This Roadmap depicts a flow of technology developments and establishment of laws and regulations which should be undertaken with public-private cooperation. The Roadmap focuses on the possible innovation of “flying vehicles” – air mobility which is more familiar and convenient and characterized by such attributes as an electrified, vertical takeoff and landing, and human pilotless aircraft – will lead to overcoming transportation issues in both urban and regional areas. (Note) It should be recognized that a grand design pertaining to use of the sky will be necessary under developmental trends of other transportation equipment and engines.

2019~

Demonstrative Experiments and Test Flights and Other Implementations (Target: 2019)

- Proposal of Business Models by Operators
- Feedback Results of Feasibility Studies
- Permission of Test Flights
- Coordinating and Maintaining Takeoff and Landing Areas and Air Spaces for Test Flights
- Establishment of Fukushima Robot Test Field as a Test Flight Base

Comencement of Business Services (Target: 2023)

- Expanded Utility
  - Mobility of People in Urbanized Areas
  - Mobility of People in Rural Areas
  - Transportation of Goods
- Effective Uses for Disaster Relief, Emergency, and Leisure
- Revising Regulation for Transportation and Use Case Business Adapted to New Business Model
- Revising Safety Standard and Examination Method Adapted to Technology Development
- Revising Regulation for Transportation and Use Case Business Adapted to New Business Model

Mid-2020s

- Implementation Based on International Discussions
- Establishment of Condition to Use Air Spaces and Radio Waves in Anticipation of Development of Business Operation
- Provision of Comprehensive Operation Management Service
- Continuous Expansion of Takeoff and Landing Areas (Arrangements with Local Landowners by Business Operators, and Smooth Transfer to Other Transportations Such as Ground Transportation)
- Expansion from Remote Islands and Mountainous Regions to Urban Areas
- Regularized Full Operation of Flights in Urban Areas
- Accomplishing Level Satisfying Public Acceptance (Safety, Noise, Environment, and So Forth)

2030s~

- Further Improvements of Safety and Reliability
- Accomplishment of Electrically Propelled Passenger Vehicles
- Technological Development on Built-in Vehicle System and Ground System (Technologies to Facilitate Flights and the Like)
- Technology Development to Attain Required Cruising Distance and Quietness Level as That Required for Aircrafts
- Ensuring the Same Level of Safety and Quietness Level as That for Aircrafts
- Development of Remote Control from Ground (Automatic Flight)
- Simultaneous Operation Management and Collision Avoidance for Multiple Vehicles in the Air
- Advanced Automatic Flight
- Increased Cruising Distance: Development of Battery, Motor, Hybrid, and Weight Saving Technologies and So Forth
- Improved Quietness: Development of Technologies Such as Noise Reduction of a Rotor

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