Field Operational Tests

Wide Area

FOT has been conducted in real environments for 1 year

SIP-adus FOT focuses on verifying automated driving system technology in real environments including public roads with various participants. Tests have been commenced in five technology fields: dynamic map, human machine interface (HMI), security, pedestrian traffic accident reduction and next-generation transport.

Main Targets of SIP-adus FOT

- Activation of the study / technology development
- An evaluation, a problem is extracted in more viewpoints
- Confirmation of the practical use
- International cooperation and harmonization
- Social acceptability promotion

Schedule

■October 2017
・Commencement of FOT

■March 2018
・Interim Report
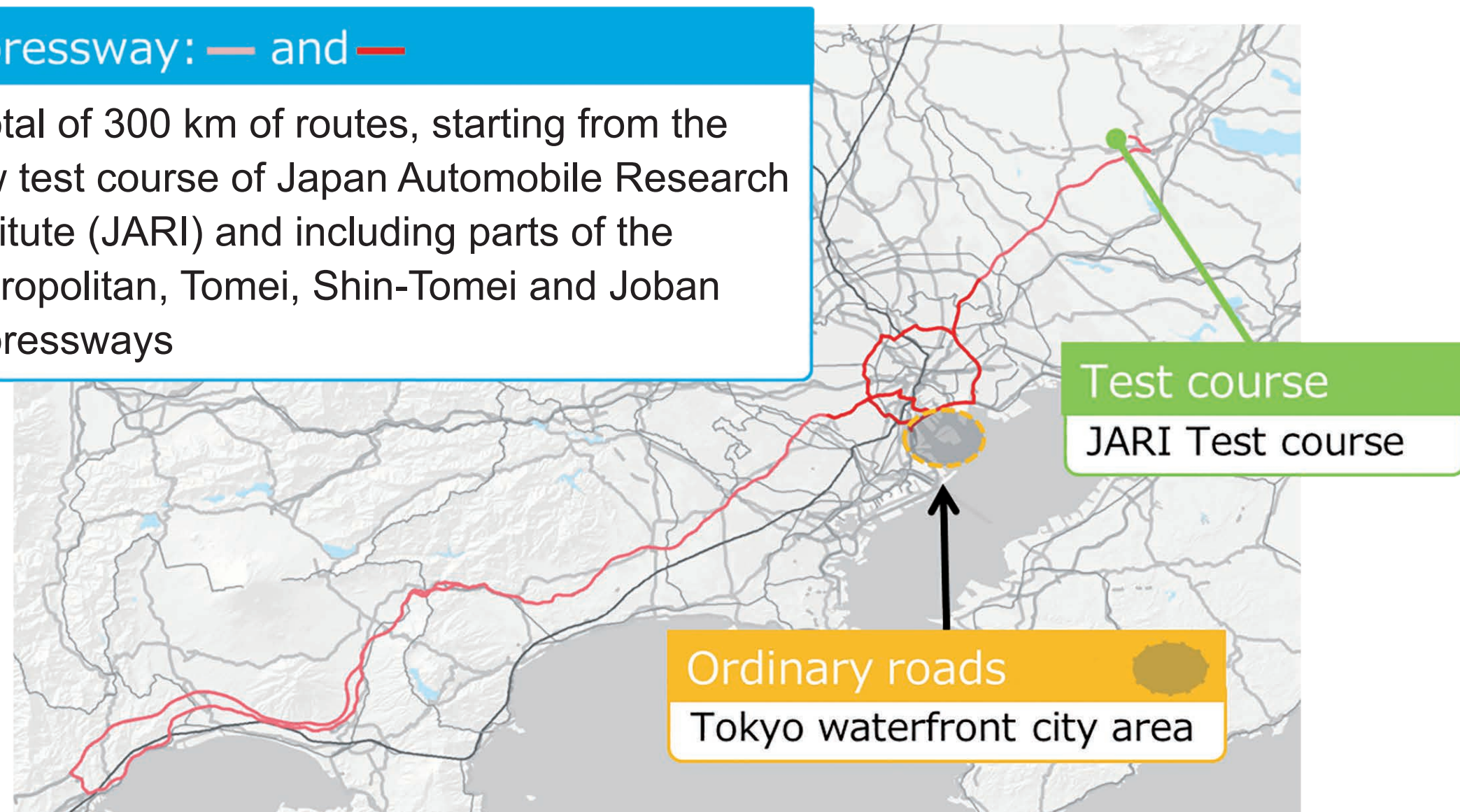
■March 2019
・Final Report

Test Sites

Expressway   **Surface Streets**   **Test Course**

Expressway: — and —

A total of 300 km of routes, starting from the new test course of Japan Automobile Research Institute (JARI) and including parts of the Metropolitan, Tomei, Shin-Tomei and Joban Expressways

Test course
JARI Test course

Ordinary roads
Tokyo waterfront city area

### Test Participants

Alphabetical Order

ALPINE Driving Mobile Media Innovation · BMW · MINI · BOSCH Invented for life
CALSONIC KANSEI · Continental · DAIHATSU · HONDA The Power of Dreams
mazda · Mercedes-Benz · MLT MEIJI LogiTech · MITSUBISHI ELECTRIC
名古屋大学 NAGOYA UNIVERSITY · NISSAN MOTOR CORPORATION · OMRON · Pioneer
埼玉工業大学 SAITAMA INSTITUTE OF TECHNOLOGY · SUZUKI · SUBARU · TOYOTA
Valeo · VOLKSWAGEN AKTIENGESELLSCHAFT · ZMP · Alphabetical order

Outline of FOT

Dynamic Map

- ☐ Validation of the specifications and accuracy of static high-accuracy 3D map data
- ☐ Verification of semi-dynamic information such as traffic congestion and traffic regulation information
- ☐ Validation of the system for generating, updating and distributing data
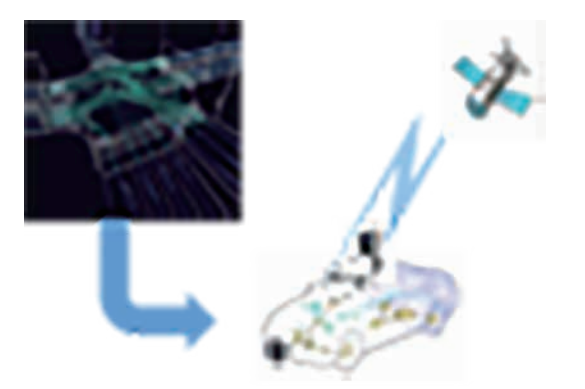
HMI

- ☐ Measurement of driver condition and driving state under actual driving environments and continuous driving for a long time
- ☐ Data collection and analysis of driver condition
- ☐ Verification of HMI methods and devices
- ☐ Study and verification of decision index of driver condition

Image of change in driver condition

Driver-monitoring camera · Angle of view · Driver condition monitoring
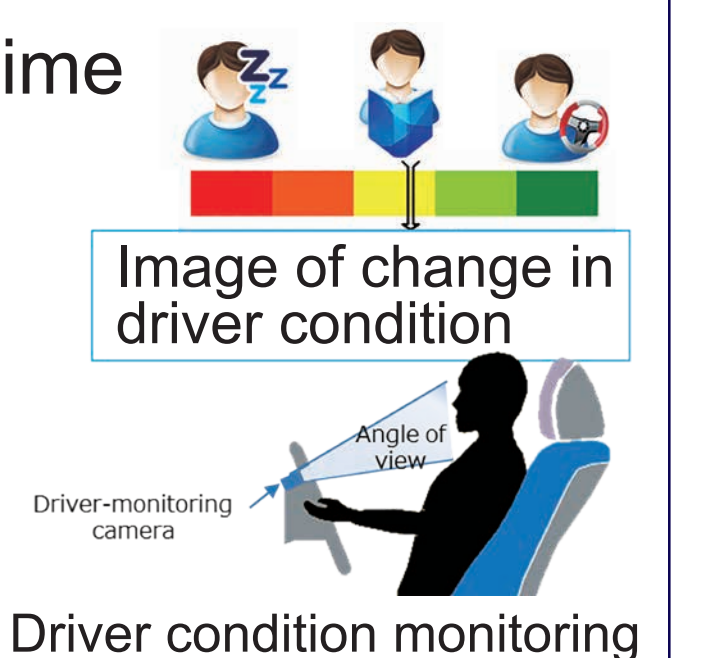
Cyber Security

- ☐ Development of a cyber security evaluation guideline to assess the protection level of connected cars against cyber-attacks
- ☐ Evaluation of the guideline in experiments with several test car systems provided by automobile manufacturers

Pedestrian Traffic Accident Reduction

- ☐ Verification of a pedestrian mobile terminal equipped with V2P communication technologies and high-accuracy position measuring system for support recognition

Reminder system

V2P communication through smart phone · Information provision
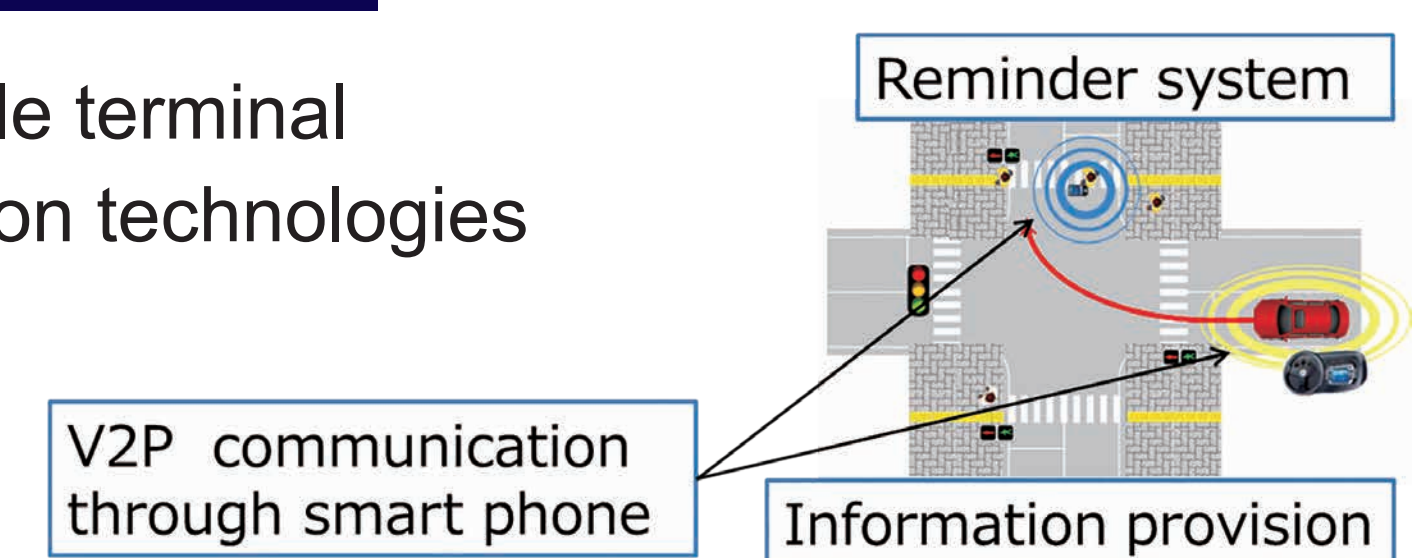
Next-Generation Transport

- ☐ Verification of service level improvement (passenger comfort and reliability) of public transportation utilizing Advanced Rapid Transit (ART) technologies
- ☐ Verification of usability and efficiency of attribute-travel based support which gives information on the most suitable route for the user via smartphone