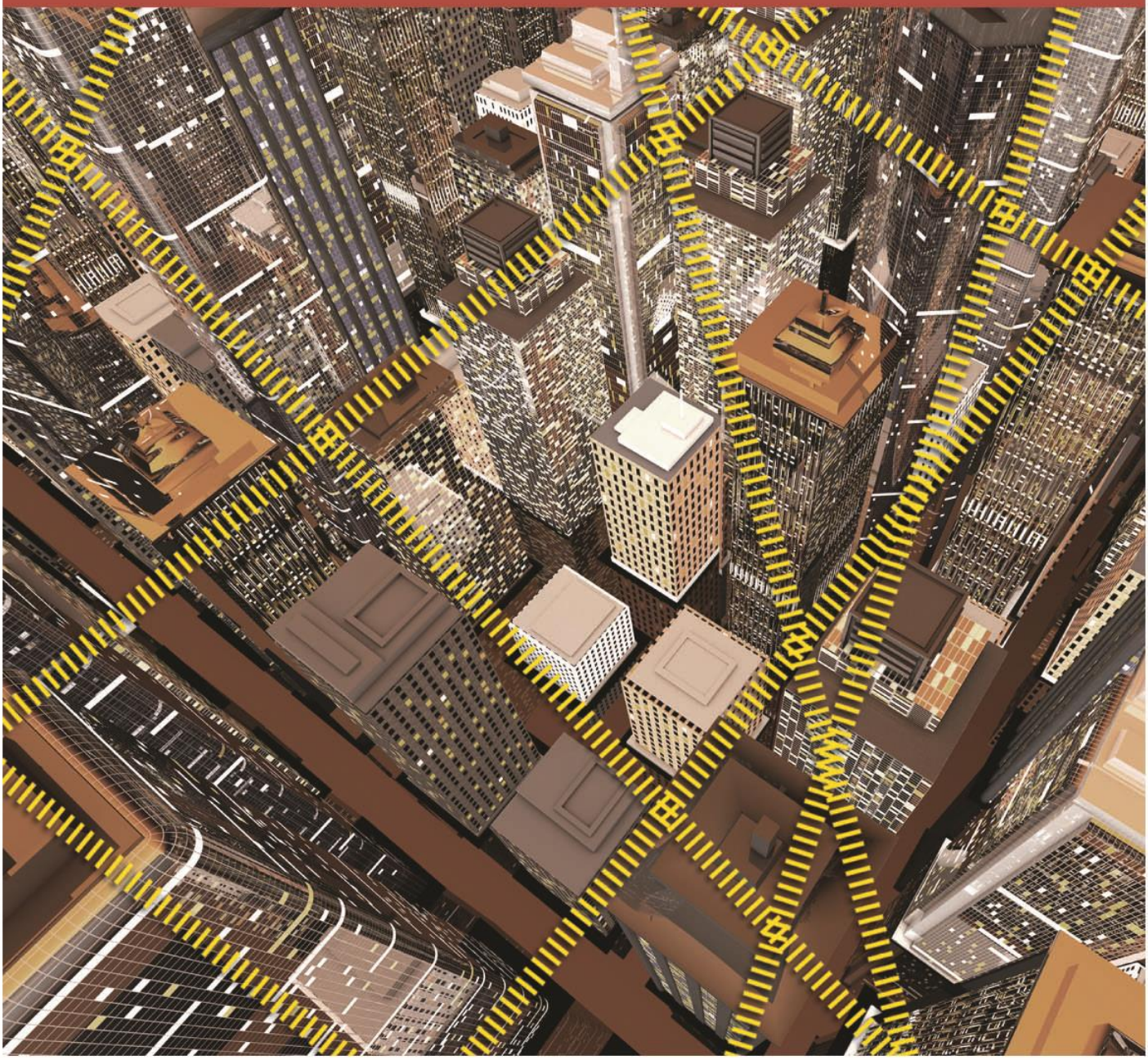
The Global AAM/UAM Market Map

AAM regulations, standards, CONOPS and roadmaps for passenger-carrying operations

Sample pages



AAM regulations, standards, CONOPS and roadmaps for passenger-carrying operations

*Thank you for downloading these sample pages of the **AAM regulations, standards, CONOPS and roadmaps for passenger-carrying operations** report. If you have any queries, please get in touch with us – contact details are below.*

AAM regulations, standards, CONOPS and roadmaps for passenger-carrying operations is written by Philip Butterworth-Hayes and published by Unmanned Publications Ltd, located at 61 Davigdor Road, Hove BN31RA, UK.

Customised updates are available by contacting the publisher.

Telephone +44 1273 724 238.

Email: philip@unmannedairspace.info

Contents

Introduction

How this guide works

This guide has been developed to bringing together in one document the work that has been done by regulators, standards bodies, industries and advanced air mobility eco-system developers to develop rules and guidelines for the safe development of electric vertical take off and landing (eVTOL) aircraft operations.

The documents are classified into the following sectors:

1. AAM Policy, CONOPS and roadmaps
2. AI, autonomy
3. Aircraft operator
4. Airspace management
5. eVTOLs and other AAM aircraft, including propulsion systems
6. Maintenance
7. Non-aviation stakeholders
8. Training for pilots, ground operations and MRO personnel
9. Vertiports and infrastructure, including charging

What is advanced air mobility (AAM)?

Advanced Air Mobility (AAM) is a new aerospace industry sector that uses advanced aircraft to transport people and cargo. AAM aircraft are often highly automated and electrically powered and can take off and land vertically. What does AAM include?

- Aircraft: AAM aircraft include electric aircraft, electric vertical takeoff and landing (eVTOL) aircraft, and air taxis
- Infrastructure: AAM infrastructure includes airports, heliports, vertiports, and vertistops, UAS traffic management, charging, security.
- Operations: AAM operations include urban air mobility (UAM), regional air mobility (RAM), cargo delivery, public services, and private vehicle travel.

How AAM is regulated around the world

For regulators around the world advanced air mobility provides a huge regulatory challenge – effectively the development of an entirely new aviation ecosystems with complex relationships to existing regulatory frameworks and with the addition of new elements such as the role of non-aviation stakeholders and developing technologies such as autonomous flight, digital airspace management and artificial intelligence.

Australasia

Australia – national

AAM Policy, CONOPS and roadmaps

Date	11 December 2024
Title	Regulatory roadmap update for Advanced Air Mobility in Australia
Description	According to CASA In the Immediate term (2024 to 2026) "we expect the volume of RPAS flights to increase due to the rise in goods delivery services," says CASA." Advances in technology will make RPAS more efficient, affordable, and capable of flying longer distances. This is likely to boost the use of larger RPAS in the commercial sector. Meanwhile, we expect the use of RPAS and model aircraft for sport, recreation, and education to remain strong. There will be greater demand for approvals of commercial operations beyond the standard operating conditions, and advanced operations we have not assessed before. The focus will likely shift toward implementing systems and services to support more complex operations in shared airspace."…In the near term "2027 to 2029" In the following 3 years, we expect AAM operations to launch in Australia. This will introduce the first commercial applications, including passenger transport in urban areas.
Link	www.casa.gov.au/resources-and-education/publications-and-resources/corporate-publications/rpas-and-aam-strategic-regulatory-roadmap#Download

AAM Policy, CONOPS and roadmaps

Date	April 2024
Title	AAM: Industry vision and roadmap" published by the Australian Association for Uncrewed Systems (AAUS),
Description	There will be three waves of AAM development, according to AAUS. Wave one will see initial use cases will be those that can be directly accommodated within the existing air navigation system, requiring minimal regulatory change, and posing no, or minimal, impact on existing airspace use and communities. The second wave can be characterised as one of adaption and transition. A period defined by a series of small changes to the existing ecosystem that permit an incremental expansion in the scope of viable and supported AAM operations. Urban Public Transport Scheduled urban public transport operations will begin. They are not expected to be cost-competitive with existing transport systems, but rather complement existing networks with new routes or a higher performance service (e.g., faster, service dependability, etc.). The third wave will see significant expansion in the coverage and capacity of scheduled passenger transport services across a growing network of urban and peri-urban vertiports.
Link	aaus.org.au

Vertiports and infrastructure, including charging

Date	June 2025
Title	Civil Aviation Safety Authority's (CASA) Guide to Vertiport Design proposals
Description	In June 2025 Australia's CASA) published a draft advisory circular (AC) on guidelines for vertical flight aircraft facilities at aerodromes designed for aeroplanes. "The purpose of this AC is to provide guidance to aerodrome and aircraft operators in the planning, design, and operation of both helicopter and vertical take-off and landing (VTOL) capable aircraft (VCA) facilities on an aerodrome that may have only been designed for fixed-wing aeroplanes," said CASA in a press release. It complements current guidance in AC 139.R-01 and AC 139.V-01 and work is underway to incorporate the applicable elements this AC in the Part 139 Manual of Standards. Draft AC 139.10 provides guidance on: • defining the intended vertical flight operations for an aerodrome • aerodrome specific downwash and outwash hazards • arrival and departure procedures • physical characteristics of vertical flight facilities • vertical flight aircraft versus taxiways designed for aeroplanes • obstacle limitation surfaces for vertical flight operations • visual aids for vertical flight aircraft – markings, lighting etc. • published information for vertical flight facilities.
Link	www.casa.gov.au/about-us/news-media-releases-and-speeches/guidelines-vertical-flight-aircraft-facilities

Vertiports and infrastructure, including charging

Date	May 2024
Title	Civil Aviation Safety Authority's (CASA) Guide to Vertiport Design
Description	The guide provides explanations and examples to complement CASA's advisory circular AC 139.V-01 which is largely based on experience with helicopter operations
Link	www.casa.gov.au/sites/default/files/2024-05/guide-to-vertiport-design.pdf

Australia – cities and regions

Australian Capital Territory

AAM Policy, CONOPS and roadmaps

Date	November 2020
Title	National aviation emerging technologies policy
Description	The Government of the Australian Capital Territory has published its National Emerging Aviation Technologies Policy covering drone and eVTOL industries.
Link	www.infrastructure.gov.au/sites/default/files/migrated/aviation/technology/files/submission-59-act-government.pdf

New South Wales

AAM Policy, CONOPS and roadmaps

Date	December 2022
Title	Electric Aviation How new technology could reshape regional NSW
Description	"Our vision is to ensure this new technology is fully integrated into a multi-modal network that benefits passengers….New and emerging electric aviation has the potential to reshape how people and goods travel in regional NSW" reads the statement which continues: "Emergency medical supplies, urgent freight and even passengers could soon be transported by state-of-the-art electric aircraft. Electric planes and drones could make transport cheaper, cleaner and more convenient than ever before. They could open new routes for passengers, connect communities and increase freight efficiency." The statement elaborates further saying "The electric aviation sector must grow in a manner that is safe, secure and considerate of the environment. It should enable economic activity, create new job opportunities and strengthen existing communities."
Link	www.nsw.gov.au/departments-and-agencies/transport-for-nsw/transport-strategies-and-plans

South East Queensland

AAM Policy, CONOPS and roadmaps

Date	6 February 2023
Title	Advanced Air Mobility Vision
Description	This technology will have an important role to play in an integrated regional transport network, complementing other services like rail and metro. It also presents an opportunity to unlock the South East's tourism market by providing new connections between our coast, island and rural destinations. The Paper also outlines how AAM will become an integrated part of SEQ's transportation network as the region looks to address issues of high growth including congestion, environmental sustainability and growing demand for affordable and accessible flight.
Link	wisk.aero/news/press-release/advanced-air-mobility-presents-opportunity-to-bring-economic-social-and-environmental-benefits-to-south-east-queensland

Victoria

AAM Policy, CONOPS and roadmaps

Date	19 September 2024
Title	Advanced Air Mobility (AAM) Action Plan
Description	This Action Plan sets out timing and the range of activities that the Victorian Government proposes to undertake to enable the transition to AAM and other zero-emission aviation technologies that promise significant economic, environmental, industrial and societal benefits.
Link	www.invest.vic.gov.au/__data/assets/pdf_file/0010/798544/14090-IV-Advanced-Air-Mobility-Action-Plan_V5-FA-WEB.pdf

USA – Cities and regions

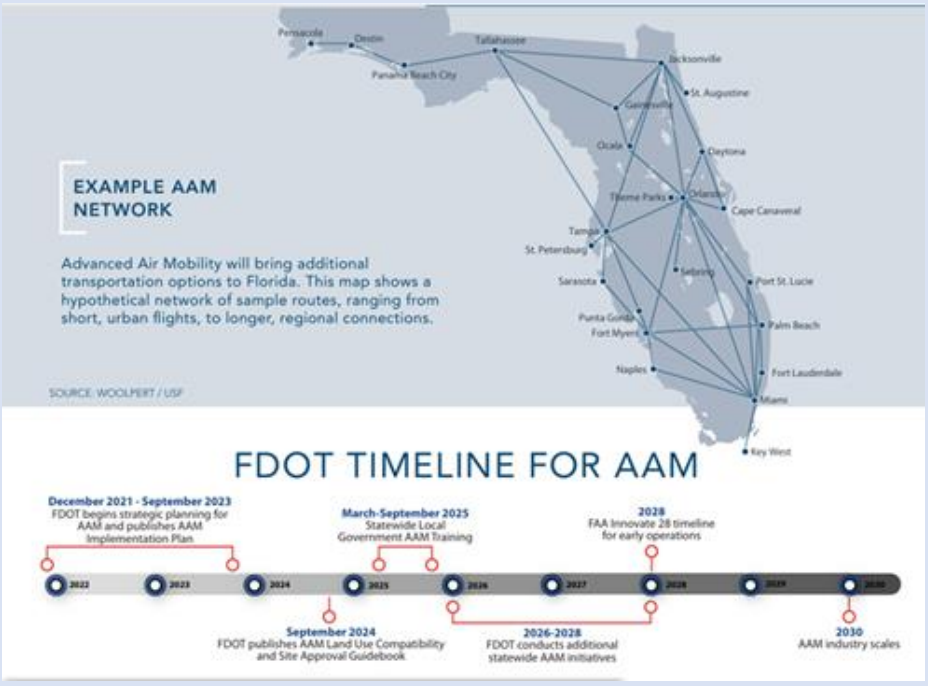
Choctaw Nation of Oklahoma

AAM Policy, CONOPS and roadmaps

Date	April 2023
Title	Advanced Technology Initiative
Description	In April 2023 the Advanced Technology Initiatives department announced it was seeking current information about AAM vertiport development. The department has issued a Request for Information (RFI) seeking relevant information from industry and academia. The Advanced Technology Initiatives (ATI) department seeks to enable economic growth and revenue diversification for the Nation of Oklahoma through combined efforts with multiple federal agencies and other key stakeholders by fostering an environment and ecosystem for the development of advanced aviation and aerospace technology industries. Since 2020 the CNO's ATI department has been a member of the FAA's BEYOND drone programme and the Unmanned Aircraft System (UAS) Integration Pilot Program (IPP). In July 2020, the CNO and Bell Textron established an agreement for Bell to begin testing some of Bell's mobility systems, like the Bell Autonomous Pod Transport and the Bell Nexus on the CNO test site location in rural southeastern Oklahoma.
Link	cnoaa.com

Florida

AAM Policy, CONOPS and roadmaps

Date	May 2025
Title	AAM Roadmap and Masterplan
Description	In May 2025 Senate Bill 1662, Florida's advanced air mobility implementation strategy, passed the Florida Legislature. Among other transport related issues, the bill: "defines key AAM terms in Florida Statutes, designates an AAM expert within the Florida Department of Transportation (FDOT) to assist local governments in their planning efforts, incorporates AAM and vertiports into the statewide aviation system plan, streamlines vertiport approvals, prioritizes grants for emerging technologies and aviation workforce training programs at airports and supports aviation workforce development and transportation-related research and development efforts," said the Eve Air Mobility post.  The FDOT has developed an AAM roadmap and masterplan. The roadmap identifies a potential statewide AAM network connecting the following cities. According to an FDOT AAM factsheet: "Early operations will take place primarily at existing airports and heliports. As the industry scales, a new sub-category of heliports, vertiports, will also support eVTOL operations. Vertiports will range from single landing pads with limited infrastructure to larger facilities with multiple landing pads, aircraft parking stands, and a terminal building. Most vertiports will also have aircraft charging stations, and communications and weather infrastructure."

	In April 2024 the FDOT brought together the newly-created Advanced Air Mobility Advisory Committee comprised of key industry partners and public and private sector stakeholders to discuss the integration of Advanced Air Mobility into Florida's transport network and perform the first of three tabletop exercises. FDOT partnered with the Hillsborough County Aviation Authority to host the meetings and tabletop exercise at Tampa International Airport, said the press statement. "These tabletop exercises will include local government officials, stakeholders, and industry community leaders, to further identify needs, discuss challenges, streamline processes, and develop necessary infrastructure to begin AAM services in the Sunshine State. These discussions include the types of AAM operations, how AAM differs from traditional aviation, necessary landing infrastructure, and how local officials and community leaders can best plan for these in their communities.
Link	fdot.gov/aviation/advanced-air-mobility

Georgia

AAM Policy, CONOPS and roadmaps

Date	9 May 2024
Title	Blueprint for AAM
Description	The US state of Georgia has published its Blueprint for AAM, which provides "actionable initiatives that can be used to integrate AAM into Georgia's transportation system. It is anticipated that this roadmap will outline a clear path and position the state toward achieving its AAM goals." There are three main components to this blueprint: a review of legislation from other states; a draft of the relevant statutory and administrative language regulating airports in Georgia; an outline of four strategic goals to advance AAM in Georgia, along with specific actions to accomplish those goals.
Link	www.dot.ga.gov/GDOT/Pages/AAM.aspx#:~:text=Georgia%20DOT%20AAM%20Blueprint&text=Recognizing%20this%2C%20GDOT%20is%20commissioning,Airport%20Charging%20Capabilities%20and%20Needs

Hawai'i

AAM Policy, CONOPS and roadmaps

Date	January 2024
Title	The Hawai'i Seaglider Initiative (HSI)
Description	Launched in January 2024 with a broad coalition committed to delivering affordable and accessible transportation option to Hawai'i communities. Seagliders are all-electric, zero-emission vessels that would operate exclusively over water at speeds up to 180mph, drastically reducing the time and cost of transporting people and freight between coastal communities. Seagliders operate by floating on a hull before transitioning to wave-tolerant underwater hydrofoils and ultimately taking flight at ultra-low altitudes, 30 to 60 feet above the water's surface, according to an HSI press release At launch, HSI members comprise more than a dozen corporate and community organizations, including: AES Hawai'i, Alaska Airlines, CNHA, Hawai'i Agricultural Foundation, Hawaiian Airlines, Hawaii Building & Constructions Trades Council, Hawai'i Lodging and Tourism Association, IBEW Local 1186, Japan Airlines, Makaha Cultural Learning Center, Maui Hotel & Lodging Association, Mokulele Airlines, Moloka'i Chamber of Commerce, Pacific Current, Polynesian Adventure, Pulama Lana'i, REGENT Craft, Retail Merchants of Hawai'i, United Airlines, and Young Brothers. HSI has also signed a memorandum of understanding with the Hawai'i Department of Transportation (HDOT). A route feasibility study estimates a one-way seaglider ticket from O'ahu to Maui or O'ahu to Kaua'i could cost USD30 – and lower costs for transporting essential goods. Seagliders can also be outfitted to transport cargo, including food and other essential goods between islands. Bringing down transportation and supply chain costs will help bring down the price of goods, increasing the purchasing power of Hawai'i residents.
Link	www.hawaiiseaglider.org www.linkedin.com/in/mrinfrastructure www.hawaiiseaglider.org www.businesswire.com/news/home/20240111096355/en/Hawai%CA%BBi-Seaglider-Initiative-Launches-with-Airlines-and-Other-Local-Partners-to-Provide-Affordable-Accessible-Kama%CA%BB%C4%81ina-Transportation