

# Future traffic management technology for UAM

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**New Energy and Industrial Technology Development Organization(NEDO)**

## NEDO's Missions

- Addressing energy and global environmental problems
- Enhancing industrial technology





# Figures of Realization of Advanced Air Mobility Project



Duration

**5 Years**

FY2022 to FY2026



Total Budget

**\$100M**



Partners

**42**

Industries, Universities,  
and Institutes

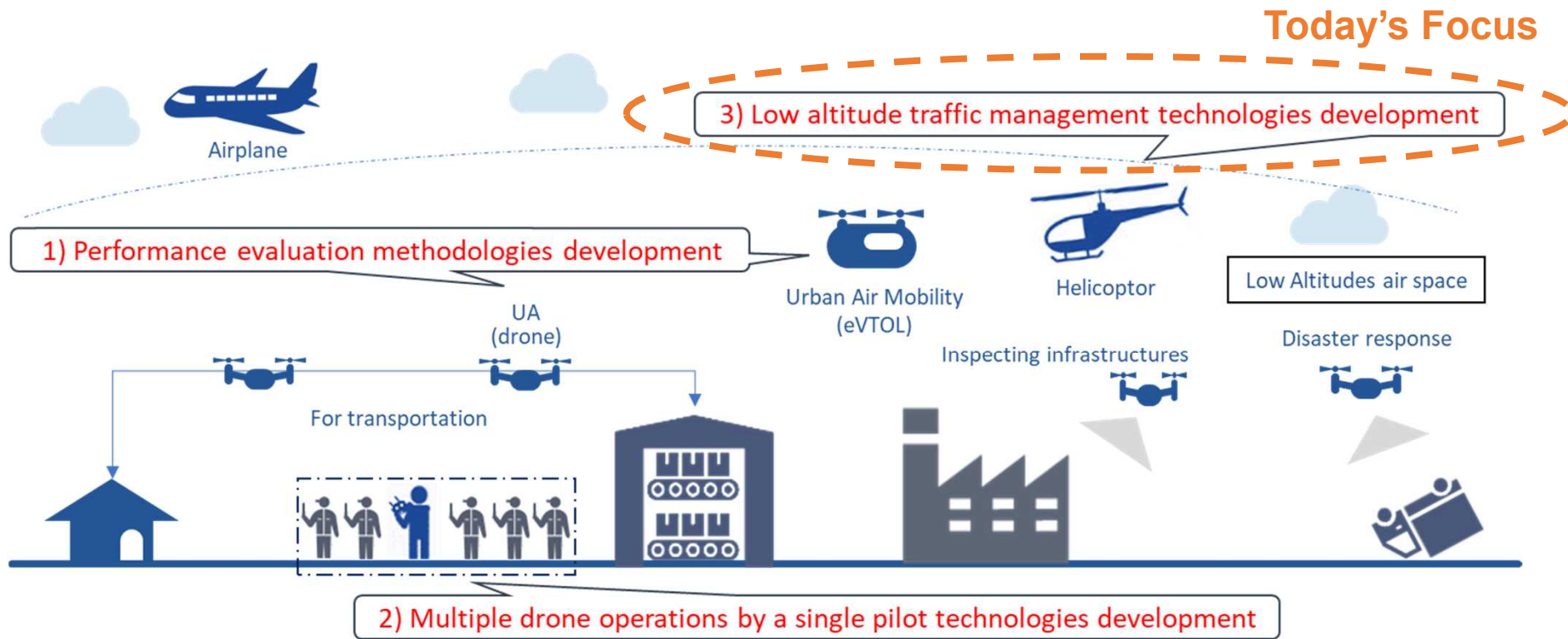


R&D Items

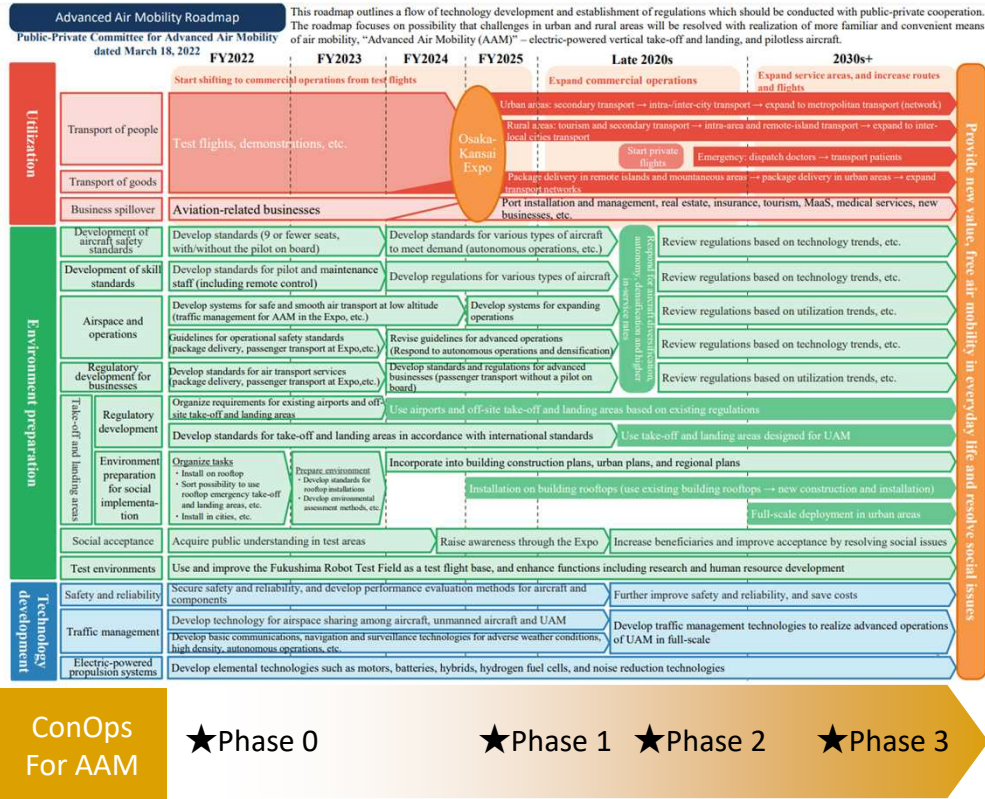
**9**

+2 research items

# Overview of R&D Activities



# AAM (UAM) Roadmap in Japan



1<sup>st</sup> issue rev.A: published in April 2024  
by “the Public-Private Committee for Advanced Air Mobility”



## Commencement of commercial operations

- Low density operations
- Pilot on board , cargo transport with remotely piloted operations

## Scaled operations

- Medium to high density operations
- Pilot on board and/or remotely piloted

## Establishment of AAM operations which include autonomy

- High density
- Integrated with automated / autonomous operations

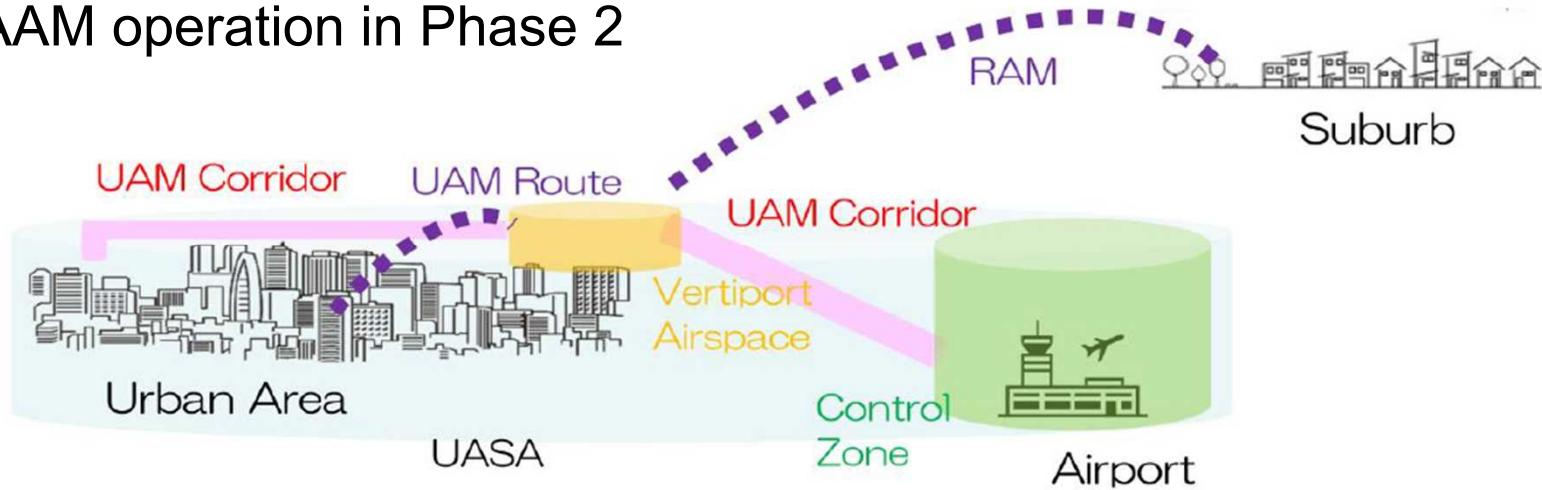
Concept of Operations for Advanced Air Mobility  
(ConOps for AAM)

First Issue Revision A Summary  
(English version)

※The Japanese version is the original and the English version is for reference purposes only.

# Phase 2 in ConOps for AAM

## Expected AAM operation in Phase 2



### UATM services in Phase 2 may include:

- Information Exchange/Sharing
- Airspace Management
- Conflict Management
- Flight Plan Authorisation
- Conformance Monitoring & Coordination

UAM: Urban Air Mobility  
RAM: Regional Air Mobility  
UATM: UAM Traffic Management  
UASA: UATM Service Area

## Propose

Develop **integrated traffic management technologies** that realize safer and more efficient flights of **UAS, AAM, and other conventional aircrafts**.

## R&D Items

### I. **Operation Procedures for AAM Flights**

Establish operational procedures and safety assurance procedures to achieve the flight of AAM at the Osaka-Kansai Expo and further initial AAM flight.

### II. **Integrated Traffic Management System**

Conduct comprehensive research and development of flight operation management systems(include UTM, UATM, vertiport operation management)

### III. **Autonomous Flight for High-density Operation**

Conduct R&D on advanced underlying technologies for operations at Maturity Level 4 and above

## Outputs

I. **Operational procedures** for the initial operation of AAM

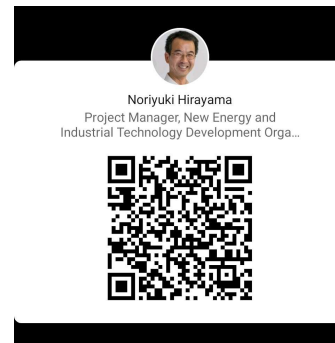
II. **Integrated Traffic Management System Architecture**

III. **Development and Verification of underlying technologies** based on the architecture





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