



Joint Press Release—for immediate release

Arsaga Partners, Tokyu Land, NTT and DOCOMO to Explore Collaboration for R&D to Create Services with IOWN

—First initiative is a IOWN-based remote conferencing system—

TOKYO, JAPAN, February 14, 2024—Arsaga Partners, Inc. (Arsaga Partners), Tokyu Land Corporation (Tokyu Land), NTT Corporation (NTT) and NTT DOCOMO, INC. (DOCOMO) announced today that they have agreed to jointly explore the development of groundbreaking telecommunication services using NTT's advanced all-photonics Innovative Optical and Wireless Network (IOWN).

Tokyu Land, NTT and NTT Corporation introduced APN IOWN 1.0¹ to Shibuya Sakura Stage² in December 2023, as part of the Greater Shibuya³ project, a major redevelopment in one of Japan's leading entertainment hubs, Shibuya district, Tokyo. The three companies, along with Shibuya-based company Arsaga Partners, plan to use IOWN technologies for the development of telecommunication services that will enhance daily life in the Greater Shibuya area and beyond.

The first initiative will be to use APN IOWN 1.0 for a remote conferencing system called Secure Hotline Powered by IOWN. The development of the new remote conferencing service started in response to companies that participated in [IOWN WEEK](#), who expressed a need for a service that takes full advantage of APN IOWN 1.0's exceptionally low latency and zero jitter⁴ characteristics, enabling users to hold meetings with partners in remote locations as if they were all face-to-face.

This service aims to achieve a sophisticated user interface and state-of-the-art user experiences. Initial setup and call operation will be intuitive and easy, allowing users to communicate smoothly and effortlessly based on a user-friendly design.

A secure environment using IOWN's dedicated lines for remote communication aims to ensure robust security for confidential meetings involving corporate strategy, non-public information, stock-related information, and the like.



Web Conference using APN IOWN 1.0 during IOWN WEEK

Roles of Each Company

Arsaga Partners	Plan and develop applications running on APN IOWN 1.0
Tokyu Land	Provide OTN Anywhere ⁵ and place for verification test
NTT	Technical support NTT's R&D including IOWN
DOCOMO	Evaluation of services using advanced technologies (IOWN, etc.)

Arsaga Partners has been committed to advancing towards a digitally transformed society by expanding its business as a consulting and development partner in Shibuya since its establishment. With the recent relocation of its office to Shibuya Sakura Stage⁶, a building with APN IOWN 1.0 implemented, Arsaga Partners will continue to provide users valuable innovations taking advantages of the APN IOWN 1.0's innovative network features.

Tokyu Land Corporation has adopted Environmental management as the company-wide policy, aiming to expand its business with the concern towards environment as a starting point. In addition to promoting its renewable energy business, which is one of the largest in Japan, the company completed the switchover to 100% renewable energy for all of its 244 facilities⁷, including office buildings and commercial facilities, in December 2022, and working on address environmental issues through its business activities such as biodiversity conservation through urban greening.

NTT Corporation and DOCOMO, has adopted IOWN as a fundamental tool for the realization of an inclusive and sustainable society. Therefore, focusing on a R&D of network and information processing infrastructure including terminals to provide high-speed, high-capacity data transmission beyond the conventional infrastructure, by utilizing optical technology. As a result, APN IOWN 1.0 was launch in Marh 2023 and will continue developing to achieve significant reduction in power consumption through applying optoelectronic convergence devices in both network and computing.

Going forward, the four partners will continue to develop next-generation solutions for enhanced daily life supported with advanced IOWN technology.

¹ An All-Photonics Network service, launched by NTT East and NTT West in March 2023, utilizes exclusive optical wavelengths across the entire communication network. https://www.ntt-east.co.jp/release/detail/20230302_01.html

² Shibuya Sakura Stage is the newest iconic landmark in Shibuya, Tokyo. It was built in November 2023 on a 2.6-hectare site in the Sakuragaoka area, situated adjacent to Shibuya Station, which offers convenient access between Shibuya Sakura Stage and other popular sites as Daikanyama and Ebisu.

³Area within a 2.5km radius of Shibuya Station (defined by the Tokyu Group) undergoing urban development (Greater SHIBUYA 2.0) integrating work, recreation and living in a sustainable community. <https://www.tokyu-land.co.jp/urban/area/shibuya.html>

⁴ By employing time-division multiplexing (fixing transmission time to differentiate information), delays and packet loss due to traffic conditions are minimized.

⁵ Terminal equipment with delay visualization and delay adjustment functions for APN IOWN 1.0 network services.

⁶ Details regarding Arsaga Partners relocation. <https://www.arsaga.jp/news/press-release-sakuragaoka-office-relocation/>

⁷ Except in some joint management projects.

About Arsaga Partners

Arsaga is a Japanese all-in-one digital transformation consulting and development partner that offers consulting and engineering services to clients all around the world. We encompasses all functions necessary for the development and operation of IT systems, including consulting, planning, design, system development, and maintenance operations, all within our organization. With engineers comprising 80% of our workforce, we engage directly with client companies and adhere to the motto of in-house development, enabling us to deliver services at an appropriate cost. Serving the highest quality at the fastest speed, we guide businesses towards greater certainty of success by empathizing with our customers.

About Tokyu Land

TOKYU LAND CORPORATION is a comprehensive real estate company with operations in Urban Development, Residential, Infrastructure & Industry, Wellness, Overseas Businesses and more. At present, we are leveraging our development capabilities—which are backed by a proven track record—and taking advantage of our steady earning power, as we develop our businesses to implement the Tokyu Fudosan Holdings Group’s long-term vision, GROUP VISION 2030, and our Medium-Term Management Plan 2025. We will continue advancing our business operations to realize the Group’s ideal vision of creating value for the future.

About NTT

NTT contributes to a sustainable society through the power of innovation. We are a leading global technology company providing services to consumers and business as a mobile operator, infrastructure, networks, applications, and consulting provider. Our offerings include digital business consulting, managed application services, workplace and cloud solutions, data center and edge computing, all supported by our deep global industry expertise. We are over \$97B in revenue and 330,000 employees, with \$3.6B in annual R&D investments. Our operations span across 80+ countries and regions, allowing us to serve clients in over 190 of them. We serve over 75% of Fortune Global 100 companies, thousands of other enterprise and government clients and millions of consumers.

About NTT DOCOMO

NTT DOCOMO, Japan's leading mobile operator with over 88 million subscriptions, is one of the world's foremost contributors to 3G, 4G and 5G mobile network technologies. Beyond core communications services, DOCOMO is challenging new frontiers in collaboration with a growing number of entities ("+d" partners), creating exciting and convenient value-added services that change the way people live and work. Under a medium-term plan toward 2020 and beyond, DOCOMO is pioneering a leading-edge 5G network to facilitate innovative services that will amaze and inspire customers beyond their expectations.

<https://www.docomo.ne.jp/english/>