

Thursday, 11 April 2024

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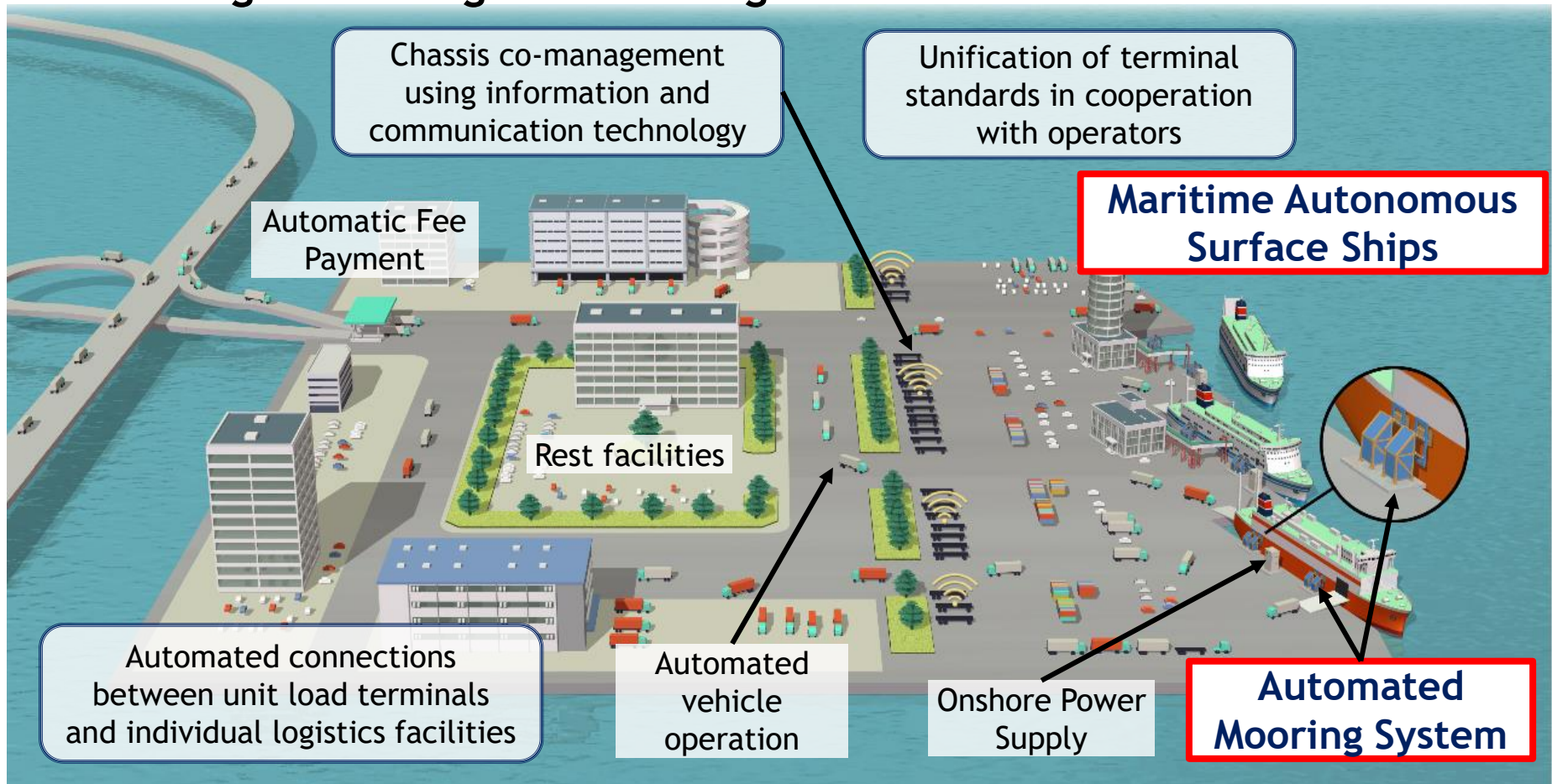
# *Challenges of Japanese Ports*

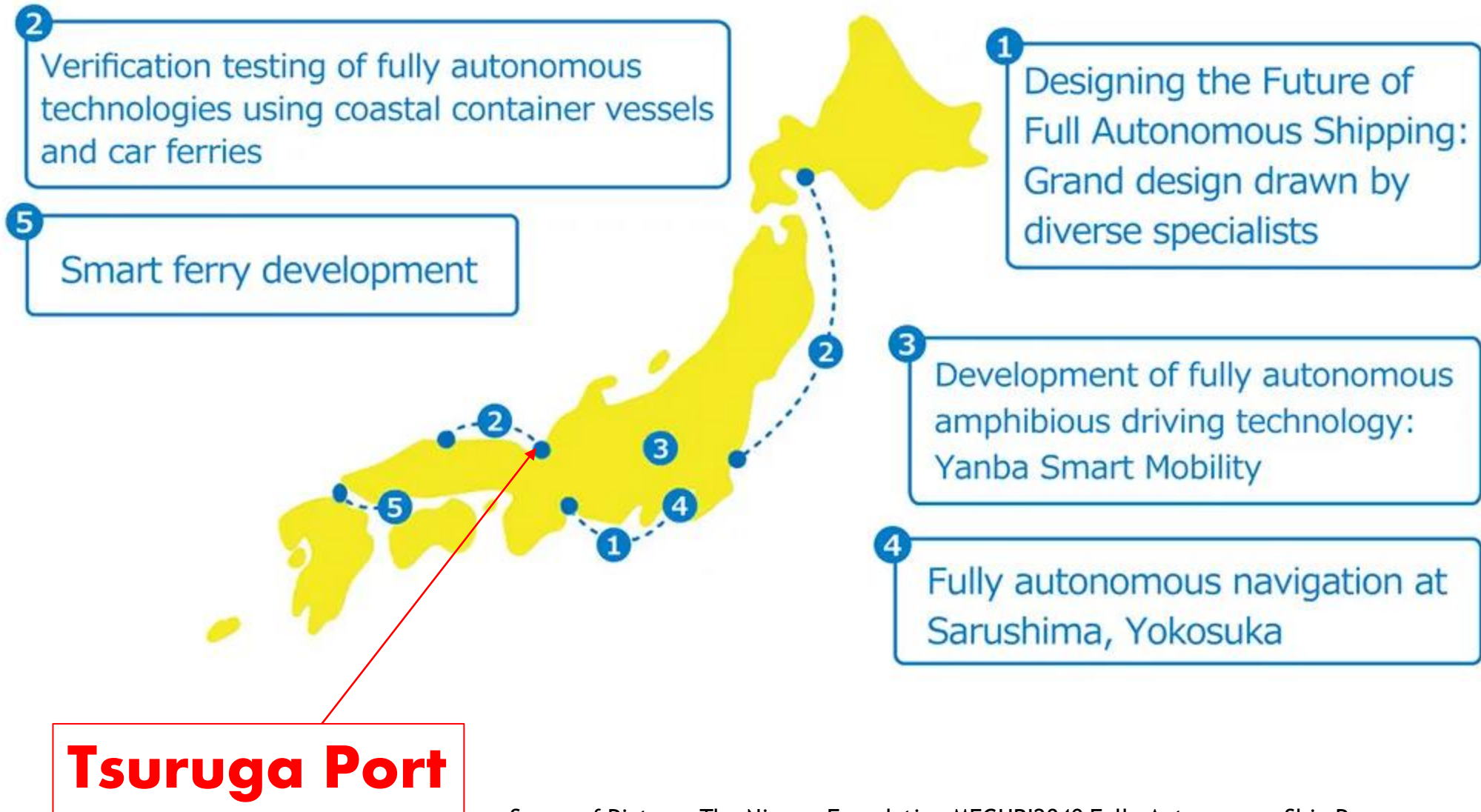
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Ports and Harbours Bureau, MLIT

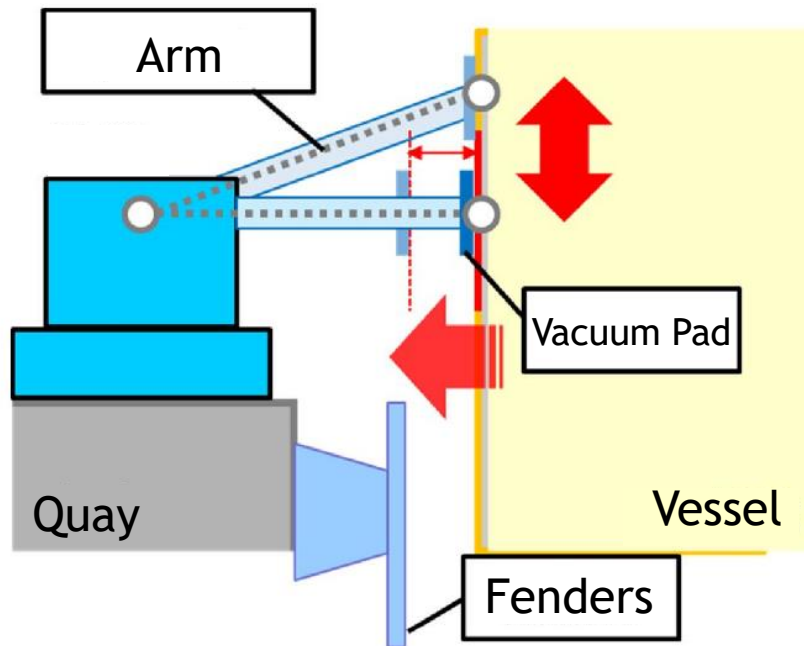
In July 2018, MLIT formulated the "Medium- and Long-term Policy for Ports and Harbors: PORT2030," which outlines the role ports should play in the development of Japan's economy and industry and in improving the quality of people's lives, and the direction of port policies that should be promoted in particular, looking to the future around the year 2030.

## Image of Next-generation High-standard Unit Load Terminal





- MLIT conducted accuracy verification, focusing on individual elemental technologies for which needs are high and feasibility is high.
- For example, MLIT demonstrate an automatic mooring system at Tsuruga Port.



Check of equipment at the factory



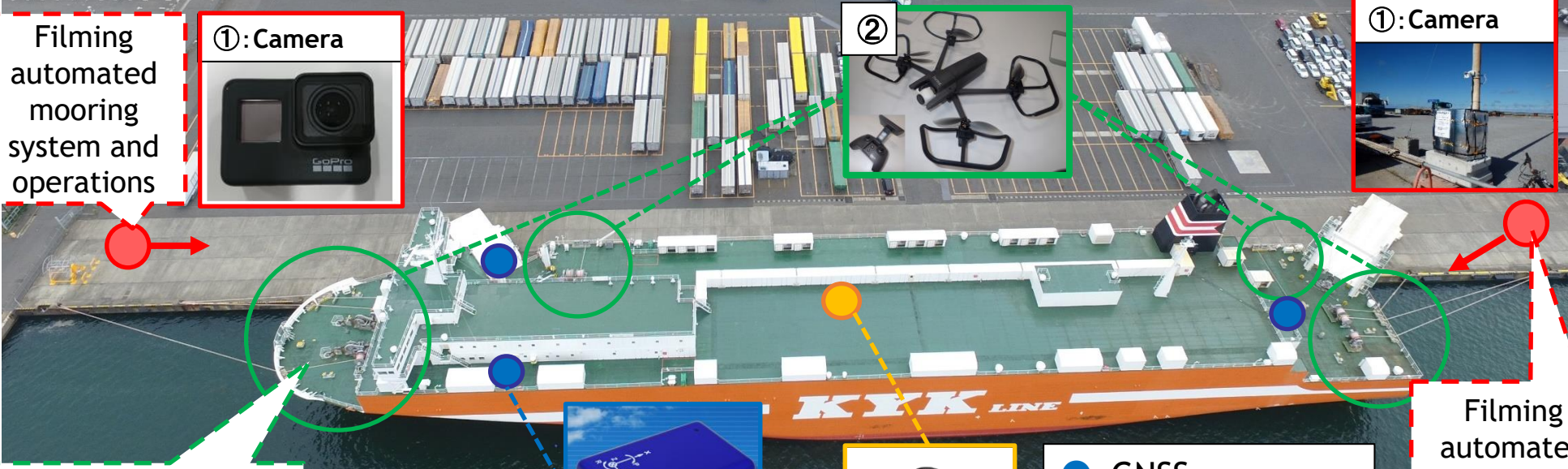
Transportation to Tsuruga Port



# Underlying Technology - Automated Mooring System



## Verification of the Effectiveness of Automated Mooring System

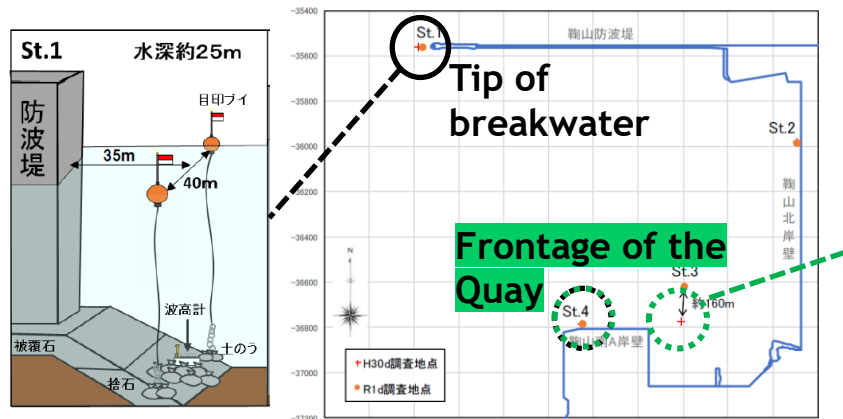


Filming automated mooring system and operations

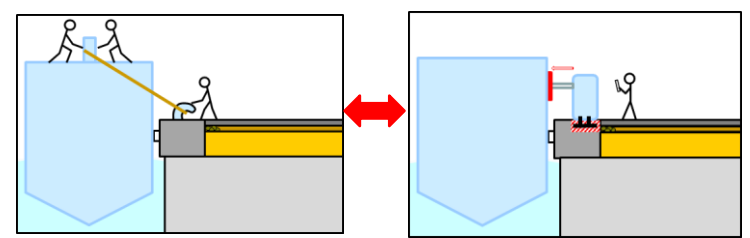
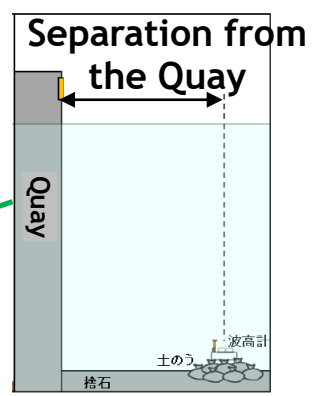
By UAV, capturing on-deck personnel and work hours

- : GNSS
- : Gyro Sensors
- : Video Camera

Filming automated mooring system and operations



Wave observation points



- ① Measure the difference in time and work required for berthing and unberthing
- ② Assessing the impact and usability of mooring on cargo handling operations

- MLIT, based on the trend of technological development of autonomous navigation of ships, plan to strategically address the following issues.
  - testing how the autonomous ship will combine with automated mooring,
  - studying the necessary improvement of port facilities and its technical standards, and
  - studying the rules for port entry and exit in cooperation with related organizations.

Note; Specified in the basic policy based on Article 3-2 of Ports and Harbors Act

- MLIT would like to receive information on the port side conditions required for the port call of MASS (e.g., calmness of the port, strength of fenders, equipment to be installed on the quay side such as cameras, etc.).

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Thank you for your kind attention!