

ITOCHU Announces Signing of MOU with KDDI, Toyota Industries, Mitsui Fudosan, and Mitsubishi Estate for Creation of Physical Internet Business

Driving Cross-industry Logistics Reforms to Solve the 2024 Logistics Problem

ITOCHU Corporation (headquartered in Minato-ku, Tokyo; Keita Ishii, President & COO; hereinafter “ITOCHU”) announced today that it has signed a memorandum of understanding (MOU) with four partners—KDDI Corporation (headquartered in Chiyoda-ku, Tokyo; Makoto Takahashi, President and CEO; hereinafter “KDDI”), Toyota Industries Corporation (headquartered in Kariya-shi, Aichi; Koichi Ito, President ; hereinafter “Toyota Industries”), Mitsui Fudosan Co., Ltd. (headquartered in Chuo-ku, Tokyo; Takashi Ueda, President and CEO; hereinafter “Mitsui Fudosan”), and Mitsubishi Estate Co., Ltd. (headquartered in Chiyoda-ku, Tokyo; Atsushi Nakajima, President & CEO; hereinafter “Mitsubishi Estate”)—agreeing to joint considerations for the creation of a Physical Internet business by the end of FY2024. The five cross-industry partners will work together to drive logistics reforms aiming to achieve sustainable logistics, including a solution to Japan's 2024 logistics problem.

Although logistics is the backbone supporting Japan's economy, the environment surrounding the logistics industry is becoming more challenging by the day, due to factors such as labor shortages accompanying population decline, tighter overtime regulations for truck drivers (the so-called "2024 logistics problem"), efforts to achieve carbon neutrality, and high fuel and commodity prices. If things continue as they are, it may become impossible to transport goods effectively in the future. To make logistics sustainable in the future, it will be essential for shippers, logistics operators, and consumers to work together as one to address current issues, and to implement next-generation solutions such as logistics standardization (e.g., expanding the use of pallets) and improving efficiency through digital transformation (DX) and green transformation (GX).

There are high hopes for the Physical Internet as a next-generation solution for the future. The Physical Internet is a network that interconnects the warehouses, trucks and other assets of multiple companies across industries, by visualizing cargoes, warehouses, and vehicle availability information through the application of digital technologies. It is a new joint delivery system that will improve logistics efficiency by finding optimal transportation routes between arrival and departure points. It is an application of the same concept as the (Digital) Internet—which enables efficient transmission and receipt of information in the form of individual data packets—to logistics.

Japan's Ministry of Economy, Trade and Industry (METI) has been encouraging various industrial sectors to make use of the Physical Internet concept since 2021, and created a roadmap for its actualization in 2022*. Standardizing and streamlining (i.e., increasing the efficiency) of logistics operations using the Physical Internet can help to reduce the burden placed on logistics operators. The system will also enable more effective use of trucks and other logistics resources, reducing fuel consumption and contributing to the reduction of greenhouse gas emissions.

Based on the MOU, the five partner companies will proceed with specific discussions toward the establishment of a new company with a view to creating actual Physical Internet service business operations by the end of FY2024.

The partners will also work with shippers and logistics carriers to build a logistics transportation network. In the future, in addition to improving the efficiency of logistics operations by utilizing the Physical Internet, ITOCHU and its partners will aim to create a service format that will become a new standard for logistics, by establishing a system that enables shippers, logistics carriers, and other users to enjoy the cost advantages created by the service. Going forward, the five companies will work together to drive logistics reforms that transcend conventional industry boundaries, aiming to solve the 2024 problem and actualize sustainable logistics.

[Each Company's Role in this Initiative]

ITOCHU	Business planning, steering, and new sales
KDDI	Service monitoring for Physical Internet services, Providing IoT connectivity, and cargo monitoring
Toyota Industries	Introduction and development of material handling systems optimized for Physical Internet services
Mitsui Fudosan Mitsubishi Estate	Construction of intermediary warehouse locations optimized for Physical Internet services

[About the Partners]

ITOCHU	In all of its business activities, ITOCHU has implemented a balance between responding to social needs and achieving business expansion, based on the Group's corporate philosophy of <i>sampo yoshi</i> . (Essentially, ensuring satisfaction for everyone involved.) In this initiative, ITOCHU will continue to practice <i>sampo yoshi</i> by building a sustainable logistics system, reducing the burden on logistics operators, and contributing to the creation of a decarbonized society and sustainable local communities.
KDDI	In May 2024, KDDI launched “WAKONX”(wakon-cross), a new business platform of AI integrated era, designed to support growth of customer business and solving social issues by consolidating the value of the entire KDDI Group. The Physical Internet is a field in which KDDI can leverage its expertise as a telecommunications carrier and will work to solve social/industry issues in logistics through this business.
Toyota Industries	As a logistics solutions provider offering optimal solutions to customer logistics issues, Toyota Industries works together with various partners—both in Japan and overseas—to improve the efficiency and automation of factories and warehouses. Through this initiative, Toyota Industries will make further contributions to solving issues at logistics site, such as labor shortages stemming from Japan's declining birthrate and aging population, and Japan's 2024 logistics problem .
Mitsui Fudosan	Mitsui Fudosan develops and operates logistics properties both in Japan and overseas, under its flagship brand of Mitsui Fudosan Logistics Park (MFLP). They are also working to encourage the sharing business of logistics properties including automated warehouses mainly for e-commerce players. With an aim to transform from a real estate developer to an

	industry developer, they try to transcend the conventional boundaries of a real estate business, and will continue working together with many partners to advance this initiative.
Mitsubishi Estate	Mitsubishi Estate operates the Logicross brand of logistics facilities. To help solve issues such as the 2024 problem in the logistics industry, Mitsubishi Estate has begun developing next-generation core logistics facilities connected directly to expressway interchanges, which can accommodate next-generation mobility vehicles such as automated trucks. These efforts include a project in Joyo, Kyoto. Through this initiative, Mitsubishi Estate will work to popularize the Physical Internet and contribute to solving pressing issues in logistics, such as the construction of logistics networks with high delivery efficiency.