

## Prospectus of the Hokkaido Nutopia Data Center Study Group

People's lifestyles are changing as we move into the post-COVID-19 era. At the same time, Japan's social system moves toward Society 5.0. As this period of great changes may affect the foundations of the future Japan, the IT infrastructures such as networks and data centers, which have so far taken for granted, must be adjusted accordingly. Modern life is dependent on the Internet and the services we use, regardless of whether they are national or international, are important life infrastructures.

Currently, most data centers are concentrated in the Tokyo and Osaka metropolitan areas. Similarly, networks, Internet exchanges and international submarine fiber-optic cables are concentrated in particular areas. The maintenance of the existing situation in Japan is not, however, the only possible option for the future. As we advance the post-COVID-19 era and Society 5.0, now is the critical time to make a grand plan describing how the role, function and location of internet and data centers in Japan should be revised. We have established this study group in order to have forum where the redesigning of business, daily life and new forms of international cooperation can be discussed from the point of view of the structure of internet and data center location.

In particular, we examine whether the accumulation of data centers in Hokkaido could be a major catalyst for the transformation of Japan's IT infrastructure. The fiber-optic cable network connecting Hokkaido and Tokyo directly has to be improved. Furthermore, in order to attract foreign users, new systems connecting Europe to Hokkaido via the Arctic Ocean and Hokkaido to Guam (Australia, Hawaii, the United States, Hong Kong, the Philippines, and Southeast Asia) via Tokyo, are needed.

Although Hokkaido has for long been recognized as an excellent location for data center operations, its' potential has not been fully utilized. Hokkaido also carries an important role as a renewable energy production area. The name of this study group, "Hokkaido Nutopia Data Center Study Group", combines 3 Ns (New, North, Network, Nu -> New) and Utopian and refers to Hokkaido as an ideal location for data centers, and as an important factor in the improvement of networks.

### **Purpose of the activity**

- Analyzing how the domestic data centers should be placed during the post-COVID-19 era. Discussing the effectiveness and importance of constructing data centers in Hokkaido.
- A transfer from the centralized and business and profit oriented model where everything is concentrated in Tokyo to a distributed data center model that takes the environment into consideration and data centers are built in the north (Hokkaido).
- The realization of the Hokkaido ICT Corridor connecting the Pacific Ocean and the Sea of Japan sides of Hokkaido.
- Discussing Hokkaido's role in the submarine cable topology of Japan by taking Hokkaido's geographical location and the activation of the Arctic Ocean submarine fiber-optic cable plan into consideration.
- Hokkaido mediating submarine fiber-optic cables. Establishing a submarine cable freeport in Hokkaido.
- Establishing an integrated base for the flow of data, goods and people in Hokkaido as a part of the process of shaping Japan's new normal.

Established on July 14, 2020