

Realization of Advanced Air Mobility (ReAMo) Project

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New Energy and Industrial Technology Development Organization

Robots and Artificial intelligence Technology Department

Realization of Advanced Air Mobility Project Manager/ Project Coordinator

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About NEDO

Positioning of NEDO

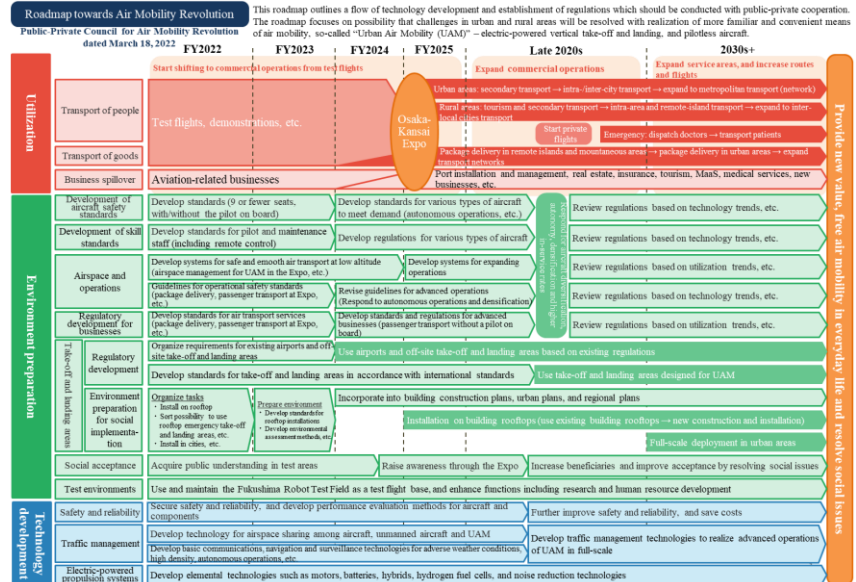
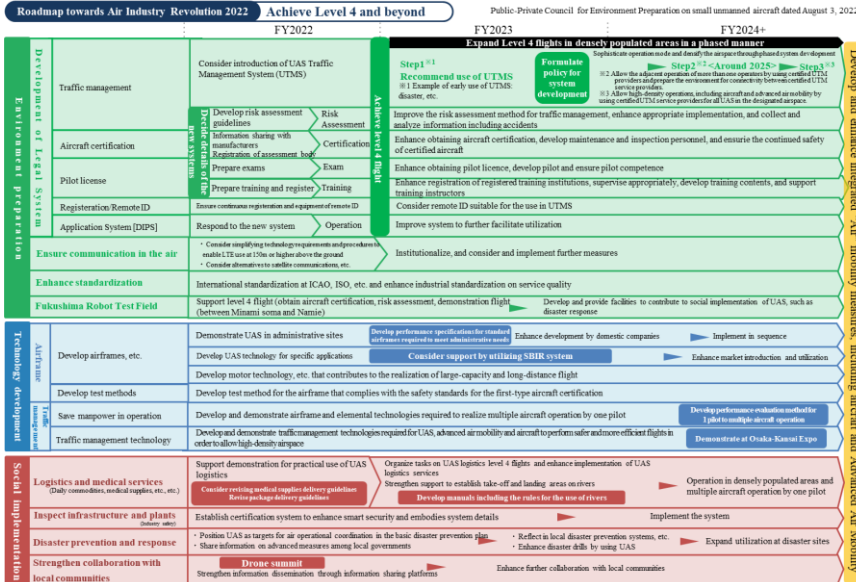
In order to contribute to the resolution of social issues, NEDO formulates technology strategies and project plans and, as part of its project management, establishes project implementation frameworks by combining the capabilities of industry, academia, and government. NEDO also promotes technology development by carrying out, evaluating, and allocating funding to promising projects to accelerate the practical application of project results.



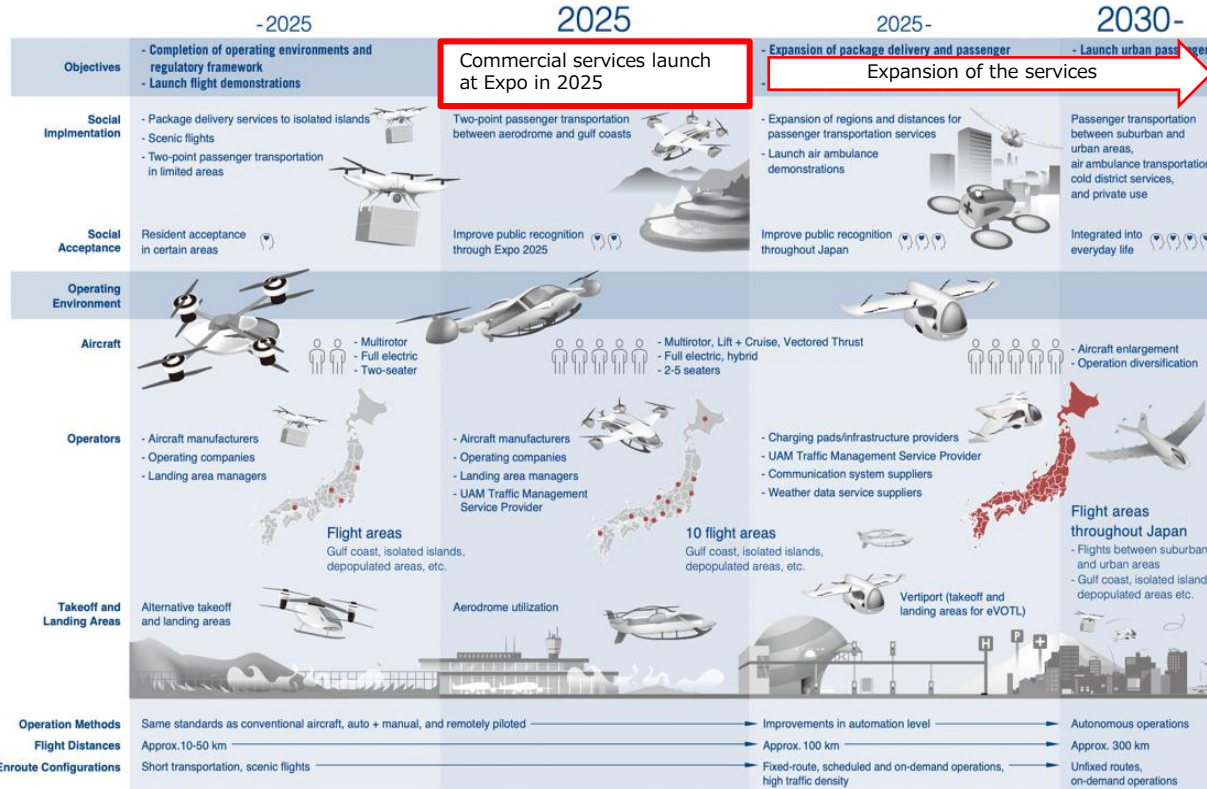
Overview of AAM in Japan

Roadmaps for Implementation of AAM in Japan

- Japanese government has established the Public-Private Committee for AAM.
- Roadmaps for Implementation of AAM in Japan has been published and updated.
- NEDO's aim is the realization of these goals through the promotion of technological development.

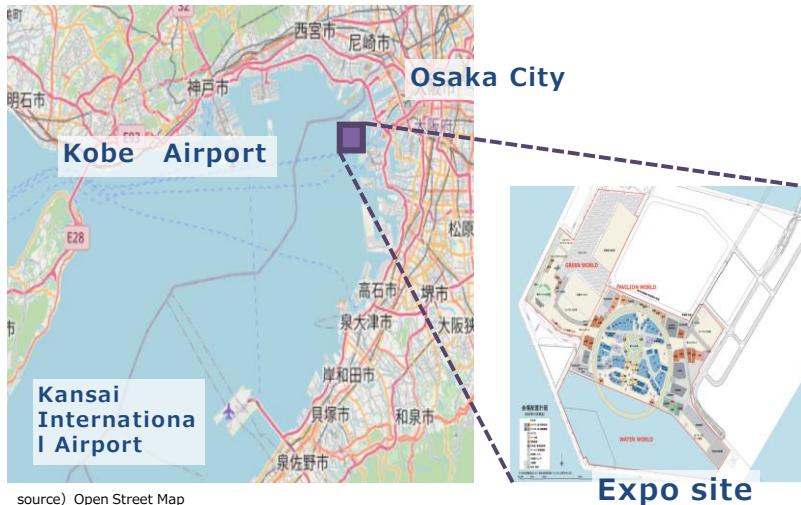


Japanese Roadmap for AAM



Initial ConOps of UAM at Expo in 2025

- Commercial service with certified eVTOL aircraft
- Pilot onboard, VFR operation
- To support safe and smooth operation, JCAB will provide the following services as ANSP:
 - Publish the AAM route (non-exclusive) on AIP
 - Coordination of flight plan (strategic de-conflict)
 - Conformance monitoring with ADS-B



“Advanced Air Mobility (AAM)” operating the verti-port in the Expo site [Smart Mobility Expo]

■ Sponsor company
ORIX Corporation (Tokyo)

“Advanced Air Mobility (AAM)” eVTOLs operators [Smart Mobility Expo]

- Participating companies**
- ANA HOLDINGS INC. (Tokyo) and Joby Aviation Inc. (USA)
 - Japan Airlines Co., Ltd. (Tokyo)
 - Marubeni Corporation (Tokyo)
 - SkyDrive Inc. (Aichi)

ReAMo Project

AAM Maturity Level By ReAMo

As the maturity level rises, there will be less human involvement in the operation of these vehicles. In urban areas in particular, flight density will increase, and use of AAM will penetrate into the spheres of everyday life.

- Start of commercial operation
- Utilization as secondary transportation from the airport
- Onboard pilots, low flight frequency
- Ports will mainly be located outside of densely populated areas



Image of Maturity Level 2



Image of Maturity Level 4

- Realization of high-density operations over urban areas, airspace exclusive to AAM
- With the advancement of automation, the pilot will no longer be on board but remotely monitors and controls the aircraft
- Many ports will be built on building rooftops, and flights will efficiently access large-scale airports as well

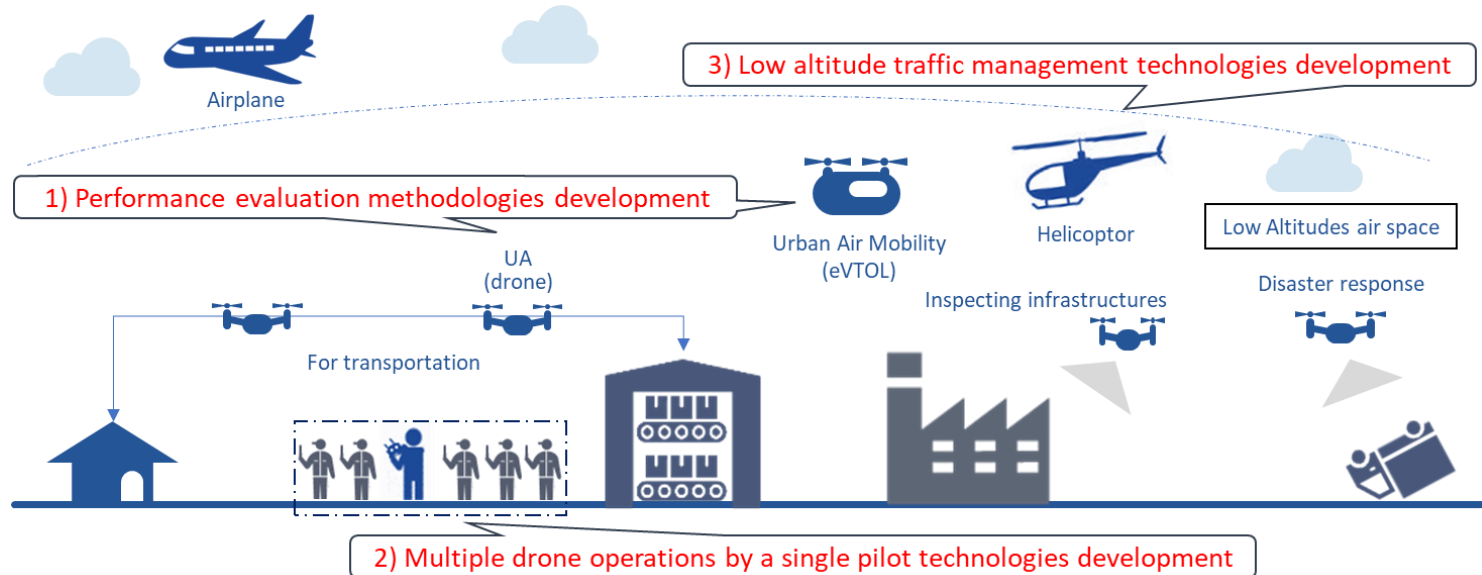


Image of Maturity Level 6

- Autonomous flights without any human involvement are realized, enabling free and flexible air mobility
- Users can take flights from their neighborhood in residential and surrounding areas, whenever they want
- Aircrafts for personal use will become popular in addition to passenger aircraft

Outline of ReAMo Project

- Five-year project starting in FY2022, with a budget of 20million euros per year.
- Three R&D activities are supported.



ReAMo Project members

- Over 40 partners from universities, national R&D institutes and industry (telecoms, UTM service providers, motor manufacturers, UAS manufacturers, etc.) in Japan.



<https://www.youtube.com/watch?v=WGii0c5BDQM>



Reference Material
