Section 4 Development of an Affluent and Vital Ubiquitous Network Society

1. Elimination of digital divide and promotion of information systems to local communities

In order to deliberate specific measures to eliminate the digital divide in view of the changes that are expected to take place by 2010, the Ministry of Internal Affairs and Communications (MIC) set up the Strategic Council on Bridging the Digital Divide in October 2007 and a final report was prepared and announced in June 2008. Based on this, the Strategy on Bridging the Digital Divide was formulated as a master plan. The strategy lists the following items as goals for developing a broadband infrastructure: (1) eliminating broadband-zero areas by end of FY2010 and (2) raising the super-high-speed broadband service area coverage rate of households to more than 90%. In addition, the progress of related measures will be followed up under this strategy.

Since it is difficult to rely on private operators to develop a broadband infrastructure to eliminate the remaining zero-broadband areas (1.4% as of end of September 30, 2008), early elimination will be pursued through the active intervention of public programs. The MIC set up the Council on Broadband Development to further facilitate collaborative partnerships with telecommunications business operators.

The MIC also established the Study Group to Promote Development of Mobile Phone Coverage Areas in March 2009 with the aim of reviewing the goals for further coverage area development for mobile phone services and considering specific measures based on the Strategy on Bridging the Digital Divide. A report is expected to be produced around February 2010.

2. Regional development, etc., utilizing the information and communications infrastructure

Acknowledging that correcting the regional divide is an urgent issue, the MIC is committed to upgrading local economies and societies through the power of the structural reform of ICT as, for example, a means of dispatching regional informatization advisors. Specifically, the MIC has set up the Portal Site for Community Revitalization through ICT (jointly with the Association for Promotion of Public Local Information and Communication/July 2008) and has been implementing the Program to Establish Regional ICT-utilization Models (since FY2007).

Furthermore, the MIC has been promoting the dissemination of the Community Information Platform, which is the standard specification stipulating the rules to be followed by individual systems, so that information systems of municipalities, etc., can be mutually connected and coordinated. The MIC has performed demonstration tests on systems meeting the standard specification for the Community Information Platform, which would enable coordination among municipalities and between municipalities and the private sector, targeting the moving industry and local revitalization sector since FY2008 as a project to promote the Community Information Platform.

Furthermore, the MIC has implemented the Hometown Mobile Service Promotion Project with the aim of creating an ubiquitous society and promoting local industry, thus realizing the revival of the local community through the promotion of hometown mobile businesses that provide services limited to specific functions so that the elderly people living in the local area can easily use mobile phones using an MVNO.

3. Promotion of barrier-free information

Today, various services are widely offered through information and communications devices or websites, and therefore, it is important to ensure accessibility for elderly and disabled people. The MIC is promoting the active use of the Operational Models for Government Websites for Everyone that offer specific operational models for maintaining and improving web accessibility, enabling all people to use public websites.

With respect to telecommunications accessibility, the ITU-T approved the Telecommunications Accessibility Guidelines, which had been discussed at the instigation of Japan, as an ITU Recommendation in 2007. In response, the MIC has been making efforts toward the dissemination and penetration of the said guidelines.

The MIC has also formulated guidelines necessary to improve usability of ICT products and services for elderly people.

Moreover, in order to enable people with visual and auditory disabilities to easily acquire information through broadcasting media, the MIC subsidizes part of the costs of production of closed-caption and audio description programs. The Guidelines for Broadcasting Administration for the Visually and Auditory Impaired Persons, formulated in January 2007, aims to provide closed-caption services to all possible broadcasting programs by 2017.

4. 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 New IT 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 implement future e-government plans properly and to achieve the expected results following the PDCA cycle (revised in December 2008).

The MIC plans to conduct the steady promotion of the informatization of administrative services based on the plan.

(2) Realization of e-local governments

e-Local governments aim to upgrade administrative services and simplify and streamline administration through the use of ICT. In March 2007, the MIC issued the New Guidelines for Promoting e-Local Governments in order to "realize a useful, effective and vital e-local government by fiscal 2010" and conducts annual follow-ups of the progress of implementation.

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

5. Promotion of ICT in disaster prevention field

In addition to public networks for subscribed phones and cellular phones and exclusive lines, the MIC 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 MIC will continue promoting the development and enhancement of the disaster prevention communication network while setting up effective measures to address network interruption through, for example, activities of the Conference of Emergency Communications.

6. Promotion of content policy

Under the basic policy of market expansion in the contents field as part of its efforts for strengthening the capacity for Japan's growth and international competitiveness, Japan set forth the numerical target of "increasing the value of the contents market to about 5 trillion yen within the next 10 years" in the Basic Guidelines for Economy and Fiscal Management and Structural Reform 2006 (cabinet decision in July 2006). Also, the 2007 Intellectual Property Promotion Plan (Headquarters for Intellectual Property Strategy in May 2007) designated "making Japan a first-class global digital content super-power" as a main pillar of its efforts, thus promoting collaboration between public and private sectors.

In order to develop a business environment for contents production and distribution industries, the MIC has been (1) discussing rules and other issues concerning the use/transmission of contents, (2) making efforts toward the development of a contents trade market, (3) considering the promotion of appropriate broadcasting contents production and trade, and (4) making efforts for preventing illegal contents on networks. In addition, the MIC has been making active efforts for IPTV and for strengthening the international competitiveness of the contents business and reinforcement of the creative industry.

7. Creation and fostering of ICT venture businesses

ICT ventures create new businesses with innovative and indigenous technology and business models are expected to serve as the front-runners of innovation that enables the ICT industry of Japan to achieve further development in an era of increasingly fierce global competition.

In the Third Science and Technology Basic Plan (cabinet decision in March 2006), the government of Japan advocates the strengthening of the comprehensive support system for research and development-oriented ventures, etc., by promoting corporate activities for R&D-oriented ventures. Also, in the 2008 Basic Policy for Economic and Financial Reform (cabinet decision in June 2008), the government states that it intends to continue its efforts for the creation of venture businesses. The MIC also takes measures to promote the creation and growth of ICT ventures in cooperation with related ministries and agencies, covering various aspects from fund supply, securing and development of human resources, and information provision, etc.

In specific terms, in order to support the development of human resources in ICT ventures, the MIC has developed the Manual for Formulation Business Plan and Venture Management and the Management of Courses on Support for Formulation of Business Plan and Points to Remember in Supporting Ventures. It has also formulated the ICT Venture Leader Program and the Guidelines for Securing and Developing Human Resources in ICT Ventures.

8. Development of ICT personnel

(1) Development of advanced ICT personnel

Development of human resources with highly advanced knowledge and skills in the rapidly advancing ICT field is crucial for Japan to maintain its status as the world's leading ICT-based country and to maintain and improve international competitiveness. Thus, the MIC 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, etc., which develop human resources in the information and communications field.

Based on the ICT International Competitiveness Enhancement Program ver.2.0 of July 2008, the MIC intends to support the development of functions serving as a national center for coordination between universities and supported corporations towards developing highly capable ICT human resources in partnership with industry, academia and government.

(2) Promotion of informatization of education

Since it is very important for children--the main players in the future of Japan--to become familiar with ICT at an early stage in their life, to improve their information utilization ability, and to build a society where new intellectual and cultural values are created, the MIC has been making efforts to promote the installation of in-school LAN, to promote the Oasis Project and to improve media literacy, etc.

9. Promotion of telework

Telework is expected to provide a solution for various issues such as an ageing population with a declining birthrate, regional revitalization, reduction in environmental load, etc., while improving business efficiency and productivity in an effort to strike a proper work-life balance. With respect to telework, the government of Japan raised the target for teleworkers to 20% of the working population by 2010 in the Telework Population Doubling Action Plan (decision by the Inter-ministerial Committee on the Promotion of Telework, approved by the IT Strategy Headquarters in May 2007). The MIC also has been making a concerted effort to promote telework, in cooperation with relevant ministries and agencies.

Specifically, the MIC has implemented the Telework Trial/Experience Project to encourage smalland medium-sized enterprises to offer telework opportunities and carried out demonstration tests to establish a next-generation advanced telework model system.

10. Dealing with global warming issues in the ICT field

As global warming issues have become increasingly serious in recent years, ICT is expected to contribute greatly to the realization of a safe and secure society, as well as to present solutions to global warming through more efficient business operations. On the other hand, consideration of global warming issues is becoming increasingly necessary because of the increase in power consumption and in the number of ICT devices in use. The Hokkaido Toyako G8 Summit held in July 2008 adopted a declaration that calls for signatory countries to the U.N. Framework Convention on Climate Change to set a goal of cutting greenhouse gas emissions in half by 2050. This signifies that environmental and climate change issues have become a challenge to be addressed by the international community.

Based on these, the MIC set up the Study Group on Ecology Measures in ICT Sector in November 2008 and prepared a report in May 2009.

Also, at the Symposium on ICT and Climate Change held by ITU in April and June 2008, intensive measures focusing on these issues have been taken and the ITU-T launched the Focus Group on ICT and Climate Change (FG) in July 2008. The MIC hosted the final meeting of the FG in March 2009.

11. Promotion of ICT use for medical care

In the medical sector in Japan, malpractice caused by the increased burden on medical professionals is frequently reported. The burden of national health costs is expected to increase rapidly along with the advancement of an aging population, and preventive measures for lifestyle-related diseases are increasingly necessary.

With the aim of contributing to solutions to these issues, the MIC has been conducting demonstration

tests through the advanced use of ubiquitous network technologies, such as electronic tags for improving the safety of medical practices, in collaboration with the Ministry of Health, Labor and Welfare. The MIC has also been conducting three-year demonstration projects from 2008 to 2010 to build a foundation for health information utilization that would contribute to the provision of seamless medical care and to daily health promotion measures through the effective use of personal health data, in cooperation with Ministry of Health, Labor and Welfare and the Ministry of Economy, Trade and Industry.

Recognizing the shortage of doctors in rural areas, the MIC and the Ministry of Health, Labor and Welfare have jointly set up the Panel on Telemedicine Promotion Measures (jointly hosted by the prime minister and the minister of health, labor and welfare) since March 2008, with the aim of studying the possible use of telemedicine technologies to enhance medical care in rural areas as well as measures to promote such use.