## **Chapter 5**

# ICT Policy Initiatives in the Ministry of Internal Affairs and Communications

## **Section 1** Promotion of comprehensive ICT policies

### 1. Current status and issues

#### (1) Declining birthrate, and aging/declining population

Japan continues to struggle with a declining birthrate and aging population, and the population is expected to continue to decline. There are concerns that the decline in the working-age population (15 to 64 years old) will affect the economic growth rate due to economy and market contract in the future. It is therefore an urgent matter to improve labor productivity and expand labor

force participation. ICT plays a major role in solving such problems. For example, the use of AI and robots is expected to improve the efficiency of operations and distribute labor resources more efficiently, and use of remote work and satellite offices is expected to expand options for working without being restricted by location.

#### (2) Disasters are growing more frequent and severe, while social infrastructures continues to age

In recent years, severe weather disasters have been frequently occurring in Japan due to the effects of climate change, and large-scale earthquakes, such as Nankai Trough earthquakes, trench-type earthquakes around the Japan Trench and Kuril Trench, and earthquakes directly beneath Tokyo, are also said to be imminent. In the event of such a disaster, it is necessary to collect disaster-related information and provide accurate evacuation information through ICT, and must promptly restore communications and continue to provide continuous communications services.

been rapidly developed during the period of high economic growth in Japan will quickly deteriorate in the future, and it is necessary to strategically maintain and renew this infrastructure. However, with the labor supply decreasing due to the declining birthrate and aging population, it will be difficult to devote manpower toward maintaining Japan's infrastructure. Therefore, it is necessary to maintain, update, and manage infrastructure more efficiently by utilizing ICT.

There are also fears that the infrastructure that had

#### (3) Increasingly complicated international situation

The international situation surrounding Japan is becoming increasingly complex, with the Russian invasion of Ukraine, cross-border cyberattacks on critical infrastructure, and the spread of disinformation. In response, the Act on the Promotion of Ensuring National Security through Integrated Implementation of Economic Measures enacted in May 2022 describes "telecommunications," "broadcasting," and "postal services" as business fields that could be covered by a system to ensure the stable provision of specified social infrastructure services. The Government intends to work toward implementing such a system in the future. In cooperation with the international community, it is necessary to make efforts to build a resilient ICT infrastructure, and to strengthen cybersecurity and supply chains.

In October 2020, Japan declared that it would aim to

achieve carbon neutrality by eliminating greenhouse gas emissions as a whole by 2050, as the issue of climate change continues to worsen. In June 2021, the "Action Plan of the Growth Strategy" was formulated to promote two approaches for transitioning ICT industry to a green industry: (1) the promotion of energy demand efficiency and CO2 conservation through digital technologies (Green by ICT) and (2) the conservation of energy and transition to green technology for digital devices and the ICT industry itself (Green of ICT).

Internet traffic in Japan<sup>1</sup> increased approximately 2.3 times as of November 2022 compared with November 2019 before the COVID-19 outbreak. Traffic is expected to continue to increase, and so will the amount of power consumed by ICT-related devices and other equipment. It is also necessary to bring green technology to ICT.

<sup>&</sup>lt;sup>1</sup> Total download traffic for fixed broadband subscribers

### 2. Initiatives to promote comprehensive ICT policies

#### (1) Promotion of initiatives to realize the Digital Garden City Nation Concept

In November 2021, the "Council for the Realization of the Digital Garden City Nation Concept" chaired by the Prime Minister was established, in order to materialize the concept, promote the revitalization of rural areas through digital implementation, and to realize the "Digital Garden City Nation Concept," in which Japan would be connected with the world by promoting the implementation of digital technologies in rural areas, creating a new wave of transformation, and narrowing the gap between rural areas and cities. Based on the discussions of this council, the Cabinet approved the "Basic Policy for the Digital Garden City Nation Concept" in June 2022 and the "Comprehensive Strategy for the Digital Garden City Nation Concept" in December of the same year. This strategy covers a five-year period from fiscal 2023 to fiscal 2027 and presents the medium- to long-term basic direction of the concept.

In November 2021, the Ministry of Internal Affairs and Communications established the "Headquarters for the Promotion of the MIC Digital Garden City Nation Concept" headed by the Minister for Internal Affairs and Communications, to promote building digital infrastructures for hardware and software (a prerequisite for digital implementation), developing and securing human resources with digital skills, implementing initiatives to leave no one behind, and implementing digital services to solve social issues in rural areas.

With regard to building digital infrastructures such as optical fiber and 5G, the Ministry of Internal Affairs and Communications formulated the "Digital Garden City Nation Infrastructure Development Plan" in March 2022,<sup>2</sup> and is strongly promoting efforts in line with this plan.



Figure (related data) Council for the Realization of the Digital Garden City Nation Concept URL: https://www.cas.go.jp/jp/seisaku/digital\_denen/index.html



Figure (related data) Headquarters for the Promotion of the MIC Digital Garden City Nation Concept URL: https://www.soumu.go.jp/main sosiki/singi/denen toshi/index.html

#### (2) Discussions on Information and Communications Policy with a View to 2030

In September 2021, the Ministry of Internal Affairs and Communications consulted with the Information and Communications Council on Information and Communications Policy with a View to 2030, with the goal of realizing Society 5.0 and securing economic security toward 2030 in light of future trends in the information and communications field, technology, and utilization. The first report was presented in June 2022.<sup>3</sup>

The Information and Communications Council re-

sumed discussions in January 2023, taking into account the rapid progress in information and communications technology and the remarkable ongoing changes in social conditions. During the General Policy Committee meeting held under the council, discussions were held on the direction of ICT policy over the next 10 years by "backcasting" from the coming future of 2030. The final report<sup>4</sup> was presented in 2023.

<sup>&</sup>lt;sup>2</sup> Revised April 2023

<sup>&</sup>lt;sup>3</sup> First Report on "Information and Communications Policy with a View to 2030" (June 30, 2022) https://www.soumu.go.jp/menu\_news/s-news/01ryutsu06\_02000319.html

<sup>&</sup>lt;sup>4</sup> Refer to [Policy Focus] Overview of the final report on "Information and Communications Policy with a View to 2030" for an overview of the final report.