## **Operations in Review**



# **Integrated ICT Business**

In the Integrated ICT Business, with the start of a new structure as the newly formed DOCOMO Group, we advanced initiatives to create the three major synergies of expansion of the enterprise business, more competitive network, and strengthening the power of service creation and development and promoting DX, while also promoting sales of 5G services.



### The Next Stage of Innovation: Transform our business portfolio to become an integrated ICT company and achieve sustainable growth

Enterprise Business	<ul><li>Resolving social and industrial challenges through the improvement of our integrated solutions</li><li>Supporting business efficiency through the fusion of mobile and fixed-line services</li></ul>
Smart Life Business	<ul><li>Achieving both organic and disruptive growth</li><li>Achieving both immediate business expansion and long-term growth initiatives</li></ul>
Consumer Communications Business	<ul> <li>Implementing channel reforms in both real and online environments to create new, hybrid customer experiences</li> <li>Continuing efforts to improve network quality and reliability</li> </ul>

## TOPIC

## NTT Com, Takenaka and Shimizu to collaborate on digital transformation of construction sites

NTT Communications Corporation (NTT Com), Takenaka Corporation, and Shimizu Corporation began their collaboration on the digital transformation of construction sites in July 2023. Through collaboration and joint study, the three companies aim to improve the productivity of the entire construction management operations that occur at construction sites daily by digitalizing and linking information used for process management, material logistics, work instructions, etc., in process charts and daily work reports.

### Launch of "d Smart Bank" Digital Account Service

NTT DOCOMO, in collaboration with MUFG Bank, Ltd., launched the digital account service "d Smart Bank" in December 2022. This digital account service allows customers to accumulate "d Point" when using it for automatic payments, such as for "d Card" usage or mobile phone bills, as well as for receiving wages and other

payments exceeding a certain amount. Through this service, we will continue to expand our range of financial services that can be securely and conveniently used in various scenarios as part of our commitment to individually supporting each customer's approach to managing their finances.

### Introduction of the new services "eximo" and "irumo"

In July 2023, NTT DOCOMO began offering new price plans, "eximo" and "irumo." The "eximo" plan is designed to cater to a wide array of customer needs, from those who use little data to those who wish to use data without any restrictions\* when watching videos on the go, for instance. Conversely, "irumo" is aimed at customers who not only require less data, but are also looking for a more economical rate. Along with the existing "ahamo" plan, we will continue to offer a mix of attractive services that include financial and payment solutions as well as video and other services, with the aim of maximizing the value provided to our customers.

\* Data usage may be restricted during times of network congestion or heavy data traffic

## Message from the CEO

**Operations in Review** 

# **Regional Communications Business**

In the Regional Communications Business, in addition to strengthening our solutions business which supports the digital transformation of companies, local governments, and societies to resolve regional social issues, we offered our "Hikari Collaboration Model," which provides wholesale fiber-optic access services, among other things, to various service providers.

NTT Group

## Results for the Fiscal Year Ended March 31, 2023



### NTT East - Intensifying efforts to support a recycling-oriented economy in local communities -

Evolution of access networks to support a digital society	<ul> <li>Expanding the f among others</li> </ul>
Offering integrated managed services that support on-premise environments for customers	<ul> <li>Providing centra of intra-building</li> </ul>
Engineering that strengthens the resilience of local communities	<ul> <li>Consolidating centralizing tech communication</li> </ul>
Further enhancing the reliability of the networks supporting Japanese infrastructure	<ul> <li>Increasing ove enhancing main</li> </ul>

## NTT West - Contributing to the Resolution of Social Issues Through Businesses in Growing Sectors -

- Offering comprehensive solutions to customers, including the promotion of community revitalization through cloud services targeted at municipalities and the advancement of DX in university education
- Utilizing QUINTBRIDGE for joint business development pitches and the Future Co-Creation Program to promote business co-creation with our partners
- Exploring new use cases enabled by IOWN, such as new entertainment experiences leveraging low-latency networks
- through upgraded operations and the strengthening of communication facilities

## TOPIC

## Launch of APN IOWN 1.0

NTT East and NTT West have launched the All-Photonics Network (APN) IOWN 1.0 as the first commercial service aimed at achieving the IOWN concept, in which all sections of a communications network use optical wavelengths exclusively. APN IOWN 1.0 ensures high speed, high capacity and low latency, and zero fluctuation. Additionally, integrating OTN Anywhere, launched concurrently, enables the visualization and



functions of Regional Edge and adapting to remote needs,

alized solutions for monitoring, maintenance, and operation and in-office LAN environments, among others

facility construction and operational tasks at NTT-ME, chnical expertise and know-how for building and managing infrastructure

erall reliability through cross-sector collaborations and ntenance and operations using AI, among others

• Ensuring the reliable and stable provision of telecommunications services, which serve as critical social infrastructure,

adjustment of latency. We will continue to work with our customers to expand use cases, including remote performances, remote lessons, e-sports, remote equipment operation, and tight integration between data centers. Moreover, we are advancing our R&D efforts to enhance APN-related technologies, with the goal of offering a firsthand IOWN experience at the 2025 World Exposition (Osaka-Kansai Expo).

## **Operations in Review**



# **Global Solutions Business**

In the Global Solutions Business, NTT DATA Group worked to extend and consistently provide a range of IT services, such as offerings of digitalization and system integration, that are responsive to the changes in the market, as well as to strengthen its ability to provide services in growth areas such as the data center business and managed services.



## Strategy in the Medium-term Management Plan of the NTT DATA Group

As a Trusted Global Innovator, NTT DATA Group aims to create value for the future and achieve a sustainable society along with its customers by forging connections between various people and technology.

Overall Strategy	Capitalize on the convergence IT & Connectivity
	Strengthen consulting with foresight
	Evolve to an asset-based business model
	Enhance advanced & development technology
	Be the best place to work

## TOPIC

Generative AI service launched capable of crafting evidence-based responses by securely integrating various types of data

In June 2023, NTT DATA Japan launched the LITRON Generative Assistant, a service that produces evidencebacked responses by securely linking a variety of dataincluding internal regulations, business documents, and public data-through generative AI. NTT DATA Japan already introduced the text-interpretation AI tool LITRON, which uses large-scale language models, to the market a while ago, and it has continued to engage in research and development. This new service benefits from those efforts. Additionally, by leveraging NTT DATA Japan's data analysis platform, we alleviate customer security concerns while accelerating the adoption of cutting-edge technologies.

## Collaboration with Mitsubishi Heavy Industries to build a rack-type liquid immersion cooling system for existing data centers

NTT DATA Japan, in partnership with Mitsubishi Heavy Industries, Ltd., has developed a rack-type liquid immersion cooling system that allows for the direct cooling of servers and other IT equipment in liquid and can be applied to existing data centers. This system submerges IT equipment in a specialized insulating liquid for efficient cooling. Following real-world testing at Mitaka Data Center EAST, we confirmed a 92% reduction in cooling energy consumption based on our internal building standards, as well as a 173% improvement in operational efficiency compared to conventional systems. Building on these findings, NTT DATA Japan aims to apply this cooling system to its own data centers and provide services to contribute to both the NTT Group's decarbonization targets and customer efforts toward decarbonization and energy efficiency while endeavoring to offer eco-friendly system services.

## **Operations in Review**

# Others (Real Estate, Energy and Others)

In the Real Estate Business, NTT Urban Solutions has taken the lead in utilizing a wide range of resourcesincluding ICT, real estate, energy, and environmental technology-to spearhead the development of vibrant and unique communities. In the Energy Business, our focus has been on NTT Anode Energy. We have pushed forward with the development of renewable energy power plants, local production and local consumption of energy using energy management systems, and rolled out solutions aimed at decarbonization.

NTT Group

## Results for the Fiscal Year Ended March 31, 2023



## Urban Solutions to Realize a City Full of Energy and Individuality

Under the slogan "Connecting People, Cities, and the Future.", NTT Urban Solutions Group combines the consulting prowess to solve local challenges, a proven track record in real estate development both in Japan and abroad, design and engineering expertise across all facility-related domains, and management capabilities that leverage extensive know-how to enhance asset value. We are committed to contributing to the sustained growth and progress of local communities.

Solutions	<ul> <li>Property management</li> </ul>
a unique approach to "Urban Solutions"	• Design, engineering,
of the NTT Group to advance	Real estate developm
Leveraging the collective strengths	<ul> <li>Consulting, data colle urban solutions</li> </ul>

## Smart Energy Business

NTT Anode Energy contributes to the realization of a decarbonized society through its smart energy business.

Green Power Generation Business	• Development of renewable ene
Local Grid Business	<ul> <li>Provision of local energy proservices to companies using</li> </ul>
Consumer Energy Business	<ul> <li>Provision of electricity for cus</li> </ul>
Construction/Maintenance Operation Business	<ul> <li>Provision of construction, ma customers and the NTT Group</li> </ul>

TOPIC

## Achieved Level 4 ISO 37106 Certification, the international standard for smart cities, the second such instance in the world

The Higashi-Sakura 1-chome Area in Higashi Ward, Nagoya City, managed by NTT Urban Solutions, has achieved Level 4 certification, currently the highest level of the ISO 37106 international standard for smart city operation models. This is only the second such certification worldwide. Going forward, the NTT Group will continue to expand its support for sustainable urban solutions focused on wellbeing, run by and for local residents, with the goal of maximizing community and individual well-being.



ection, research, and analysis of basic information related to

nent and management

and facility solutions

nt, ICT management, and energy management

ergy to realize the NTT Group's Environment and Energy Vision

roduction for local consumption as well as carbon-neutral energy management systems

stomers and the NTT Group

aintenance, and monitoring services of electricity facilities for up

## Acquisition of Green Power Investment Corporation and other renewable energy operators

NTT Anode Energy, in collaboration with JERA Co., Inc. (JERA), has completed acquisition of shares of Green Power Investment Corporation (GPI), which is owned by Pattern Energy Group LP, a U.S.-based renewable energy operator. Moving forward, NTT Anode Energy, JERA, and GPI will synergize their respective expertise, insights, and strengths in renewable energy operations, with the goal of contributing to Japan's goal of becoming carbon neutral by 2050 through further initiatives, thereby promoting the adoption of renewable energy within Japan. (See page 24 for details)