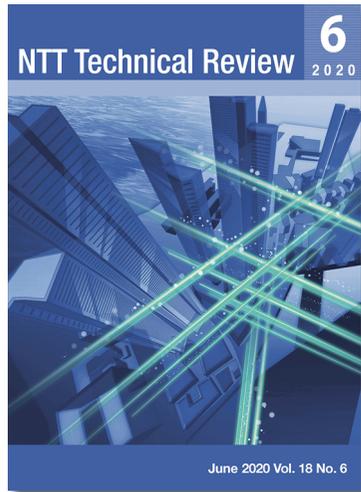


<https://www.ntt-review.jp/archive/2020/202006.html>



View from the Top

- ▶ Katsuhiko Kawazoe, Senior Vice President, Head of Research and Development Planning Department, NTT

Front-line Researchers

- ▶ Tatsuaki Okamoto, NTT Fellow, Director, Cryptography & Information Security Laboratories, NTT Research, Inc.

Feature Articles

Cognitive Foundation® for Innovative Optical and Wireless Network (IOWN)

- ▶ Approach to Cognitive Foundation® for the Innovative Optical and Wireless Network (IOWN)
- ▶ Quality-prediction Technology for Optimal Use of Multiple Wireless Access Networks
- ▶ Intelligent Zero-touch Operation

Feature Articles

NTT Group's Initiatives in Food and Agriculture

- ▶ NTT Group's Initiatives Regarding Food and Agriculture
- ▶ Community Revitalization by Utilizing ICT and Agriculture
- ▶ Development of the Food and Agriculture Value Chain by Using "Tsunagu" Distribution Platform

Regular Articles

- ▶ Radio Frequency Equipment for High Maintainability and Availability in Remote Island Satellite and Disaster Relief Satellite Communications

Global Standardization Activities

- ▶ Activities to Revise the Radio Regulations on 5-GHz-band Wireless LANs at WRC-19 and ITU-R

Practical Field Information about Telecommunication Technologies

- ▶ Case Studies of Telecommunication Failure Caused by Electromagnetic Noise from Inverters

View from the Top

Katsuhiko Kawazoe, Senior Vice President, Head of Research and Development Planning Department, NTT

▼ Overview

NTT is promoting the Innovative Optical and Wireless Network (IOWN) to provide an information and communication technology infrastructure that brings about various benefits. The company is pursuing research and development of key technologies to implement IOWN in 2030. Now that the entire world has been hit by an unprecedented situation due to the coronavirus (COVID-19) pandemic, expectations for NTT's efforts based on its philosophy of contributing to society are growing. We talked with Katsuhiko Kawazoe, NTT Senior Vice President, Head of Research and Development Planning Department, about the attitude of his department—which ought to be called the "brain of NTT"—to tackle this crisis and the sense of value of NTT researchers.



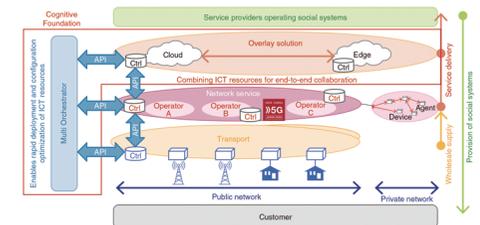
Feature Articles

Cognitive Foundation® for Innovative Optical and Wireless Network (IOWN)

Approach to Cognitive Foundation® for the Innovative Optical and Wireless Network (IOWN)

▼ Abstract

There is an urgent demand for information and communication technology (ICT) to meet the needs of industrial and social systems. These systems include the management of rapidly increasing devices and diverse digital services. In this article, we introduce NTT Group's approach to fully automated, autonomous, and self-evolving life-cycle management of ICT resources, including the deployment and optimization of such resources, to provide applications and solutions.



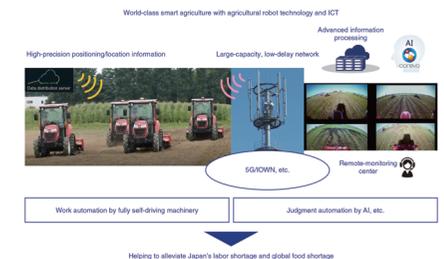
Feature Articles

NTT Group's Initiatives in Food and Agriculture

NTT Group's Initiatives Regarding Food and Agriculture

▼ Abstract

Agriculture is a key industry in rural areas of Japan; however, it faces various problems such as long-term decline in the working-age population, aging of the population, natural disasters due to climate change, and securing sales channels. To solve these problems, *AgriTech*—which uses biotechnology, the Internet of Things, big-data analysis, artificial intelligence, and robots in the field of agriculture—is attracting attention. Since its privatization in 1985, NTT has been required to have a mission with both public and corporate aspects. In consideration of this dual mission, NTT is striving to create a smart world to solve social issues through its business activities. With agriculture positioned as a priority, we are working to create *Smart Agri* by using information and communication technology developed for telecommunications business to solve problems faced by the agricultural industry through cooperation with leading partners. The direction of initiatives by the NTT Group, specific examples, and future plans are introduced in this article.



With agriculture positioned as a priority, we are working to create *Smart Agri* by using information and communication technology developed for telecommunications business to solve problems faced by the agricultural industry through cooperation with leading partners. The direction of initiatives by the NTT Group, specific examples, and future plans are introduced in this article.