

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