This roadmap outlines a flow of technology development and establishment of regulations which should be conducted with public-private cooperation. Advanced Air Mobility Roadmap The roadmap focuses on possibility that challenges in urban and rural areas will be resolved with realization of more familiar and convenient means Public-Private Committee for Advanced Air Mobility of air mobility, "Advanced Air Mobility (AAM)" – electric-powered vertical take-off and landing, and pilotless aircraft. dated March 18, 2022

			FY2022	FY2023	FY202⊿	4 FY2025	Late 2020s		2030s+
			Start shifting to commercia	Start shifting to commercial operations from test			Expand commercial operations		Expand service areas, and increase routes and flights
Utilization	Transport of people Transport of goods		Test flights, demonstr	rations, etc.		Urban are Osaka- Kansai	as: secondary transport → reas: tourism and secondar ties transport Star f	intra-/inter-city transpor y transport → intra-area t private iohts Emergency	rt → expand to metropolitan transport (network) and remote-island transport → expand to inter- : dispatch doctors → transport patients
						Expo Package transpor	e delivery in remote island t networks	s and mountaneous areas	$s \rightarrow package delivery in urban areas \rightarrow expand$
	Business spillover		Aviation-related businesses Port installation and management, real estate, insurance, tourism, MaaS, medical services, new businesses, etc.						
	Development of aircraft safety standards		Develop standards (9 or fe with/without the pilot on	ewer seats, board)	Develop star to meet dem	ndards for various ty nand (autonomous or	pes of aircraft perations, etc.)	Review regulation	is based on technology trends, etc.
	Development of skill standards		Develop standards for pile staff (including remote co	Develop standards for pilot and maintenance staff (including remote control) Develop regulations for various types of aircraft					
ы	Airspace and operations		Develop systems for safe and smooth air transport at low altitude (traffic management for AAM in the Expo, etc.)						is based on utilization trends, etc.
nviro			Guidelines for operational safety standards (package delivery, passenger transport at Expo,etc.) Revise guidelines for advanced operations and densification Revise guidelines for autonomous operations and densification Revise regulations based on technology trends, etc.						is based on technology trends, etc.
nme	Regulatory development for businesses		Develop standards for air transport services (package delivery, passenger transport at Expo,etc.)						is based on utilization trends, etc.
nt pr	Take-	Regulatory	Organize requirements for existing airports and off- site take-off and landing areas based on existing regulations						
epar	-off and la	development	Develop standards for take-off and landing areas in accordance with international standards Use take-off and landing areas designed for UAM						
ati		Environment	Organize tasks	Prepare environment • Develop standards for rooftop installations • Develop anvironmental	Incorporate into building construction plans, urban plans, and regional plans				
0 B	nding	for social	 Install on roottop Sort possibility to use rooftop emergency take-off 			Installation on	building rooftops (use e	(use existing building rooftops \rightarrow new construction and insta	
	areas	implementa- tion	and landing areas, etc. • Install in cities, etc.	assessment methods, etc.					Full-scale deployment in urban areas
	Social acceptance		Acquire public understand	ding in test areas	F	Raise awareness throu	ugh the Expo Increas	se beneficiaries and in	nprove acceptance by resolving social issues
	Test environments		Use and improve the Fukushima Robot Test Field as a test flight base, and enhance functions including research and human resource development						
Technology development	Safety and reliability		Secure safety and reliability, and develop performance evaluation methods for aircraft and Further improve safety and reliability, and save costs						eliability, and save costs
	Traffic management		Develop technology for airspace sharing among aircraft, unmanned aircraft and UAM Develop basic communications, navigation and surveillance technologies for adverse weather conditions, of UAI of UAI					p traffic management M in full-scale	technologies to realize advanced operations
	Electric-powered propulsion systems		Develop elemental technologies such as motors, batteries, hybrids, hydrogen fuel cells, and noise reduction technologies						