Chapter 2

ICT policy initiatives in the MIC

Section 1　Promotion of comprehensive ICT policies

1. Current status and issues

(1) Progress of declining birthrate, aging population, and population decrease

In Japan, the declining birthrate and aging population are progressing, and it is expected that the population will continue to decrease in the future. Particularly, the decrease in the working-age population (ages 15-64) is a concern as it may lead to a reduction in labor supply, a decrease in future economic and market size, and a decline in economic growth rate. Therefore, improving labor productivity and expanding labor participation are urgent tasks. ICT plays a significant role in addressing these issues. For example, by utilizing AI and robots to improve work efficiency and allocate labor resources effectively, and by expanding employment options through telework and satellite offices, which are not constrained by location.

(2) Frequent and severe disasters, aging social infrastructure

In recent years, Japan has experienced frequent and severe weather disasters due to climate change, and the occurrence of large-scale earthquakes such as the Nankai Trough Earthquake, the Japan Trench and Kuril Trench Earthquakes, and the Tokyo Metropolitan Earthquake is also considered imminent. During such disasters, it is essential to utilize ICT to accurately collect disaster-related information and provide evacuation information, as well as to ensure the rapid restoration of communication and the continuous provision of communication services.

Moreover, the infrastructure that was intensively developed during the period of rapid economic growth is expected to age rapidly in the future, necessitating strategic maintenance and renewal. Given the decreasing labor supply due to the declining birthrate and aging population, it is also challenging to allocate manpower for infrastructure maintenance. Therefore, it is necessary to use ICT to manage and update infrastructure more efficiently.

(3) Increasing complexity of international situations

The international situation surrounding Japan is becoming increasingly complex, with events such as Russia's invasion of Ukraine, cross-border cyberattacks on critical infrastructure, and the spread of disinformation. In this context, the "Act on Promotion of Ensuring Security by Taking Integrated Economic Measures" (Act No. 43 of 2022), enacted in May 2022, lists "Telecommunications Business," "Broadcasting Business," and "Postal Business" as business fields that may be subject to the system for ensuring the stable provision of specific social infrastructure services. Efforts are being made to ensure the effective implementation of this system. Moving forward, it is necessary to build resilient ICT infrastructure, strengthen cybersecurity and supply chains, and collaborate with the international community.

Additionally, as climate change issues become more severe, Japan declared in October 2020 its goal to achieve carbon neutrality by 2050, aiming to reduce greenhouse gas emissions to net zero. The "Growth Strategy Execution Plan," formulated in June 2021, promotes the greening of the information and communication industry through two approaches: (1) promoting energy efficiency and CO2 reduction through digitalization (Green by ICT) and (2) improving energy efficiency and greening of digital devices and the information and communication industry itself (Green of ICT).

Japan's internet traffic[1] has surged approximately 2.7 times as of November 2023 compared to pre-COVID-19 levels in November 2019. With the expected continued increase in traffic, the power consumption of ICT-related equipment is also on the rise, necessitating the greening of ICT itself.

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[1] Total download traffic for fixed broadband subscribers

2. Initiatives to promote comprehensive ICT policies

(1) Promoting efforts to realize the Vision of Digital Garden City Nation

To advance the implementation of digital technologies from rural areas, create a new wave of transformation, and narrow the gap between rural and urban areas, the "Vision of Digital Garden City Nation Realization Conference," chaired by the Prime Minister, was established in November 2021. This initiative aims to realize the "Vision for a Digital Garden City Nation," which connects Japan to the world, by concretizing the concept and promoting regional revitalization through digital implementation. Based on the discussions of this conference, the "Basic Policy for the Vision for a Digital Garden City Nation" was formulated in June 2022, and the "Comprehensive Strategy for the Vision for a Digital Garden City Na-

tion," a five-year plan from FY2023 to FY2027, outlining the medium- to long-term basic direction of the concept, was approved by the Cabinet in December of the same year. Furthermore, in December 2023, the "Comprehensive Strategy for the Vision for a Digital Garden City Nation (Revised Edition in 2023)" was approved by the Cabinet, taking into account the trends in digital administrative and fiscal reforms.

Particularly regarding the development of digital infrastructure such as optical fiber and 5G, the "Infrastructure Development Plan for a Digital Garden City Nation" was formulated by the MIC in March 2022[2], and efforts are being vigorously promoted in line with this plan.

Figure (related data) Vision of Digital Garden City Nation Realization Conference
URL: https://www.cas.go.jp/jp/seisaku/digital_denen/index.html

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[2] Revised on April 2023