The "Advanced IT Prefecture"

– IT Strategies for Regional Initiatives in Okayama –

By Goto Masaaki

OKAYAMA Prefecture is making an effort to develop its IT infrastructure ahead of other prefectures in Japan, based on the concept that an information network foundation is just as necessary to society as water and electricity services. The backbone of this effort is the Okayama Information Highway, a high-speed, high-capacity fiber optic network installed throughout the prefecture. With an investment that has reached a total of ¥2.5 billion, Okayama became the first regional government in the world to install the next-generation Internet protocol standard, IPv6, for its core network. By actively promoting the IT industry and human resources development, Okayama, under Prefectural Governor Ishii Masahiro, has been implementing initiatives to establish itself as the "Advanced IT Prefecture."

Okayama is situated in the western part of the main island of Honshu. One of the characteristics of the prefecture is the size of its manufacturing industry. Located in the south along the Seto Inland Sea, the Mizushima industrial belt is one of the leading industrial centers of western Japan. The ratio of the worker population employed in secondary industries (mining, manufacturing and construction) is about 32%, which is three points higher than the national average.

The Prefecture began drawing up plans for its information highway in 1996. The impetus for this effort was the concern that the living standards for people in Okayama might fall behind the rest of the country, if it was slow to develop its information network infrastructure amid the rapid IT revolution. Since it determined that unprofitable areas would be neglected if the infrastructure development was left to private companies, the Prefecture decided to install the fiber optic network itself.

Construction of the core network began in 1998, and was completed in March 2001. With this core network, the entire prefecture had fiber optic con-nections by March 2003. In March 2004, a next-generation Internet protocol with better security, IPv6, which can cope with a huge increase in the number of addresses was installed, and a high-speed high-capacity service (up to 10 Gbps) was realized.

As a result of connecting local schools, community centers and libraries in all municipalities to the fiber optic network, there are now over 2,000 public institutions on the Okayama Information Highway. Access to this network is offered free of charge for everyone.

Online Provision of Public Bidding and Resident Application Procedures

Thanks to the improved IT infrastructure, the Prefecture has launched a series of advanced initiatives to offer more convenience to residents.

In April 2002, the Prefecture introduced an online electronic bidding system for prefectural project contracts. The system began with consulting contracts, and was expanded to include large-scale construction contracts in September of the same year. Since then the system has been progressively expanded, and the aim is to handle, in principle, all prefectural contract bidding electronically by 2006.

Various online application and reporting procedures for residents have also been actively handled. Working with municipalities, the Prefecture was able to set up online services for 20 procedures, including the issuing of residence certificate copies, personal seal registration certificates and tax statements, as of March 2004. The plan is to provide 95% of prefectural procedures and 90% of municipal procedures online by March 2007.

Since there are different government agencies handling the different procedures, a portal site called *Seikatsu Benri Cho* (Life Support Site), was set up on the Prefecture's website in order to make the list of individual prefectural and municipal offices easy to understand and access. By accessing to this site, residents can easily find the offices to help them with formalities for events such as births, marriage and moving house. The Prefecture's website also provides other various information relating to daily life and business.
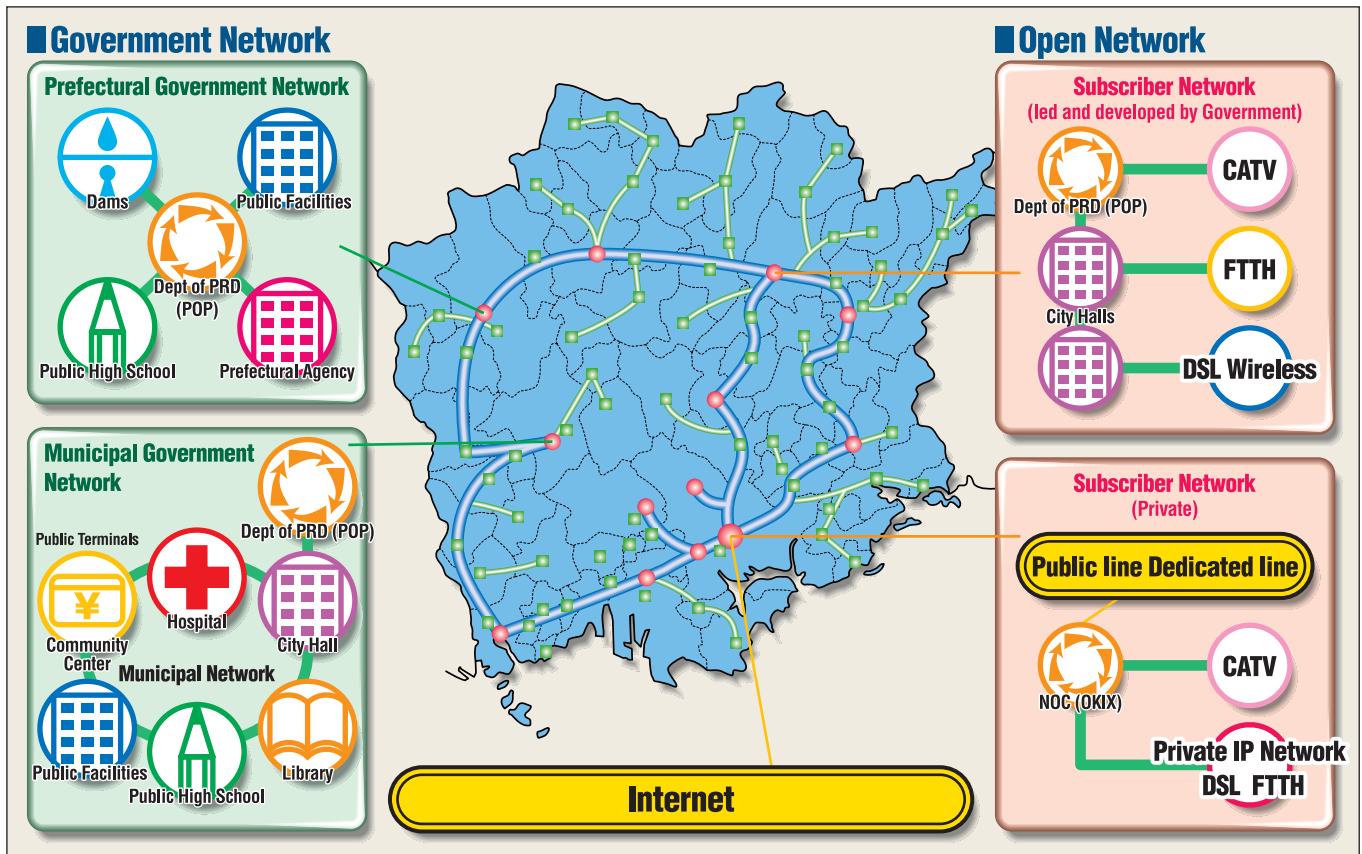
Kurashi no Anzen Web Map (Daily Safe WebMap) was launched in October 2004, with the goal of deterring street crime and raising accident prevention awareness. Here, information on crimes and traffic accidents that have occurred in Okayama over the past year are displayed on a map. With the help of the prefectural police headquarters, it shows the locations where robberies, purse-snatchings, home or office burglaries and accidents have occurred. By using different colors on the map to indicate burglaries or vehicle break-ins, dangerous areas can be seen at a glance.

The Prefecture Integrated Geographic Information System (GIS) provides aerial photos and maps of the entire prefecture, which can be used in a wide range of fields including land use, disaster prevention, farming, tourism and urban planning. For example, with the simple click of a mouse, it instantly ascertains the distance to a destination or the total area of a proposed development site, as well as confirming refuge locations and emergency heliports in the event of a disaster, as well as sightseeing locations.

Emphasis on the Development of the IT Industry and IT Specialists

Okayama is also putting energy into the development of the local IT industry. In April 2002, the Prefecture introduced one of the first systems in Japan to create a Special IT Economic Zone. In order to attract IT-related companies to the central part of Okayama City, the Prefecture provides office space in this zone at reduced prices and offers low-interest

Figure 1 Illustration of Okayama Information Highway

■ Government Network

Prefectural Government Network
- Dams
- Public Facilities
- Dept of PRD (POP)
- Public High School
- Prefectural Agency

Municipal Government Network
- Public Terminals
- Dept of PRD (POP)
- Hospital
- Community Center
- City Hall
- **Municipal Network**
- Public Facilities
- Public High School
- Library

Internet

■ Open Network

Subscriber Network (led and developed by Government)
- Dept of PRD (POP)
- CATV
- City Halls
- FTTH
- DSL Wireless

Subscriber Network (Private)
- Public line Dedicated line
- NOC (OKIX)
- CATV
- Private IP Network
- DSL FTTH

Source: Okayama Prefecture

financing to IT companies. These proactive initiatives were well received and in June 2003, this area was designated as a special IT zone by the national government.

Starting in 2005, the Prefecture also established a system that gives precedence to IT venture-capital companies within the prefecture when ordering its information processing and computation operations. This precedence contract ordering system for IT companies is rare in Japan. Since IT venture companies often lack financing despite having superior technology, the new system is designed to assist these companies by providing more contract opportunities. Even when the Prefecture signs contracts with major corporations, it seeks to ensure that local startup IT companies will receive some of the subcontracting work.

Development of human resources in the IT sector is also essential. The goal is to see that one million people, or over half of the local population, have the skills to make full use of the Internet by March 2007.

In the area of education, an instructor training system for IT skills was set up in order to ensure that all classes in elementary, junior-high and high schools are able to use Internet and all teacher can provide classroom making practical use of information technology. In some high schools, video conferencing systems have been set up, and some courses at universities in Okayama are offered as distance education.

This year an "expert system" for IT was also created, whereby outstanding technology specialists and researchers are recognized as experts by the Prefecture. Their advice is sought on matters relating to the Prefecture's IT operations, and they are asked to serve as instructors of IT courses hosted by the Prefecture. The goal is to raise the IT skills of local government officials by gaining knowledge from these specialists over the long term. The experts also benefit from the arrangement through their increased recognition by society.

■ More PR for Internet Usage

Looking at the Prefecture's IT policy today, the Okayama Information Highway has been firmly established, and steady progress has been made toward the online provision of governmental services and the creation of various information sites. However, these assets are not yet being fully used to their potential, and Tanaka Shoji of the Prefecture's Information Policy Department stated that, "The issue facing us now is how to get residents to better utilize the Information Highway."

For the future, the Prefecture's policy will be to improve its PR activities with the goal of raising Okayama's broadband subscription rate from just over 30%, to 50% by March 2007. **J S**

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