected in policymaking. In October 2006, the Guidelines Concerning Competition Review in the Telecommunications Business Field 2006 ~ 2008 was formulated as a mid-term policy for competition evaluation and “Detailed Items for Implementation of Competition Review in the Telecommunications Business Field 2006” was announced in November as a year plan.

Basically, a strategic evaluation focusing on specific themes as well as periodical evaluation is supposed to be executed.

Based on the Basic Policy and Detailed Items, The Ministry of Internal Affairs and Communications collected information from the supply-side and demand-side and announced “FY2006 Market Definition in the Telecommunications Business Field”, describing detailed evaluation items. Evaluation results are to be announced by July 2007.

###### C. Promotion of competitiveness in mobile communications market

Mobile Number Portability (MNP) is the ability to take an existing mobile phone number assigned by a mobile phone carrier and reassign it to another mobile phone carrier, allowing the subscriber to retain the same number. The Ministry of Internal Affairs and Communications conducted deliberations at the Study Group on Mobile Number Portability since November 2003. As a result, a report was finalized in April 2004 which recommended the items to be considered at the time of introduction, and commented that MNP should be introduced at the earliest possible time in fiscal 2006.

In response to the report, the Ministry of Internal Affairs and Communications compiled and issued Guidelines on Number Portability for Mobile Phones in May 2003 which stipulated specific items to be considered for introduction by mobile phone service providers and other telecommunications service providers, including the forms of introduction, timing of introduction, methods of introduction, cost sharing system, and usage procedures, and so forth. Furthermore, partial amendment of regulations was made in February 2006 to stipulate that telecommunications service providers (mobile phone service providers) should take necessary measures to enable the portability of numbers from November 2006. Based on this, telecommunications service providers just started the number portability service of cell phones on October 24, 2006.

###### D. Ensuring Universal Services

The universal service system is a system wherein the involved telecommunication service providers share the fee required to ensure provision of the “Basic



Telecommunication Services” (universal services: subscription telephone, public telephone, and emergency telephone), which are indispensable for people's daily lives, throughout the country.

In late August 2006, NTT East and West announced that their universal service revenues for fiscal 2005 were approximately a 51.8 billion yen deficit for total. In response to this result, the government approved a subsidy amount and delivery procedure as well as contribution amount and collection method in November 2006, and conducted the first application of the system.

#### **E. Ensuring fair and legitimate business operation for telecommunication service providers**

In telecommunication service field, the government regulations are repeatedly reduced to shift from the ex-ante regulatory system to the post-check system. During this shift, since business operation of some providers was found out to be inappropriate, recovering reliability in the telecommunication services is an urgent task to be addressed now. In response to the situation, in April 2007, the government amended the requirements for business improvement orders to telecommunication service providers, and submitted a Law Bill to Amend the Broadcast Law to the 166th Diet, including an amendment to Telecommunications Business Law, which regulates government oversight of “sound development of telecommunication services” in addition to the current “user interests”.

### **(2) Advancement of Network**

#### **A. Promotion of Network Advancement**

The IT New Reform Strategy stipulates that efforts shall be made to transfer the systems to IPv6 in principle by fiscal 2008 in the effort toward realization of the world's most convenient and effective e-Government, and in preparation for the renewal of information communications equipment for each government agency. Based on this strategy, the Ministry of Internal Affairs and Communications has been sharing/exchanging opinions with other countries regarding migration to IPv6 and making efforts toward introduction of IPv6. Also, to realize a ubiquitous network society, the Ministry of Internal Affairs and Communications has been conducting empirical tests since 2006, ensuring security of the IPv6 network to enable users to leverage its benefits safely and securely without adding a number of devices.

Furthermore, developing the next generation IP network system is essential to realize a ubiquitous network society. The “Next Generation IP Network Promotion Forum” was established in December 2005 for conducting mutual connection tests, evaluating technical aspects including empirical tests as well as setting up technical standards and international standards. The Forum issued a finalized report in 2006, which included evaluation on security and reliability regarding the migration to IP system.

#### **B. Evaluation on Telecommunication Numbers**

The business environment surrounding fixed phone services has been changing largely due to new entry to the market and rapid enlargement of IP phone services. Along with this situation, available telecommunications numbers are now at risk to be used up in the future. Also, the role of telecommunications numbers needs to be reviewed during the process of migration to IP.

Hence, the Ministry of Internal Affairs and Communications hosted meetings of the Study Group on Telecommunications Numbers in the IP Era since December 2004. This study group issued the second report in June 2006, which determined to use 060 number for new services such as Fixed-Mobile Convergence, and 1XY telecommunications numbers for consulting with administrative call centers, etc.

To review requirements for assigning new numbers to the FMC services, service ranges and requirements for current numbers, the Ministry of Internal Affairs and Communications consulted with the Information and Telecommunication Committee for Regulatory Frameworks Pertaining to Telecommunications Numbers for Introducing Fixed-Mobile Convergence (FMC) Services in September 2006, and received a response in March 2007.

#### **C. Appropriate Management of IP Address and Domain Name**

Internet resources such as IP addresses and domain names are managed and controlled by the private non-profit organization ICANN (Internet Corporation for Assigned Names and Numbers). The Ministry of Internal Affairs and Communications is contributing to establishment of an international cooperative structure as an authorized registered member of the Government Consultative Committee of ICANN (consisting of representatives of respective countries).

## **2. Development of Broadcast Policy**

### **(1) Broadcast Policy Summary**

#### **A. Reviewing broadcast policy based on the digitization of broadcasting**

Toward a smooth conversion to digital broadcasting and development of broadcasting that would accurately meet viewers' needs, the Ministry of Internal Affairs and Communications set up the Study Group for the Development of Digitization and Broadcasting Policy in July 2004. This study group issued a final report in October 2006. This report made proposals on the decentralization principle of mass media, institutionalization of holding companies which own broadcasting companies as subsidiaries, and stipulations of CS broadcasting.

#### **B. New trend of international broadcasting**

Under the Broadcast law, the Minister of Internal Affairs and Communications can order NHK to conduct

international broadcasting using a specified signal range and contents. The Enforcement Order (April 2006) of fiscal 2006 was issued for international audio broadcasting, requiring broadcast of current events, important national policy, news reports and explanations for governmental opinions regarding international affairs as broadcasting contents.

Then, since the North Korean abduction of Japanese was determined to be a task that the entire nation must tackle, the government started to leverage audio international broadcasting more positively, and in November 2006, decided to include special notes on the North Korea abduction program in its broadcasting contents. This was also included in the FY 2007 Enforcement Order of international audio broadcasting (April 2007).

### C. Revision of Broadcast Law

Based on the “Agreement between the government and the ruling parties on regulatory frameworks for communications and broadcasting” (June 2006) etc., the Ministry of Internal Affairs and Communications has been promoting reform in communications and broadcasting fields, and conducted a revision of the broadcasting system, focusing on NHK related programs. The Ministry just submitted a law bill for partial amendments of the Broadcast Law, etc to the 166th Diet, including critical reforms such as establishing the procedure to enable prompt and flexible use of radio waves.

Amendments to the Broadcast Law suggested in this law bill include the followings:

- (1) NHK ... 1. Enhancement of governance, 2. Provision of program archives using broadband services, 3. Building a system for new international broadcasting, and 4. Review on enforced broadcasting system
- (2) Commercial broadcasters ... 1. Introduction of authorized broadcasting holding company system, 2. institutionalization of pay-TV management, 3. Independent use of one-segment broadcasting, 4. development of regulations which are required when a consignment broadcaster is transferred, 5. easing of regulations on pay-TV fees, and 6. Introduction of a system to require submission of recurrence prevention plan.

### (2) Promoting the advancement of broadcast

#### A. Promoting the transfer of terrestrial broadcasting from analog to digital format

Terrestrial digital TV broadcasting was launched in the three largest metropolitan areas, Tokyo, Osaka and Nagoya, in December 2003, and gradually expanded its coverage area. By December 2006, service was started in all prefecture capitals. The current analog broadcast television will be fully converted to digital format by July 24, 2011. In January 2004, the Ministry of Internal Affairs and Communications consulted with the Information and Communications Council for “appropriate usage of terrestrial digital broadcasting in the future and the role of the administration in its penetration” to

examine issues and solutions regarding future usage of terrestrial digital TV in various fields and a complete conversion to digital broadcasting by 2011. The Council issued the third report in August 2006.

Working with the Association for Promotion of Digital Broadcasting, broadcasters, and local public entities, the Ministry is actively promoting concrete benefits for users and social meaning for digitalization of terrestrial broadcasting to the public by posting advertisements in newspapers, announcing via television commercials, creating leaflets and posters, and providing information at various events.

Furthermore, in December 2006, the “National Council for Promotion of Terrestrial Digital Broadcasting” consisting of top leaders from a wide range of fields such as broadcasters, manufactures, dealers, consumer groups, mass media and business groups, and concerned government ministries including the Ministry of Internal Affairs and Communications issued the “Action Plan for the Promotion of Digital Broadcasting (No. 7)”, documenting the penetration target of terrestrial digital broadcasting receivers, and detailed items to be conducted by concerned parties.

#### B. Promotion of satellite broadcasting policy

BS analog Hi-Vision broadcasting on Channel 9 will be terminated on November 30, 2007. From December 1, the three commercial broadcasters authorized for consignment broadcasting (December 2005) are to start digital Hi-Vision broadcasting using this frequency band. To facilitate the transition to digital broadcasting and promotional activities to viewers, the Ministry of Internal Affairs and Communications has been holding a “Liaison Committee concerning preparation for the termination of BS analog Hi-Vision broadcasting and the launch of new BS digital broadcasting” since September 2005. The committee is now conducting preparations for a smooth transition.

Also, responding to the changing environment surrounding satellite broadcasting, the Ministry had been holding “Study Group on Future Images of Satellite Broadcasting” from October 2005 to October 2006, to discuss mid- and long-term issues to be addressed for sound development of satellite broadcasting. Based on proposals from this study group, the Ministry is now looking into the usage of new frequency bands for BS broadcasting, promoting a shift from CS-digital broadcasting to High-Vision broadcasting, and discussing the platform for satellite broadcasting.

#### C. Advancement of cable television

While the environment surrounding cable television has drastically changed in recent years, including the digitization of terrestrial and satellite broadcasting and advancement of broadbandization of communications services, some issues are increasingly recognized as needing attention. In February 2006, the Ministry of Internal Affairs and Communications set up the Study

Group on the Nature of Cable Television in the 2010's to conduct discussions regarding the nature of cable television services with an eye to 2010 and after, in order to identify future tasks, and deliberate on comprehensive support measures for the development of cable television, and a report is scheduled to be finalized by June 2007.

### 3. Promotion of radio policy

#### (1) Radio policy summary

##### A. Promotion of Strategy for Frequency Liberalization

For delivery of radio broadband services, which is the key to the realization of a ubiquitous society in Japan, the Ministry of Internal Affairs and Communications is promoting the Strategy for Frequency Liberalization as a means to formulate a framework to drastically liberalize frequencies and allocate them to new fields. According to this strategy, the Ministry has introduced the calculation method of radio usage fee based on economic value of the radio waves, and the "registration system of radio stations" required for free activities of radio businesses. The Ministry continues to promote the policy based on this strategy.

##### B. Establishing a procedure to facilitate a quick and flexible radio usage

To outline the basic direction of deliberations on a system that integrates and links communications and broadcasting, the Ministry of Internal Affairs and Communications has been having meetings of the "Study Group on Comprehensive Legal System Governing Communications and Broadcasting" since August 2006. The study group issued a report concerning the Radio Law, "Legal System in Response to New Aspects of Communications and Broadcasting -- toward Acceleration of Wireless Innovations --" in January 2007. Taking the proposals from this report into account, the Ministry of Internal Affairs and Communications submitted the "Law Bill to Amend the Broadcast Law" to the 166th Diet, including a partial revision of the Radio Law, which facilitates a quick and flexible radio usage, and the Telecommunications Business Law, together with other revisions.

##### C. Promotion of reform of frequency allocation

Service of cellular phones is now encountering a rapid shift from second to third generation. In response to the situation, the Ministry of Internal Affairs and Communications set up a licensing scheme in August 2004 which specified 1.7GHz (FDD system) and 2GHz (TDD system) bands as bands for the third generation cellular phones. In November 2004, the Ministry approved establishment of particular base stations for three newly entered cellular phone business operators who use this frequency band. Furthermore, the Ministry of Internal Affairs and Communications launched the Action Plan for Radio Spectrum Reallocation to present the action plan to implement smooth and steady follow-

ups on the radio spectrum reallocation. This Action Plan is to be sequentially reviewed based on evaluation results of the annual survey on radio spectrum usage and changes in the environment for radio spectrum usage, etc.

#### (2) Approach to advancement and diversification of radio usage

##### A. Advancement of mobile communication system

The 1.5GHz band is currently used for second generation cellular phones and independent mobile communications. To promote a reform of bands to secure bands for third generation cellular phones, in April 2007, the Ministry of Internal Affairs and Communications developed a system including new technical criteria toward introduction of third generation cellular phones and the modified frequency assignment plan. So-called fourth generation mobile telecommunications systems in around 2010, following IMT-2000 (International Mobile Telecommunications-2000), are being internationally standardized by the International Telecommunication Union (ITU). With the aim to realize practical application in and around 2010, the Ministry of Internal Affairs and Communications is actively promoting efforts for research and development and international standardization with industry-academia-government cooperation.

##### B. Setting up the Ultra Wide Band (UWB) wireless system and wireless access system

The Information and Communications Council conducted deliberations on the technical requirements for the UWB wireless system while taking account of the following conditions: the user environment for the UWB wireless system, operational forms of other wireless systems, domestic users' needs and the trend in international discussions, etc. As a result, a partial report was put forward in March 2006 on the technical requirements for the UWB wireless system for communications using microwave bands. Based on the report, the Ministry of Internal Affairs and Communications revised the related ordinances, etc. in August 2006. Also, in May 2007, the Ministry set up a system for the introduction of a High-speed Wireless LAN System which supports communication speeds over 100Mbps.

#### (3) Development of radio usage environment

With rapid diffusion and advancement of radio usage such as cellular phones, public concerns are growing that radio frequencies emitted by wireless facilitates may have an undesirable effects on human health, and induce malfunction of medical devices such as implanted cardiac pacemakers.

To resolve these concerns and create an environment where people in Japan can use radio frequencies safely and securely, the Ministry of Internal Affairs and Communications is currently working on establishment of appropriate criteria and conducting continuous research. The Ministry is also promoting international



harmonization of Radio-Radiation Protection among various countries.

With the expansion of radio usage, inappropriate use of radio frequencies by unlicensed radio stations has increased and a number of failures in radio usage have

been reported. In order to conduct effective detection of unlicensed radio stations, the government has been developing the Detect Unlicensed Radio Stations (DEURASÅFDetect Unlicensed Radio Stations) since 1993.



## Section 3

### Establishment of a Safe and Secure Ubiquitous Network Society

#### 1. Consumer administration in relation to telecommunications services

##### (1) Illegal and harmful information on the Internet

Illegal and harmful information on the internet is increasing social concerns in Japan. The Ministry of Internal Affairs and Communications has convened meetings of the Study Group to Address Illegal and Harmful Information on the Internet since August 2005 to deliberate on voluntary efforts of providers to tackle illegal and harmful information on the Internet and systems and measures to effectively support such efforts. Then, a finalized report was compiled in August 2006. Based on the proposals from the study group, the Ministry of Internal Affairs and Communications continues to develop a network environment where the administration can support voluntary actions of providers and users against illegal and harmful information on the internet with due considerations to freedom of expression. For example, the Ministry assists the associations and others in the business to create and promote a guideline for proper operation of the Provider Liability Limitation Law, supports providers to voluntarily tackle illegal and harmful information on the internet, and disseminates and promotes the application of filtering.

##### (2) Measures against nuisance e-mails

The Ministry of Internal Affairs and Communications has been and continues to take comprehensive measures against e-mails delivered to cellular phones and PCs unilaterally for advertisement and commercial purposes without consent of the receiver (so-called nuisance mails). These measures include effective enforcement of Law on Regulation of Transmission of Specified Electronic Mail promotion of a project to banish nuisance emails, technical solutions, and international cooperation.

##### (3) Misuse of cellular phones

With rapid diffusion of cellular phones, cellular phone related crimes such as billing fraud or drug deals

are becoming a social issue that needs to be addressed. The Ministry of Internal Affairs and Communications address this issue by properly enforcing the “Law on Identification of Cellular Phone Users by Mobile Operators and Prevention of Abusive Use of Cellular Phones” (Fully enforced in April 2006)

##### (4) Protection of personal information in the telecommunications field

With respect to protection of personal information encompassing all areas, the Law concerning the Protection of Personal Information became fully enforced in April 2005. To conduct proper enforcement of this law, the Nippon Information Communications Association and Secure Broadcasting Authorization and Research Center are the accredited organizations for protection of personal information in the telecommunication field and broadcasting field, respectively. In March 2007, a recommendation based on this law was made to a telecommunication service provider which caused a mass leakage of personal information (first time in the information and communication field).

For personal information protection in the telecommunication service field, the Ministry of Internal Affairs and Communications revised Guidelines regarding the Protection of Personal Information in the Telecommunications Business in August 2004, and for the broadcasting field, formulated the “Guidelines concerning Protection of Personal Information of Broadcast Services Users” in August 2004 (enforced in April 2005). The guideline was reviewed and revised in March 2007 based on a final report, etc. from the Study Group on the Future Direction of Satellite Broadcasting (October 2006 to October 2007).

#### 2. Promotion of Information Security Policy

##### (1) Information security measures of the government

The government has been promoting information security measures in a concerted manner by establishing

the National Information Security Center in the Cabinet Secretariat (NISC) in April 2005, as a central organization for information security measures, and the Information Security Council (chairman: Cabinet Secretary) in the Strategic Headquarters for Promotion of an Advanced Information Telecommunications Network Society in May 2005. The Council formulated the First Information Security Basic Plan in February 2006.

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

Establishing a safe and secure usage environment with improved information security is essential to promote an advanced information and communication network society in the future. Based on the progress of efforts in information security measures of the entire government and the second report “Proposals of Information Security Policy 2005” (July 2004) of the Study Group on Next Generation IP Infrastructure (February 2004 – June 2005), the Ministry of Internal Affairs and Communications has been making efforts to strengthen information security measures from three aspects: 1 Preventing failures from spreading out through networks, 2. Corresponding to diversification of products connected to networks, and 3. Overcoming vulnerability of human resources.

## **(3) Ensuring safety and reliability in the telecommunications services**

As an index for safety and reliability measures for information and communications systems, the Ministry of Internal Affairs and Communications created “Safety and Reliability Criteria for Information and Communications Network”. The Ministry is promoting

the use of the criteria among telecommunications service providers; however, an increase in the number of accidents such as communication failure in services as well as unconventional network accidents are being confirmed, due to the advancement of IP technology and expansion of usage of ICT services. In consideration of such situation, safety and reliability measures for network IP technology have been discussed at the Information and Communications Council since August 2006.

## **(4) Promotion of safety assessment and advancement of cryptographic technology**

The CRYPTREC (Cryptography Research and Evaluation Committee), or the project to assess cryptography by study groups, which is co-hosted by the Ministry of Internal Affairs and Communications and the Ministry of Economy, Trade and Industry, continued to conduct the study, research, and compilation of standards to audit e-government recommended ciphers and ensure the safety and reliability of the e-government recommended ciphers in fiscal 2006.

## **3. Ensuring reliability of electronic data**

In order to further promote socio-economic activities using the network such as e-commerce by ensuring a smooth user environment for electronic signatures, the Law concerning Electronic Signature and Certification Services has been enforced since April 2001. The Law provides for the government’s introduction of arbitrary certification systems which satisfy certain standards, and as of the end of fiscal 2006, 18 specific certification services had been accredited.



# Section 4

## Development of affluent and vital ubiquitous network society

### **1. Elimination of geographic digital divide and promotion of information system to local communities**

The government has been actively promoting optic fibers, etc., in the effort toward elimination of zero-broadband regions by 2010 in the IT New Reform Strategy.

Based on this government policy, the Ministry of Internal Affairs and Communications formulated the “Next Generation Broadband Concept 2010” which specified the development goals including elimination of

zero-broadband regions by 2010, the basic plan for broadband development such as creation of a roadmap, assignment of roles between the public and private sectors, and a promotional system followed by concerned parties. Using the prefecture roadmap and development manual, etc., the Ministry will make a further effort to support and work with private sectors and local public entities established under the Law for Telecommunication Infrastructure Improvement, in order to eliminate zero-broadband regions.

Also, the Ministry is supporting “services to reduce



disparities in information and communications among regions” and providing “grants for promoting development of local information and communications infrastructure”, to improve the geographical digital divide and promote informatization of local regions.

## 2. Promotion of barrier free information

The Ministry of Internal Affairs and Communications is establishing an information barrier-free environment with no digital divide caused by age and physical restrictions, so that all people including the elderly and disabled can make use of ICT.

The Ministry is promoting the active use of “Operational Models for Governments’ Websites for Everyone” (established in December 2005) which presents specific operation models for maintaining and improving web accessibility, enabling all people including the elderly and disabled to use public websites and web-systems. The Ministry has also been establishing and promoting guidelines to improve telecommunications accessibility. Furthermore, deliberations on guidelines for improving usability have continued since fiscal 2006, in order to offer easy use of ICT to the elderly.

Closed caption programs and audio commentary programs are broadcast to enable people with hearing difficulties or impaired vision to efficiently obtain information through television broadcasting. Based on the “Law for Promoting Businesses that Facilitate the Use of Communications and Broadcast Services by Physically Disabled Persons”, the Ministry is supporting part of the production costs for the production companies.

## 3. Promotion of Informatization of Administrative Services

### (1) Realization of e-Government

The government has thus far been promoting improvements of usability and service quality, administrative reform to leverage IT, and establishment and enhancement of e-Government, based on the e-Government Construction Program, the Future Administrative Reform Policy, and the IT Policy Package-2005.

Also in the IT New Reform Strategy, realization of “the most convenient and efficient e-Government in the world” is specified as one of the IT structural reform policies.

Based on the IT New Reform Strategy, the Liaison Conference for Chief Information Officers (CIO) of Respective Ministries formulated the “e-Government Promotion Plan”(August 2006) to properly implement the future e-government plans and achieve expected results following the PDCA cycle. This plan clearly indicates goals to be achieved by 2010 and measures required to achieve those goals. The Ministry of Internal Affairs and Communications plans to conduct steady promotion of informatization of administrative services based on the e-Government Promotion Plan.

### (2) Realization of e-Local Governments

e-Local Governments are established to increase the satisfaction level of residents, realize a simple and effective administration, revitalize local areas and promote the development of local IT industry. In August 2003, the Ministry of Internal Affairs and Communications formulated the “Guideline for Promoting e-Local Governments” to develop infrastructure of e-local governments and promote online administrative procedures. Also, considering the recent change in the information and communications environment surrounding local public entities, the Ministry issued the “New Guideline for Promoting e-Local Governments” in order to “realize a useful, effective and vital e-local government by fiscal 2010”. This guideline includes not only an operational policy to achieve the goal, but benchmarks to monitor the progress so that the implementation can be reviewed every fiscal year.

Hence, using such infrastructure as Local Government Wide Area Networks (LGWANs), the Resident Registration Network System, and the Public Certification Service for Individuals, the Ministry of Internal Affairs and Communications has been promoting effective e-Local Government and taking various measures from financial and human resource viewpoints, etc., to improve local services.

## 4. Promotion of ICT in Disaster Prevention Field

In addition to public networks for subscribed phones and cellular phones and exclusive lines, the Ministry of Internal Affairs and Communications is now establishing a robust, congestion-free independent network called the “disaster prevention communications network” across the nation, prefectures and municipalities, to secure communications and collect and submit information promptly and steadily in the event of disaster. The Ministry is promoting development and enhancement of the disaster prevention communication network while setting up effective measures in the event of network interruption, including activities of the Conference of Emergency Communications.

## 5. Regional development, etc. utilizing the information and communications infrastructure

Establishment and utilization of regional information and communications infrastructure will promote regional development and revitalization and lead to resolution of various problems that respective regions have. Hence, the Ministry of Internal Affairs and Communications is supporting regional development utilizing the information and communications infrastructure, and regional revitalization initiated by ICT.

Also, to combine all the knowledge from residents, business entities and local public entities and revitalize

local social economy through creation of an ubiquitous network infrastructure, the Ministry of Internal Affairs and Communications has been hosting the following two conferences: “Study Group on Local Revitalization and Ubiquitous Network Society” (since November 2006) for deliberations on concrete issues to be addressed and measures to be taken, and “Study Group on Local Areas during the Web2.0 era” (since November 2006) with the intent to exemplify the ideal local government and region during the Web 2.0 era as well as providing the steps in order to achieve it, utilizing innovative changes such as distributed, open and low cost networks realized by information technology.

## 6. Promotion of Content Policy

The government is promoting comprehensive and effective measures for creation, protection and application of contents through a joint effort by the nation, local public entities and concerned parties since the establishment of Law on the promotion of creation, protection and application of contents. “Intellectual Property Rights Promotion Plan 2006” (formulated by the Intellectual Property Strategy Headquarters, June 2006) aims to create a cultural and creative nation through the effective use of contents, and the “Basic Guideline for Economy and Fiscal Management and Structural Reform 2006” (approved by the cabinet, July 2006) includes expansion of the content market as its fundamental policy, with the goal of “increasing the value of the content market to 5,000 billion yen within the next 10 years”.

To contribute to the promotion of content distribution, the Ministry of Internal Affairs and Communications 1) executes demonstration experiments for IPTV services, 2) has discussions on enhancement of international competitiveness in the content market, 3) promotes community-based creation and distribution of contents, 4) develops a content-trading market, 5) conducts investigative research to prevent distribution of illegal video contents through networks, and 6) creates the next generation video contents and promotes research and development on distribution technology.

## 7. Creation and fostering of ICT venture businesses

To realize sustained development and revitalization of our nation, creation of new industries and reform in industrial structure through innovation will be a critical subject. Venture businesses, which hold advanced and unique technology and create new businesses, are expected to play an important role to initiate innovation. Also, fostering the growth of ICT venture businesses is a key to improve Japan’s international competitiveness in the ICT industry and realize sustained economical development.

However, venture businesses, especially start-up businesses, are facing difficulties in raising funds, securing stable manpower and cultivating a market, due to

limited performance records, no established technical evaluation and lack of collateral on property and credibility. Hence, it is sometimes hard for them to apply and commercialize their highly advanced technologies.

To promote startup and growth of ICT venture businesses, the Ministry of Internal Affairs and Communications offers funds through subsidies and tax benefits, supports securing and training of human resources and provides information through seminars, events and business plan presentations, in cooperation with the concerned ministries and agencies.

For example, to support securing and training of human resources, the Ministry has been hosting meetings of the “Study Group on securing manpower for ICT venture businesses” since June 2006. The study group formulated the “Guideline for securing for ICT venture businesses”, a manual for ICT venture business managers to efficiently secure human resources. Also, as a new plan for fiscal 2007, the Ministry is planning to develop a training program for ICT venture business managers (especially for managers of businesses from startup to expansion phases) to assist creation and review of the business plan and establishment of an operational system to effectively execute the business plan. Furthermore, the Ministry is working with universities that have entrepreneurial education programs and ICT venture businesses, to develop an educational program for college students, fostering their managerial and technical skills. This program is intended to develop ICT venture business managers and executives.

## 8. Development of ICT personnel

### (1) Development of advanced ICT personnel

The Ministry of Internal Affairs and Communications has been implementing a support scheme for ICT human resources development programs since fiscal 2001 to assist the quasi-public organizations and public-interest corporations which develop human resources with professional knowledge and skills in the information and communications field. Also, the Ministry developed the PBL (Project Based Learning) materials to train project managers (PM) and IT architects (ITA). Furthermore, to train research/development personnel required for innovation in the ICT field, the Ministry has been holding the “Conference for training of research/development personnel in the ICT field” since November 2006, discussing how industry, universities and governments should cooperate with each other.

### (2) Supporting development and utilization of ICT infrastructure at schools

It is essential to develop an environment where our children may experience ICT at an early age so that they can obtain skills to utilize ICT. “Creating and executing a plan for development of ICT environment including school LANs and computers in general classrooms as well as introducing ultra-high speed internet using fiber optics into schools” is included in the IT New Reform

Strategy. Hence, the Ministry of Internal Affairs and Communications created the "School LAN Introduction Manual", showing a model plan to develop a school network, and published it on its website, in order to support introduction of school LAN, which is an ICT infrastructure at schools.

## 9. Promotion of Telework

Working with the Ministry of Health and Welfare, the Ministry of Internal Affairs and Communications started "Demonstration experiments on telework model system (Shared use model system enabling a safe and secure introduction of telework)" to develop an environ-

ment for telework of private sectors. In addition, according to the tax reform in fiscal 2007, the Ministry established the "Tax system for development of telework environment", which provides investment incentives to the companies introducing telework facilities.

The Ministry is also implementing a wide range of measures such as diffusion and education activities with industry-academia-government cooperation ("Telework Promotion Forum"), and creation of a "Telework Introduction and Operation Guide Book" with the concerned ministries (Ministry of Health and Welfare, Ministry of Economy, Trade and Industry, and Land, Infrastructure and Transportation Ministry).



# Section 5

## Promotion of Research and Development

### 1. New research and development strategy toward a ubiquitous society

Japan has developed the world's most advanced broadband environment and achieved the status of the world's leading nation in the field of mobile internet usage. While making use of its expertise, it is also important to promote research/development and demonstration experiments for elemental technology and utilization technology required to realize a ubiquitous network society, together with research/development to create solutions for newly emerged issues such as establishment of the next generation backbone, which can handle the rapid increase in traffic volume.

The Ministry of Internal Affairs and Communications consulted the Information and Communications Council in July 2004 about the nature of research and development toward a ubiquitous society. The Council issued a report in July 2005. The report includes suggestions on the nation's role to promote "UNS Strategy Program" and this program, as well as the system and environment, which will be essential to conduct research and development.

The UNS Strategy Program (Universal Communications, New Generation Networks, Security and Safety for the Ubiquitous Network Society) consists of 1. Strategy for Next Generation Network Technology aimed at maintaining and strengthening international competitiveness, 2. Safe and secure ICT strategy aimed at establishing a safe and secure society, and 3. Universal Communications Technology Strategy to develop intellectual prowess. The Ministry of Internal

Affairs and Communications promotes the research and development of fiscal 2006 intensively and strategically based on this program.

### 2. Strategy for Next Generation Network Technology

Amid the progress in the re-construction of core networks (advancement of IP communications) on an international scale, the Ministry of Internal Affairs and Communications 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, based on the Strategy for Next Generation Network Technology aimed at maintaining and strengthening international competitiveness. The R&D activities include research/development of (1) next-generation backbone, (2) basic technologies for ubiquitous networks, (3) next generation photonic network technology, (4) advanced utilization technologies for information appliances, (5) next generation network infrastructure technology, and (6) dynamic network technology.

### 3. Safe and secure ICT strategy

As the "ICT Safe and Secure Technology Strategy" aimed at establishing a safe and secure society, the Ministry of Internal Affairs and Communications promotes research and development activities to overcome issues in various fields including medical care/welfare, food/agriculture, security/disaster prevention, urban/natural environment with ICT, to achieve "ICT-based Safety and Security" which offers older people a sense



of security, and to provide a dependable ICT infrastructure so that anyone can enjoy “Safe and Secure ICT”.

The R&D activities include research/development of 1. ubiquitous sensor network, 2. systems to ensure child and elderly safety using ubiquitous network technologies, 3. information and communications technologies for advanced utilization of e-Tags, 4. mobile satellite communication technology, 5. high-speed, large capacity satellite communication technology, 6. quasi-zenith satellite system, 7. remote sensing technology, 8. next generation advanced network infrastructure, 9. integration between robots and ubiquitous network, and 10. information security technology.

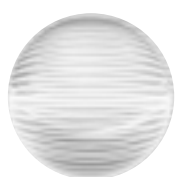
#### 4. Universal Communications Technology Strategy

As a “Universal Communication Technology Strategy” for boosting intellectual energies, the Ministry of Internal Affairs and Communications 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.

#### 5. Development of a research and development environment to promote the UNS Strategy Program

To effectively and efficiently promote research and development activities in information and communication technology including the UNS Strategy Program, creating an open, flexible and competitive research/development environment is essential. Hence, the Ministry of Internal Affairs and Communications is now developing the advanced test-bed network for research and development (JGN II), utilizing competitive research funds.



## Section 6

### Promotion of International Strategy

#### 1. Promotion of international policy

##### (1) Promotion of international policy in Asia-Pacific region

###### A. Promotion of the Asia Broadband Program

As an action plan for the development of a broadband environment in the Asian region, the Ministry of Internal Affairs and Communications formulated the Asia Broadband Program in March 2003. In this Program, Asia aspires to become an information hub by 2010. Also, with a strong connection to private sectors in Japan, the Ministry has been hosting the “Broadband Promotion Conference in Asia” since March 2004. The Ministry of Internal Affairs and Communications and other concerned ministries revised this plan at the meeting held in August 2006.

###### B. Cooperation and coordination between Japan, China and Korea

In September 2002, the first Japan-China-Korea ICT Ministerial Meeting was held in Marrakech, with the aim to promote cooperation between the respective countries

in the field of information and communications. In March 2006, the fourth Meeting was held in Amoi, China. The three countries agreed on reinforcement of collaboration with ASEAN countries and further corporation in the ICT field including information security, next generation IP network and 4G, and signed an agreement to ensure the corporate framework among the three countries.

###### C. Multilateral Efforts in other Asia-Pacific region

Various multilateral efforts have also been made: Asia Pacific Economic Cooperation (APEC), Asia Pacific Telecommunity (APT), Association of South-east Asian Nations (ASEAN) Telecommunication and IT Ministers Meeting, and Asia-Europe Meeting (ASEM). As for ASEM, “The first ICT Cabinet members Meeting” was held in Hanoi, Vietnam in November 2006, and the chairman’s statement including the “List of Activities”, summarizing issues to be tackled for ASEM in the future, was adopted at the meeting. Agreement was also made with regard to keeping the exchange of opinions and information sharing in order to promote cooperation in the ICT field.

## **(2) Promotion of international policy among international institutions and multiple nations (except for Asia-Pacific region)**

### **A. Participating in ITC (International Telecommunication Union) Activities**

ITU is a specialized agency of the United Nations in the telecommunication field. Japan is making a positive contribution to the work of the ITU; for example, Japan has accepted assignments of a chairperson and vice-chairperson to the Study Group, and supports human resource development.

Regarding the World Summit on Information Society, based on discussions at the second phase of the WSIS that took place in Tunis, the first meeting of the Internet Governance Forum (IGF) was held in Athens (Greece) during late October and early November 2006.

As well, Japan is also actively contributing to a new round of negotiations of the G8 Summit, WTO (World Trade Organization), and activities of the OECD (Organization for Economic Co-operation and Development) and WIPO (World Intellectual Property Organization).

### **(3) Promotion of international policy in bilateral relationship**

Japan has been having multifaceted discussions with the United States every year since June 2001, based on "US-Japan Economic Partnership for Growth", which was created to promote sustainable growth through dialogue. In June 2006, as a result of 5th year dialogue on the U.S.-Japan Regulatory Reform and Competition Policy Initiative, a report concerning regulatory reform and competition policy in various fields including telecommunication was summarized and announced.

Then in December 2006, petitions were exchanged during the 6th year dialogue.

As well, the Ministry of Internal Affairs and Communications is having consultations on policy with other countries' ministries and agencies of information and communication, including bilateral policy dialogues with European countries and China. Also, the Ministry is making active effort to conclude FTA (Free Trade Agreements) and EPA (Economic Partnership Agreements).

## **2. Promotion of international cooperation**

The information gap (digital divide) has been growing internationally, and there is an increasingly recognized need to build information and communications networks on an international scale, including developing countries. The Ministry of Internal Affairs and Communications provides various supports, including ICT human resources development, support for ICT policy and system formulation through policy dialogue with the information and communications ministries of developing countries, support for the development of information and communication infrastructure by implementing international joint experiments, etc., and support for the international and regional organizations that promote international cooperation in eliminating the digital divide. The Ministry also contributes to sustainable development in the information and communications field in developing countries through Official Development Assistance (ODA) in cooperation with various agencies and organizations, including the Ministry of Foreign Affairs, Japan International Cooperation Agency (JICA), and Japan Bank for International Cooperation (JBIC).



## **Section 7**

### **Development of Postal Service Administration**

#### **1. Smooth and secure execution of privatization of Japan Post**

On October 1 2007, Japan Post Corporation (holding company) and 4 other business corporations (a mail delivery company, an over-the-counter service network firm, a postal savings company and an insurance services company), together with Organization of Postal Savings and Postal Life Insurance (independent administrative agency), were established based on the Japan Post Law. The services of Japan Post are supposed to be transferred

to above companies and organization.

To facilitate privatization and splitting up of Japan Post, the Ministry of Internal Affairs and Communications has started a preparation towards privatization, such as approving "Execution Plan for Transferring Services of Japan Post" regulating transfer of assets, services and personnel of Japan Post to Japan Post Corporation and respective companies while improving fiscal performance and management efficiency to ensure sound management and encourage compliance.

## 2. Effort towards postal service and corresponding delivery service

Since the “Law concerning Correspondence Delivery by Private-Sector Operators” was enacted in April 2003, a need to discuss how new companies can enter into the general correspondence delivery business has been increasing. The Ministry of Internal Affairs and Communications has been having meetings of “Study Group on the Reserved Area in Postal Services and Competition Policies” since January 2006. The Study Group issued a report in June 2006. The Ministry is also making efforts on comprehensive and fundamental review on overall system for postal and corresponding delivery services after the implementation of privatiza-

tion of the postal service. For example, with a view to advance proposals and discussions of this Study Group, the Ministry has started meetings of “Investigation Study Group for Reviewing Postal and Mail Delivery Services”, which encompasses new trends such as advancement of privatization of the postal service and enactment of Law on Postal Reform in U.S.

Also, according to the “Basic Policies Concerning the Protection of Personal Information” (April 2004) adopted by at a Cabinet meeting, the Ministry has been having meetings of “Study Group on Protection of Personal Information in Corresponding Delivery Service Field” since December 2006 to determine guidelines, based on Private Information Protection Law.