September 11, 2024
KYOCERA Communication Systems Co., Ltd.
Yamato Transport Co., Ltd.
Packcity Japan Co., Ltd.

Launch of Demonstration Experiment of Unmanned Robot Mobile Delivery Services in Ishikari City, Hokkaido, Equipped with PUDO Station Lockers

KYOCERA Communication Systems Co., Ltd. (Head Office: Fushimi-ku, Kyoto; President: Yoshihito Kurose; hereinafter "KCCS"), Yamato Transport Co., Ltd. (Headquarters: Chuo-ku, Tokyo; Representative Director and President: Yutaka Nagao, hereinafter "Yamato Transport"), and Packcity Japan co.,ltd (Head Office: Chiyoda-ku, Tokyo; Representative Director and President: Yuji Ogawa; hereinafter "Packcity Japan") hereby announce the launch as of Wednesday, September 11, 2024, of a new demonstration experiment of a mobile delivery service (hereinafter "the demonstration experiment") using a medium-speed, medium-sized unmanned automated delivery robot traveling on a roadway and equipped with a PUDO Station open-type delivery locker in some areas of eastern Ryokuendai in Ishikari City, Hokkaido.

Medium-speed, medium-sized unmanned automated delivery robot

1. Background and Objectives

In the logistics field, amid a growing number of parcel deliveries due to the expansion of the e-commerce market and other factors, there are concerns about future transportation capacity shortages. Especially within last-mile delivery, the social implementation of delivery services using medium-speed, medium-sized automated delivery robots is expected to improve loading capacity and delivery efficiency as a solution to issues such as frequent small-lot deliveries and driver shortages.

KYOCERA Communication Systems Co., Ltd.

KCCS is working with local governments and companies to develop, propose, and verify technologies and services using medium-speed, medium-sized unmanned automated delivery robots, and is enhancing their versatility so that they can be applied to a wide range of services for practical use.

With the aim of realizing a sustainable society and improving customer convenience, Yamato Transport has been conducting demonstration experiments for delivery services for individuals using medium-speed, medium-sized unmanned automated delivery robots from 2022 in collaboration with KCCS to verify the practical application of regional logistics support services.

In response to diversifying lifestyles, Packcity Japan aims to provide further convenience and comfort through the operation of PUDO Station, an open-type delivery locker that allows customers to receive and send packages both when and where they want.

Through the demonstration experiment, the three companies will test a new mobile delivery service that meets diversifying needs for package pickup, such as solving labor shortages, changing lifestyles, and increasing demand for contactless pickup, and pursue the possibility of more efficient delivery services.

2. Overview of the Demonstration Experiment

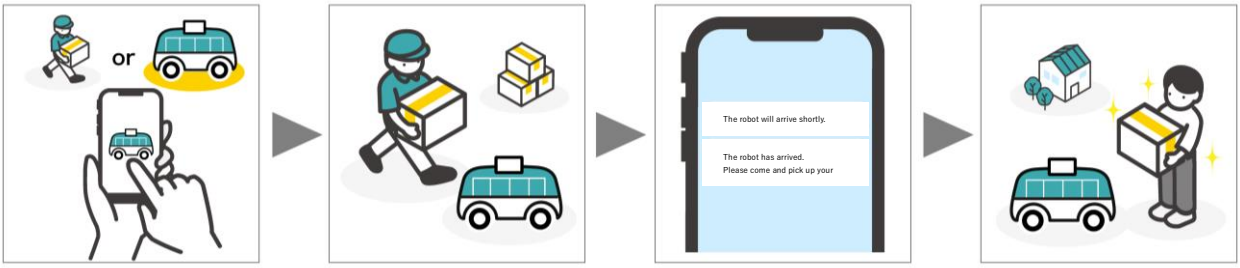
Experiment period	Scheduled for September 11 to late October 2024 ・During the period, operation is scheduled for 9:00 a.m. to 9:00 p.m. (including Saturdays, Sundays, and national holidays) ・Operation is subject to cancellation or termination without prior notice ・The service period may be subject to change due to inclement weather or vehicle adjustments
Experiment details	Testing of mobile delivery service using unmanned automated delivery robots equipped with PUDO Station lockers ・Due to the driving route, robots will stop at delivery points within a minute's walk of the recipient's home
Eligible customers	Residents in eastern Ryokendai, Ishikari City, Hokkaido ・Requires registration with Kuroneko Members, Yamato Transport's membership service for individuals (no signup or annual fee)
Eligible packages	TA-Q-BIN to Kuroneko Members in the target area ・Excluded: Cool TA-Q-BIN, TA-Q-BIN Cash on Delivery, TA-Q-BIN Collect, and packages over 120 size (total of three measurements)

KYOCERA Communication Systems Co., Ltd.

Scheduled service area	Roadways in part of eastern Ryokendai, Ishikari City, Hokkaido 
Role of each company	KCCS: Planning, management and coordination of the demonstration experiment Development, operation, and management of unmanned automated delivery robots Yamato Transport: Implementation of mobile delivery service using unmanned automated delivery robots Packcity Japan: Development and operation of PUDO Station lockers
Partners	Ishikari City Toyota Industries Corporation

*The demonstration experiment will be conducted as part of the Innovative Robotics R&D Infrastructure Development Project: Realization of Delivery Service by Automated Delivery Robots, for which the New Energy and Industrial Technology Development Organization (NEDO) publicly solicited applications and KCCS was selected in June 2022.

3. Service Flow



④ When receiving a pre-delivery notification, customer selects "Parcel Locker: Yamato Transport Ryokuendai Demonstration Experiment" as the pickup location

③ Yamato employee loads the package onto the robot

① Customer receives notification when the robot approaches a delivery point near their home

② Customer receives package from the robot

4. Future Developments

Through the demonstration experiment, we aim to create a new delivery service that adapts to lifestyles that are diversifying along with the expansion of the e-commerce market, and to implement unmanned automated delivery robots that are suited to regional characteristics in society. In addition, we will continue demonstration experiments for the practical application of local logistics support

services using unmanned automated delivery robots, and contribute to the development of a sustainable future community based on regional cooperation.

About Unmanned Automated Delivery Robots

- A remote observer monitors the vehicle while it is in motion and remotely controls the unmanned automatic delivery robot depending on the situation.
- Permission for the test on public roadways includes from approval for the relaxation of safety standards from the Hokkaido District Transport Bureau and approval for use of public roadways from the Hokkaido Prefectural Police, with the cooperation of Ishikari City.
- For more information on unmanned automated delivery robots, please visit the following website (Japanese only).
  URL： https://www.kccs.co.jp/contents/mobility/

About PUDO Station

- PUDO Station is an open-type delivery locker available for use by Packcity Japan's contracted courier companies. Users can send and receive packages by simply entering their password.
- Toyota Industries Corporation (Head Office: Kariya-shi, Aichi Prefecture; President: Koichi Ito) is manufacturing and installing the PUDO Station locker body to be mounted on the unmanned automated delivery robot for the demonstration experiment.

Contact

KYOCERA Communication Systems Co., Ltd.
Kimura, Nakakura, Public Relations & Advertising Department
TEL: +81-90-7550-8625 (direct), E-mail: webmaster@kccs.co.jp

Yamato Transport Co., Ltd.
General inquiries: Call Center, TEL: 0120-01-9625 (in Japan only, toll-free number)
Press inquiries: Corporate Communications, TEL: +81-3-3248-5822

Packcity Japan Co., Ltd.
Attn: Yuyama
TEL: +81-3-6273-7350, Email:sales@packcity.co.jp

KYOCERA Communication Systems Co., Ltd.

Reference

- Launch of Japan's First Demonstration Experiment in Which a Single Operator Remotely Monitors and Operates Multiple Medium-speed, Medium-sized Automated Delivery Robots Traveling Simultaneously on a Roadway (October 25, 2023, Japanese only)
  https://www.kccs.co.jp/news/release/2023/1025/
- Launch of Demonstration Experiment of Delivery Service for Individuals Using Unmanned Automated Delivery Robots on Tuesday, November 8, 2022, on Public Roadways in Ishikari City, Hokkaido (November 8, 2022, Japanese only)
  https://www.kccs.co.jp/news/release/2022/1108/
- KCCS Selected for NEDO Publicly Solicited Project: Innovative Robotics R&D Infrastructure Development Project: Realization of Delivery Service by Automated Delivery Robots (June 23, 2022, Japanese only)
  https://www.kccs.co.jp/news/release/2022/0623/
- Started Demonstration Experiment of a Robot Sharing Delivery Service Using Unmanned Automated Delivery Robots on Public Roadways in Ishikari City, Hokkaido (August 17, 2021, Japanese only)
  https://www.kccs.co.jp/news/release/2021/0817/
- Project to Construct a Basis for Research and Development of Innovative Robots
  https://www.nedo.go.jp/activities/ZZJP_100188.html