

Section 7

● Elimination of the Digital Divide and Human Resources Development

1 Elimination of geographic digital divide

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

2 Promotion of information barrier-free

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

3 Human resource development

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

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

Section 8

● Promotion of Research and Development

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

In order to realize a society in which the economy of Japan can grow sustainably and everyone can live safely and comfortably, it is necessary to maintain and boost the competitiveness of industry by making proactive and strategic investments in the priority areas in which research and development should be undertaken. From this point of view, the Third Science and Technology Basic Plan (approved by the Cabinet in March 2006)

takes two basic stances: 1) science and technology to be supported by the public and benefit society, and 2) an emphasis on fostering human resources and a competitive research environment. The Basic Plan also identifies four prioritized areas, including the information and communication area, and calls on the government to invest intensively in the four prioritized areas, as it did in the Second Basic Plan.

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

under the policy of selection and concentration.

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

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

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

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

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

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

(3) “Universal Communications Technology Strategy” to develop intellectual creativity

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

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

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

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