61ST CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGION

Kuala Lumpur, Malaysia
7 – 11 September 2026

AGENDA ITEM 3: AVIATION SAFETY

THE EASA REGULATORY FRAMEWORK FOR THE SAFE AND SUSTAINABLE DEVELOPMENT OF INNOVATIVE AIR MOBILITY

Presented by the European Union Aviation Safety Agency (EASA)

SUMMARY

This Discussion Paper presents EASA's regulatory framework for Innovative Air Mobility as a practical reference for Asia-Pacific CAAs. It covers drones, VTOL-capable aircraft, U-space, vertiports, environmental protection and public acceptance, and highlights how an operation-centred, proportionate and risk-based framework can support safe implementation and regulatory cooperation.

THE EASA REGULATORY FRAMEWORK FOR THE SAFE AND SUSTAINABLE DEVELOPMENT OF INNOVATIVE AIR MOBILITY

1. INTRODUCTION

1.1 Innovative Air Mobility is moving from concept to early deployment. Drones already support infrastructure inspection, emergency response, mapping, logistics and medical deliveries. At the same time, electric and hybrid aircraft, including VTOL-capable aircraft, are being developed for future cargo and passenger services.

1.2 For Asia-Pacific States, these developments may support practical public-interest use cases: medical logistics, island and remote-area connectivity, disaster response, infrastructure monitoring, port and offshore operations, and, where the conditions are right, new urban transport services.

1.3 The benefits will only be realised if the regulatory foundations are credible. Operations over cities, transport corridors, ports, islands or densely populated areas raise questions that go beyond the aircraft itself, including ground risk, airspace integration, emergency procedures, vertiports, noise, security, data and public confidence.

1.4 The question for regulators is therefore not whether innovation should be enabled, but how it can be enabled safely and in a way that can grow from trials to routine services. EASA's regulatory framework is offered as a practical reference point for that discussion, not as a one-size-fits-all model. It supports the ICAO Advanced Air Mobility approach, including the development and adaptation of the global regulatory framework.

2. DISCUSSION

2.1 EASA has developed the European regulatory framework for Innovative Aerial Services around a simple principle: the rules should reflect the operation and its associated risks. This makes the framework proportionate for low-risk activities while providing a stronger safety foundation for complex operations over people, in controlled airspace, or in other demanding environments.

2.2 Innovative Aerial Services is a broader concept encompassing the set of operations and services that are of benefit to citizens and the aviation market and are enabled by new airborne technologies. Innovative Air Mobility covers the safe, secure, and sustainable mobility of passengers and cargo enabled by new-generation technologies and integrated into a wider transport system, while additional aerial operations can be enabled through special payloads or sensors (inspection, mapping, surveillance, telecommunications).

2.3 For unmanned aircraft systems, Regulations (EU) 2019/945 and 2019/947 established the open, specific and certified categories. The open category addresses lower-risk operations under defined limitations. The specific category uses an operational risk assessment or predefined approaches. The certified category applies where the risk profile requires aircraft and operator certification and remote pilot licensing.

2.4 This tiered structure is useful for authorities because it creates a path from simple operations to more complex use cases without treating every drone activity as if it had the same risk. It also gives operators a clearer route to authorisation and gives authorities a common basis for oversight. In 2025, EASA updated the AMC and GM to Regulation (EU) 2019/947 to introduce the SORA 2.5 methodology developed by JARUS, supporting more harmonised and clearer authorisation processes for specific-category operations.

2.5 The framework has also been extended to certified unmanned aircraft systems and VTOL-capable aircraft. Regulations (EU) 2024/1107, 2024/1108, 2024/1109 and 2024/1110 address initial and continuing airworthiness for certified unmanned aircraft systems. Commission Implementing Regulation (EU) 2024/1111 establishes requirements for the operation of manned aircraft with vertical

take-off and landing capability.

2.6 In 2025, EASA published further Acceptable Means of Compliance and Guidance Material for manned VTOL-capable aircraft, including material on air operations, flight crew licensing and rules of the air. These materials help translate high-level rules into implementable requirements for operators, manufacturers and competent authorities.

2.7 For Asia-Pacific CAAs, the value of this approach is practical. It connects the elements that determine safety in real operations: aircraft design, operator responsibilities, crew competence, flight preparation, landing and diversion planning, continued airworthiness, occurrence reporting and oversight. This is especially relevant before services are scaled up or before local infrastructure and operating models become difficult to change.

2.8 Digital airspace services are another core building block. The U-space regulatory framework enables the safe, secure, and highly automated integration of UAS traffic into the aviation system through end-to-end digital services proportionate to operational risk. Beyond supporting the coexistence and separation of manned and unmanned aviation, U-space provides the foundation for the scalable deployment of Innovative Air Services, underpinned by a supervised chain of trust, enhanced cybersecurity, and improved support for authorities in addressing non-cooperative UAS activities and broader hybrid threats.

2.9 Infrastructure is equally important. EASA's prototype technical design specifications for vertiports provide guidance for the design of VFR vertiports for manned VTOL-capable aircraft in the enhanced category. The guidance addresses physical characteristics, obstacle environment, visual aids, lighting and markings. This can help CAAs work with cities, transport ministries, airport operators, emergency services and planning authorities from the start.

2.10 The Asia-Pacific region also includes many operating environments where Innovative Air Mobility may develop outside the classic 'air taxi' narrative: island routes, coastal services, offshore platforms, medical transport, logistics corridors and post-disaster access. A total-system framework helps authorities test these use cases without losing sight of route design, communications, contingency management, landing site availability and energy or fuel planning.

2.11 Environmental protection and public confidence should be treated as part of implementation, not as a later communications exercise. EASA has published guidelines for measuring noise from unmanned aircraft systems below 600 kg and Environmental Protection Technical Specifications for VTOL-capable aircraft. EASA is also progressing work on noise requirements for VTOL-capable aircraft. This supports a more transparent discussion with communities and local authorities.

2.12 The EASA Innovative Air Mobility Hub complements the regulatory material by bringing together citizens, cities, regions, national authorities, EU institutions, operators and manufacturers. It provides information on rules, guidance, data, environmental considerations and case studies. For States preparing pilot projects or regulatory sandboxes, this type of platform helps turn lessons learned into shared regulatory practice.

2.13 EASA's framework is not presented as a requirement for other regions to copy. Its immediate value is as a tested set of building blocks that can help Asia-Pacific authorities benchmark their own arrangements, identify gaps, structure pilot projects, and develop interoperable approaches where cross-border operations, international operators or common manufacturers are involved.

2.14 Possible cooperation could include regulatory exchanges, workshops on the open, specific and certified categories, sharing experiences and challenges in the harmonised and consistent application of the SORA methodology, implementation of U-space airspace, vertiport planning, environmental and noise assessment, public acceptance, and the design of pilot projects or regulatory sandboxes. Such cooperation would allow States to adapt relevant lessons to their own legal systems, geography, traffic levels and market maturity.

2.15 Key links and resources:

Resource (hyperlinked)
European Commission - Innovative air mobility and aerial drone operations
EASA - Drones & Air Mobility
EASA - Innovative Air Mobility Hub
EASA - Easy Access Rules for Unmanned Aircraft Systems
EASA - U-space
Commission Implementing Regulation (EU) 2024/1111 - VTOL operations
EASA ED Decision 2025/010/R - AMC & GM to Regulation (EU) No 965/2012
EASA ED Decision 2025/011/R - AMC & GM to Regulation (EU) No 1178/2011
EASA ED Decision 2025/012/R - AMC & GM to Regulation (EU) No 923/2012
EASA ED Decision 2025/018/R - SORA 2.5 package
EASA - Special Condition for VTOL and Means of Compliance
EASA - Prototype Technical Design Specifications for Vertiports
EASA - Drones and VTOL-capable aircraft environmental information

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

a) note the EASA regulatory framework for the safe and sustainable development of Innovative Air Mobility, including the related work on unmanned aircraft systems, VTOL-capable aircraft, U-space, vertiports, environmental protection and societal acceptance;

b) consider the framework as a practical reference for States developing or refining regulatory approaches for drone services and future VTOL-capable operations, while adapting any lessons to national legal systems, operational environments and market maturity; and

c) discuss possible areas of cooperation with EASA and among Asia-Pacific States, including exchange of regulatory experience, SORA application, U-space airspace implementation, vertiport planning, environmental and noise considerations, public acceptance, pilot projects and regulatory sandboxes.

— END —