

Section 5

Improving Citizens' Standard of Living through Development of ICT Infrastructure and Promotion of ICT Utilization

1. Elimination of the digital divide and utilization of broadband infrastructure

(1) Efforts to eliminate the digital divide

With the goal of eliminating broadband-zero areas and areas with poor cellular phone reception by the end of FY2010, and otherwise laying out concrete steps to bridge the digital divide 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.

As of the end of March 2009, the estimated broadband service area coverage rate of households stands at 98.8%, and the super-high-speed broadband service area coverage rate of households at 90.1%. With regard to the elimination of the remaining broadband-zero areas (1.2%, or 640,000 households, as of the end of March 2009), as it is difficult to rely solely on private operators to develop a broadband infrastructure, in the first supplementary budget for FY 2009 provisions are made for approximately 340 projects requested by municipalities (at a total project cost of about 230 billion yen), and with implementation of development of FTTH, etc. through public development methods, broadband access is expected to be newly provided to approximately 340,000 households. As for the remaining 300,000 or so households, the majority are expected to be covered through expansion of the business area of private-sector enterprises, but certain areas suffer from inefficient development and as there are currently no requests for development support from the municipalities in question, for the time being they are thought best addressed through satellite broadband. Through such efforts, broadband-zero areas could potentially be eliminated before the end of FY 2010. While such broadband development efforts are moving forward on a nationwide basis, there remain issues to be overcome, such as inadequate utilization of broadband (the optical broadband utilization rate stands at approximately 1/3), etc.

The MIC also established the Study Group to Promote Development of Cellular phone Coverage Areas in March 2009 with the aim of reviewing the goals for further coverage area development for cellular phone services and considering specific measures based on the Strategy on Bridging the Digital Divide. A final report was compiled and released in March 2010.

(2) Verification of the “Broadband Open Model”

In order to contribute to the resolution of challenging regional issues by harnessing the power of optical broadband, which can provide high-speed, high-capacity communications at relatively low cost regardless of distance, in November 2009 the MIC launched the The Optical Broadband Utilization Study Team. This study team compiled and released an interim report in April 2010, outlining the construction of a Broadband Open Model incorporating cloud services into an optical broadband system and measures for its utilization for lower-cost, higher quality local government, education, challenged people's issues and the medical field. The MIC plans further deliberations on uses for the Model as the FY 2010 budget allows.

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

Acknowledging that correcting the regional divide is an urgent issue, the MIC is committed to developing support systems aimed at construction of successful models through such steps as dispatching regional informatization advisors and setting up the Portal Site for Community Revitalization through ICT (jointly with the Association for Promotion of Public Local Information and Communication).

Also, starting in FY 2010, the MIC is building on the past results of the Regional ICT Utilization Model Construction Project to formulate regional ICT human resources cultivation strategies, utilization procedures and ICT system standard specifications for application to broad-based partnerships between local governments. In addition to promoting the smooth and efficient adoption of ICT by highlighting the benefits of economies of scale to be achieved by such a partnership and outlining technological and other procedures for introduction, the MIC is continuing to implement the Regional ICT Utilization Model Construction Project as a means of achieving broad-based cost reductions at both the national and local government levels.

Also, in conjunction with APPLIC (The Association for Promotion of Public Local Information and Communication), the MIC is promoting the widespread adoption of Standard Specifications for Regional Information Platforms, rules to be applied to various individual systems, in order to facilitate linkups of regional information systems.

3. Promotion of barrier-free information

(1) Promotion of a universal usage environment

With respect to web accessibility, to ensure accessibility to website in the public sector for everyone including elderly and challenged people, since December 2005 the MIC has been promoting the active use of the Operational Models for Government Website for Everyone that offer specific operational models for maintaining and improving web accessibility. In FY 2010, these operational models will be subject to revision on the basis of recent standardization trends. 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 addition, through the National Institute of Information and Communications Technology, the MIC has been providing support for research and development of communications and broadcasting technology for the elderly and physically challenged so as to further the development of systems, devices and services for these segments of the population. Funding support is provided as necessary to corporations engaged in providing or developing communications and broadcasting services for the physically challenged (such as telephone relay services for the hearing challenged, etc.)

4. Promotion of content policy

Under the basic policy of market expansion in the contents field, as part of Japan's efforts for strengthening the capability for growth and international competitiveness by evolving into an intellectual property powerhouse, the Intellectual Property Strategic Program 2010, (adopted by the Intellectual Property Strategy Headquarters in May 2010) designated "promoting a growth strategy based on enhancement of the content market" as a main pillar of its efforts, with these efforts to be pursued jointly by the private and public sectors. Within the Panel on International Competitiveness, part of the ICT Policy Task Force for a Global Era, the MIC has been deliberating on measures to promote content policy, and an interim report was compiled and released in May 2010. Concrete measures are scheduled for implementation henceforth.

Recognizing the fact that promotion of secondary use of broadcast content via the Internet, etc., necessitates major reductions in the time and expense of rights handling, the MIC is conducting verification experiments in conjunction with video content rights management association ARMA on the integration of rights management inquiries and the realization of more efficient handling of unclear rights cases. In addition, the MIC formed a study group composed of relevant businesspeople and experts, which held deliberations on concrete measures toward the realization of more transparent and fair production and trade, and in February 2009 formulated and released the Guidelines for Regulation of Broadcast Content Production and Trade (with a second, revised version released in July 2009.) At present, these guidelines are being thoroughly explained to relevant parties at briefing sessions, etc. In addition, in March 2010 the MIC, Ministry of Education, Culture, Sports, Science and Technology (MEXT) and METI held the Conference on Promoting the Use of Publications in a Digital Network Society bringing together a wide range of related parties to consider how to promote the use of publications in a digital network society.

5. Development of ICT personnel

(1) Development of advanced ICT personnel

In order for Japan to maintain its position as one of the world's top ICT nations and maintain and improve international competitiveness, it is necessary to cultivate ICT personnel with advanced knowledge and skill in the rapidly advancing ICT field. Since FY 2001, the MIC has been implementing the Support System for ICT Personnel Training Programs, which provides assistance and partial subsidization as needed to joint public-private ventures and public corporations, etc. that implement training programs for ICT personnel. The "Haraguchi Vision" announced in December 2009 sets a target of training 350,000 advanced ICT personnel by 2020.

Starting in FY 2010, the MIC is also implementing a program to promote "future schools," so as to extract and analyze technological ICT issues related to the classroom and work toward the construction of an ICT network environment conducive to "collaborative education" in which children teach and learn from one another.

6. Promotion of telework

“Telework” refers to a flexible work method that makes use of ICT and is not tied in to a work place or time, and is seen as a major contributor to realizing work-life balance, as a step to bring about greater business efficiency and productivity, and as a means of addressing issues such as work-life balance and fewer children and an aging population, revitalizing local communities, and reducing our impact on the environment.

The national government has set an Action Plan for Doubling the Teleworking Population (decided by a committee of government agencies related to telework promotion and approved by the IT Strategic Headquarters in May 2007), which sets a governmental target of doubling the number of teleworkers to 20% of the working population by 2010. The MIC is promoting the spread of telework by working as one unit with other related government agencies.

In addition to implementing Telework Adoption Diagnosis Program demonstration tests and advanced telework system model demonstration tests in fields such as specialized health guidance, manufacturing and environmental contribution, the MIC has made efforts to develop and verify new telework systems employing NGN (next generation networks) which contribute to expansion of the scope of telework application. Also, the MIC continues to implement fixed property tax reduction measures to encourage enterprises to develop telework environments and introduce telework-related equipment.

7. 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, since FY 2009 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. Based on the Panel’s interim report released in July 2008, the MIC implemented a telemedicine model project in FY 2008 and FY 2009, collecting evidence (scientifically backed data) on the safety and effectiveness of telemedicine. On the basis of discussions held in the Working Group on Telemedicine Promotion Measures, part of the ICT Policy Task Force for a Global Era division for investigating global issues, the MIC is pursuing further study on the nationwide diffusion and expansion of telemedicine, including use of the FY 2010 budget allocated for broad-based regional partnerships utilizing ICT to gather and accumulate further evidence and revise the outlook on telemedicine as a supplement to face-to-face treatment, expand the scope of application, and apply medical remuneration to telemedicine, etc.