

6 Info-communications Policy Directions for the 21st Century

1. The Government's Role in Creating a 21st Century Based on Advanced Info-communications

In March 2000 the MPT's Telecommunications Council submitted to the ministry a report entitled "The Info-communications Vision for the 21st Century" that attempts to envision Japanese society in 2010. The report asserts that the success or failure of social reform brought about by IT will be a crucial factor in Japan's future prosperity. Under the rubric of "IT JAPAN for ALL" (referring to both Japan's own appeal and its cooperative stance vis-a-vis the rest of the world) the report calls for Japan to become the home of the worldwide IT revolution and the preferred site of IT experimentation. The report notes the necessity of developing a comprehensive policy to ensure that Japan's strengths are used to develop a successful IT model ahead of other countries.

2. R&D of Info-communications Technology in the 21st Century

In February 2000 the Telecommunications Technology Council submitted to the MPT the third edition of its "R&D Master Plan for Info-communications Technologies in the 21st Century." Focusing on three areas—(1) upgrading of applications and content; (2) upgrading network infrastructure; and (3) creation of new seeds of technology—the report lists 85 key R&D projects that need to be undertaken with some urgency. The report also suggests five large-scale info-

communications projects that encompass a wide range of research into elemental technology and require investing great deal of research resources to be promoted. Each of these large-scale projects compiles relevant projects among the key projects, ensuring that they work together to have a significant pervasive effect and are focused on the needs of society (Exhibit 26).

3. Vision for the Next-Generation Local Information Community

In May 1999 the Telecommunications Council submitted to the MPT a report entitled "Vision for the Next-Generation Local Information Community: ICAN 21 (Information Community Area Network 21) Strategic Plan." Summarizing issues and measures that might be taken in regional info-communications development between now and about 2010, the report states that policy development needs to take into account (1) broadening the geographical area in which info-communications development takes place, (2) appropriate division of responsibility, and (3) local conditions. The report also notes that the national government needs to promote the development of a nationwide info-communications infrastructure and that greater support for model projects undertaken by local governments should be provided.

4. The Millennium Project

In December 1999, at the threshold of a new millennium, the government announced a Millennium

Project that proposes a technological revolution that responds to the issues facing humankind and creates new industries. More specifically, the project calls for the development of cooperative efforts

among industry, academia, and the government in advancing technology in three key areas that will help ensure a bright future for Japan—infomation, the aging of society, and the natural environment.

Exhibit 26. Summary of Large-Scale Projects in Info-communications to Social Needs

Goal 1 Construction of a global fiber-optic network able to handle exploding telecommunications demand

Next-Generation Ultra-High-Speed Network Project

As a key element of the manufacturing, distribution, purchasing, and financial infrastructure, info-communications technology supports the industry and the economy and makes possible the provision of convenient public and other services. Using this fundamental feature of info-communications technology, this project aims to improve social systems and contribute to providing greater opportunities for learning and cultural activities at educational facilities.

- Total optical communications
- Next-generation Internet

Goal 2 Creation of a mobile multimedia environment freely available at any place and at any time

Mobile Communications Project

This project aims to use info-communications technology to enrich and enhance the convenience of people's lives, in such areas as commuting to work and school, shopping, leisure activities, and recreational activities.

- Personal mobile multimedia
- Road traffic (Intelligent Transport Systems [ITS])

Goal 3 Creation of a barrier-free communication environment in which cultures can be shared and anyone can communicate with anyone else irrespective of language

Human Communication Project

Info-communications technology can contribute to the aging society and social services by providing support to activities undertaken by the elderly and bringing about new care systems; it also supports human communications. Using these features of the technology, this project aims to promote sharing of culture and provide people with a greater range of activities in their daily lives.

- Global barrier-free communications
- Virtual-reality communications
- Literacy-free communications

Goal 4 Creation of an environmentally friendly info-communications society, or a recycling society, that allows people to live in harmony with the earth and engage in sustainable development

Environmental Preservation Project

Using info-communications technology to measure the environment and lighten environmental burdens, this project aims to preserve the environment and ensure that people can lead safe, secure lives.

- Environmental measurement
- Use of environmental information
- Easing the burden on the environment

Goal 5 Unlimited expansion of the human frontier — contributing to the effective use of outer space, whose possibilities are unlimited

Space Development Project

This projects aims to develop the potential of outer space, by providing high-speed global communications services via satellite and expanding the scope of human activity in space, thus making possible the creation of new industries using the unique outer-space environment.

- Satellite network
- Observation of the earth using satellites
- Support for development of outer space