



CALL TO ACTION

Paving the Way for the Future of Aviation with Advanced Air Mobility

What is advanced air mobility?

Advanced air mobility (AAM) represents the next frontier in aviation. Driven by innovative aircraft and propulsion technologies, digitization, increased automation, AAM is bringing about a new scale of operations, and introducing new services and modes of mobility. AAM builds on the recent experience from unmanned aircraft systems and explores opportunities for new traffic management solutions. As involved stakeholders explore these new horizons, AAM's potential role in enriching the aviation ecosystem with new technological developments and processes is emerging. This expansion was highlighted during the 41st Session of the International Civil Aviation Organization (ICAO) Assembly, held on 27 September to 7 October 2022, emphasizing ICAO's leadership in achieving a globally harmonized and interoperable framework for AAM.

What are the expected benefits of AAM?

AAM is anticipated to bring several critical benefits, in support of the United Nations Sustainable Development Goals (SDGs):

- **Economic growth:** AAM has the power to create new economic paradigms, stimulate job creation and contribute to economic growth through new industry and technology developments.
- **Sustainable propulsion:** by utilizing clean energy sources and leveraging new propulsion capabilities, AAM has the potential to offer environmentally efficient services and even reduce the environmental impact of aviation in line with global sustainability goals, at the same time supporting the development of new propulsion solutions for traditional aviation.
- **Enhanced connectivity:** by improving both domestic and international transport links, AAM brings communities, businesses and services closer together, fostering improved quality of life and complementing existing means of transportation.
- **Equity and inclusion:** AAM offers the potential to increase accessibility to mobility and making new services accessible to diverse populations and remote regions, fostering inclusive transport and new services.
- **Saving lives and delivering critical support:** AAM has a proven track record in supporting life-saving activities, from medical transport of patients, medical supplies and vaccine delivery to support of first responders in search and rescue, firefighting, flood control and other missions.



What are the challenges?

For the world to start benefiting from scalable AAM operations, stakeholders need to address several challenges:

- **Interoperability and regulation:** The rapid evolution of AAM technologies necessitates coordinated development of international standards, as a tool for regulatory harmonization, ensuring interoperability, efficiency and fostering scalability.
- **Airspace integration:** Seamless integration of diverse aircraft, both conventional and novel, is essential to ensure safety and efficiency for existing and new airspace users.
- **Multilevel coordination:** Effective AAM deployment requires collaboration across various governmental levels—national, regional and local.
- **Information sharing:** Enhanced communication among all stakeholders, including citizens, is critical to fostering transparency, sustainability and innovation, and to support the emergence of novel solutions.
- **Regulation adequacy:** Developing regulations that support AAM growth while ensuring safety, security, efficiency, environmental protection and accessibility, will facilitate the realization of AAM benefits.
- **Supporting early movers:** the crucial role of innovators and early movers by setting the pace and the scene for the complex AAM capabilities and operations requires them to be supported in early stages of AAM development.

Calling all Stakeholders to take action

The first ICAO Advanced Air Mobility Symposium (AAM 2024), to be held on 9-12 September 2024 at ICAO Headquarters, Montréal, Canada, marks a significant international milestone in the development of the AAM ecosystem. It brings together a wide array of stakeholders, including ICAO Member States and other local governmental entities (regional, municipal), intergovernmental stakeholders (UN entities), academia and research institutions, aircraft manufacturers, and providers of infrastructure, including airspace and physical infrastructure, as well as associated services, such as air traffic management and supporting capabilities. Stakeholders are urged to collaborate on AAM development in the following areas:

- **Understanding AAM:** Engage in comprehensive data collection, research, and solution development to fully grasp and balance AAM's potential and challenges and identify the role of each type of stakeholder involved.
- **Building AAM infrastructure:** Collaboratively work on developing affordable and scalable physical and digital infrastructure to support AAM systems worldwide and explore utilization and enhancement of the current infrastructure.
- **Supporting, governing and regulating AAM:** Cooperate in the establishment of adaptive, flexible and harmonized regulatory frameworks embracing innovation and compatible with current aviation frameworks, including through collaboration among international bodies, national governments, and other relevant entities.

The path forward

AAM offers numerous opportunities. By embracing innovation and working together, we can create a new era in aviation that is inclusive of a broad range of users and operations. To achieve this vision, high levels of global cooperation should be enabled by strategic planning, while remaining adaptable to changes. In moving AAM from a concept to a tangible reality, we seek to shape a future where aviation is safe and secure, sustainable, environmentally friendly, accessible to all, and seamlessly integrated into our communities.

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