

**World's first MaaS demonstration experiment from airport to Marunouchi stores using Autonomous Driving Taxi and Autonomous Personal Mobility.**

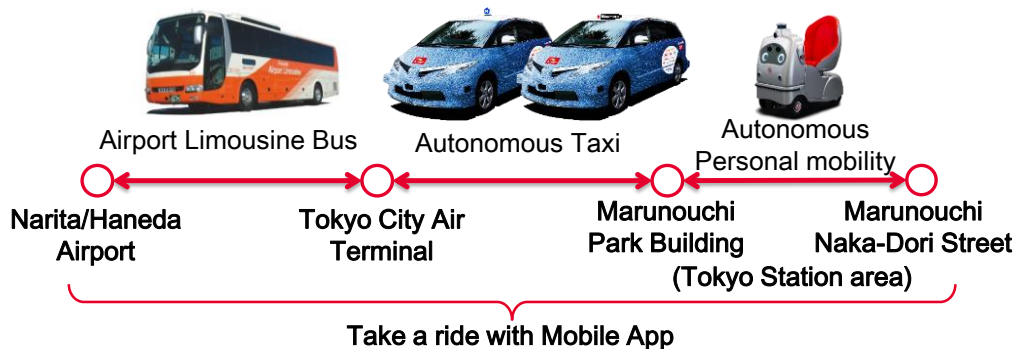
**We start reservation for foreigners (including foreign nationals) today.**

**- The demonstration experiment of transport service to provide the last mile journey from airport -**

The seven companies of us - Airport Transport Service Co., Ltd. (hereinafter referred to as Airport Transport Service), Tokyo City Air Terminal Co., Ltd. (T-CAT), Nihon Kotsu Co., Ltd. (Nihon Kotsu), HINOMARU KOTSU Co., Ltd. (HINOMARU KOTSU), MITSUBISHI ESTATE Co., Ltd. (MITSUBISHI ESTATE), JTB Corp. (JTB), and ZMP Inc. (ZMP) announced MaaS (Mobility as a Service) experiment of urban transportation infrastructure connecting with Airport limousine bus, Autonomous Driving taxi and Autonomous Personal mobility on October 9<sup>th</sup>.

We start reservation for foreigners (including foreign nationals) for this demonstration today, December 2<sup>nd</sup>.

Our demonstration experiment is supported from the Tokyo Metropolitan Government Project "Project on Business Model Construction Utilizing Autonomous Driving Technology"\*.



Period of the experiment: From January 20<sup>th</sup> (Mon) to February 1<sup>st</sup> (Sat) 2020. We launch exclusive site for the demonstration experiment today, December 2<sup>nd</sup> 2019.

See the following URL: <https://www.zmp.co.jp/event/zmp-maas2019/foreign-visitors>

By combining services of airport bus starting from Narita or Haneda airport to Tokyo City Air Terminal, Autonomous Driving taxi, and Autonomous Personal mobility, we hope to realize smooth transportation from the airport to the stores in Marunouchi area which is in the city center. The area to be covered by Autonomous Driving taxi is planned to be approximately 3 km connecting Tokyo City Air Terminal (in Chuo-ku, Tokyo) and Marunouchi Park Building (in Chiyoda-ku, Tokyo) and to be operated by Tokyo based major taxi companies, Nihon Kotsu and HINOMARU KOTSU. We'll verify the commercialization of JTB new travel service of MaaS, combined services of Airport limousine bus and Autonomous Driving taxi. We'll also have a demonstration of Autonomous Personal mobility around MITSUBISHI ESTATE' Marunouchi Park Building and Marunouchi Naka-Dori Street in the Tokyo Station area. It is the world's first cooperation service using Airport bus, Autonomous Taxi and Autonomous Personal mobility.

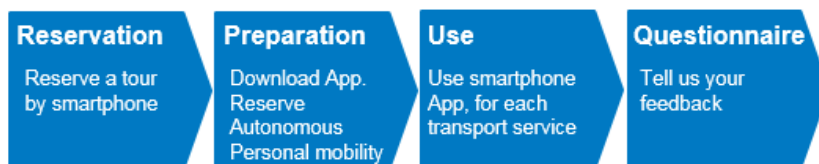
Overseas tourists are increasing in Tokyo and we are facing the issue of taxi driver shortage. We want to gather feedback from Japanese nationals and foreigners, so we plan to investigate business, technology and social acceptance of Autonomous Driving technology and MaaS to solve these issues.

For Japanese: <https://www.zmp.co.jp/event/zmp-maas2019/>

※Tokyo metropolitan government press release (Japanese): <http://www.metro.tokyo.jp/tosei/hodohappyo/press/2019/06/06/01.html>

## Overview of demonstration experiment (planned)

Schedule	<p><b><u>MaaS experiment of Airport limousine bus and Autonomous Driving taxi</u></b></p> <p>From January 20<sup>th</sup> (Mon) to February 1<sup>st</sup> (Sat), 2020. From 10:00 to 17:00</p> <p><b><u>MaaS experiment of Airport limousine bus, Autonomous Driving taxi and Autonomous Personal mobility</u></b></p> <p>From January 20<sup>th</sup> (Mon) to January 24<sup>nd</sup> (Fri), 2020. From 11:00 to 15:00.</p> <p>*The services may cancel according to weather and traffic condition.</p> <p>*The schedule and the service content may change. Please confirm the latest information in the following URL <a href="https://www.zmp.co.jp/event/zmp-maas2019/foreign-visitors">https://www.zmp.co.jp/event/zmp-maas2019/foreign-visitors</a></p>
Autonomous Driving taxi operation route	Between Marunouchi Park Building (in Chiyoda-ku, Tokyo) and Tokyo City Air Terminal (in Chuo-ku, Tokyo). Approximately 3 km.
Autonomous Driving taxi vehicle	MiniVan (ZMP RoboCar <sup>®</sup> MiniVan), 2 vehicles
Autonomous Personal mobility operation route	In a limited area of Marunouchi Park Building site and Marunouchi Naka-Dori Street (sidewalk), in the Tokyo Station area.
Autonomous Personal mobility	Autonomous Personal mobility (ZMP Robocar <sup>®</sup> Walk)
Presented by	Airport Transport Service Co., Ltd., Tokyo City Air Terminal Co., Ltd., Nihon Kotsu Co., Ltd., HINOMARU KOTSU Co., Ltd., MITSUBISHI ESTATE Co., Ltd., JTB Corp., ZMP Inc.
Narita airport arrival/departure travel charge	Between Narita airport and Marunouchi Park Building: 3,800 JPY (tax included) per person
Haneda Airport arrival/departure travel charge	Between Haneda airport and Marunouchi Park Building: 1,600 JPY (tax included) per person
Autonomous Driving taxi fare	Between T-CAT and Marunouchi Park Building: Total 1,200 JPY (including 200 JPY as travel business handling charge) per taxi
Participation application	URL: <a href="https://www.zmp.co.jp/event/zmp-maas2019/foreign-visitors">https://www.zmp.co.jp/event/zmp-maas2019/foreign-visitors</a> Application period: From December 2 <sup>nd</sup> 2019 to January 9 <sup>th</sup> 2020, until 17:00. We may change the application period depending on the received number of applications. For Japanese: <a href="https://www.zmp.co.jp/event/zmp-maas2019/">https://www.zmp.co.jp/event/zmp-maas2019/</a>
How to use	On the usage date the person can get on Airport limousine bus, Autonomous Driving taxi, Autonomous Personal mobility by using a smartphone app.



\*The passenger of Autonomous Driving taxi can reserve Autonomous Personal mobility (no charge). Because of limited number of Autonomous Personal mobility operation services, all passengers who can ride on Autonomous Driving taxi may not be able to get on Autonomous Personal mobility. Please be understanding of this beforehand.

\*Autonomous Driving taxi will be operated autonomously such as turning, changing lanes and stopping. A safe driver operates depending on the traffic condition.

## Outline of Autonomous Driving taxi and Autonomous Personal mobility



ZMP RoboCar® MiniVan

Autonomous Driving vehicle – several type of cameras and sensors are used to understand the surrounding environment and traffics so as to run a vehicle autonomously. All driving operations such as steering, accelerator, brakes are controlled by a computer.



ZMP Robocar® Walk

Robocar® Walk is a newly introduced “Mobility Partner”, Autonomous Personal mobility. The passenger use tablet and autonomously move to the destination. It greets passing people with smile in friendly and original designs to realize the safe and smoothly coexisting with people by mutual concessions.

### Each company role

Autonomous Driving taxi (development), Autonomous Personal mobility (development and operation): ZMP

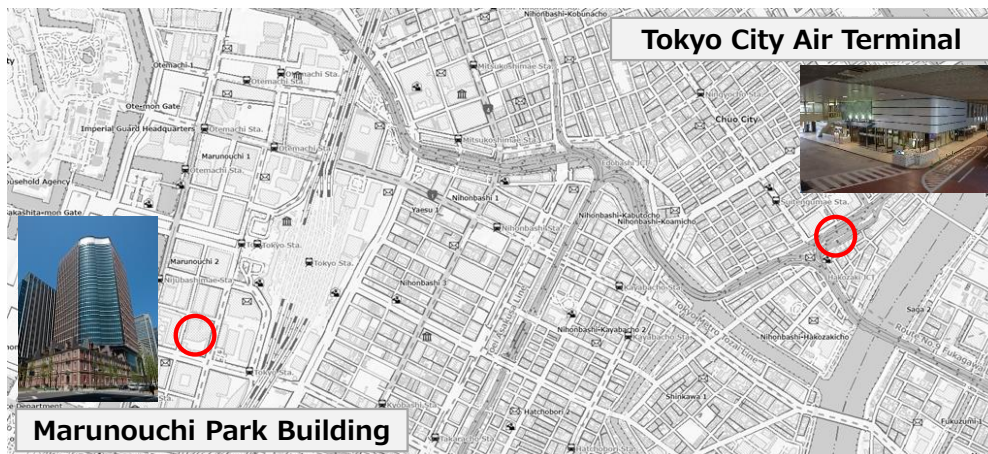
Autonomous Driving taxi operation: Nihon Kotsu, HINOMARU KOTSU

Airport limousine bus operation: Airport Transport Service

Facility providing: MITSUBISHI ESTATE, T-CAT

Travel service in MaaS (trial and sales): JTB

### Autonomos Driving taxi driving area



### Contact

Source of reference: <https://maps.gsi.go.jp/multi/>, Geospatial Information Authority of Japan. Modified by ZMP

ZMP Autonomous Driving project demonstration experiment office: [zmp-maas2019@zmp.co.jp](mailto:zmp-maas2019@zmp.co.jp)

### ZMP Inc.

Head office: Bunkyo-ku, Tokyo, Japan CEO: Hisashi Taniguchi URL: <https://www.zmp.co.jp/>

Driven by its mission “Robot of Everything: to create and empower new lifestyles by enabling free movement of people and goods”, ZMP focuses mainly on:

1. “Robocar® & Sensor Innovation” -Services for the movement of people with Autonomous Driving Platform “RoboCar®” series, and RoboVision® & Sensor systems
2. “CarriRo® Creation” -Services for the movement of goods with logistics support robot CarriRo®, unmanned forklift CarriRo® Fork and delivery robot CarriRo® Deli
3. “IZAC® Revolution” -Services for highly specialized engineering services applied to Autonomous Driving solutions
4. “RoboTest® Solution” -Services for data acquisition with vehicle running data test and data analysis tools and software

ZMP is conducting the demonstration experiments to realize level 4 of unmanned drive operation to enable the free movement of people and goods in 2020. ZMP is also aiming at being the first Japanese company to provide delivery robot “CarriRo® Deli” and Autonomous Personal mobility “Robocar® Walk” and is actively looking for partners to realize commercialization. ZMP will continue to push the limits of possible, by developing products and services, in every sense of the term.