



ICAO

International Civil Aviation Organization

The Fourth Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/4)

Bangkok, Thailand, 18 – 21 March 2025

Agenda Item 2: Review Outcomes of Related Meetings

UPDATE ON FREE ROUTE AIRSPACE (FRA) AND UNMANNED AIRCRAFT SYSTEM/ REMOTELY PILOTED AIRCRAFT SYSTEM (UAS/RPAS) IN ATM

(Presented by the Secretariat)

SUMMARY

This paper presents information on issues and initiatives of Free Route Airspace (FRA) Implementation Workshop and Unmanned Aircraft System/ Remotely Piloted Aircraft System (UAS/RPAS) Webinar in ATM in the Asia and Pacific Region.

1. INTRODUCTION

1.1 As part of its duties, the APAC Regional Sub-Office (RSO) in Beijing is tasked with aiding APAC states in enhancing airspace management to accommodate growing air traffic volumes while ensuring safety standards are upheld.

1.2 The RSO is to help facilitate advancing the implementation of FRA and managing the integration of UAS RPAS & AAM/UAM within the region. This involves close coordination with the Bangkok regional office and the Air Navigation Bureau at ICAO Headquarters. 2024, the RSO hosted a series of workshops and webinars aimed at facilitating these advancements.

2. DISCUSSION

The Free Route Airspace (FRA) Implementation Workshop in Asia-Pacific Region

2.1 The RSO held its second Free Route Airspace Implementation Workshop on November 13, 2024, attended by representatives from member states and international bodies both onsite and online. The workshop provided insights into FRA concepts, shared implementation best practices, and introduced tools to aid the transition. More details can be found on the event page: <https://www.icao.int/APAC/Meetings/Pages/2024-FRA-IMPLEMENTATION-WORKSHOP-2.aspx>.

2.2 It emphasized the importance of collaboration and aligning with global trends for more efficient and sustainable air traffic management. The event highlighted the region's dedication to sharing how to introduce and develop FRA into the airspace and creating a greener, more efficient future for aviation.

2.3 This workshop aimed to build a comprehensive understanding of FRA by discussing technical, regulatory, and operational aspects, encouraging active participation and collaboration, sharing challenges and best practices, and providing Member States with the knowledge and tools needed to transition to Free Route Airspace, aligning with global trends.

2.4 The Workshop's key takeaways are a real opportunity to gain valuable insights into FRA deployment and contribute to ATC training methods and contents, airspace design details and procedures, FRA operational challenges in Europe and the steps required to implement FRA.

The Second UAS RPAS Webinar in Asia-Pacific Region

2.5 The RSO organized its second UAS RPAS webinar on December 11-12, 2024, which centered on regulatory updates, efforts by nations to formulate AAM and UAM strategies, and effective drone management practices. Information about this event is available at: <https://www.icao.int/APAC/Meetings/Pages/2024-UAS-RPAS-Webinar-2.aspx>. The webinar aimed to promote knowledge exchange and discuss the integration of unmanned systems into the existing aviation infrastructure.

2.6 It focused on sharing updates on the regulatory framework for UAS and RPAS, along with national efforts to develop Advanced Air Mobility (AAM) and Urban Air Mobility (UAM) policies. This webinar aimed to convene representatives from government regulatory bodies, air navigation service providers, academic institutions, and industry operators, and to exchange best practices, learned lessons, and challenges encountered in the following areas:

- Update on the latest developments at ICAO in regard of the latest developments of the ICAO regulatory framework, particularly concerning UAS Beyond Visual Line of Sight (BVLOS) operations for regulators.
- Latest updates from States and international organizations on the development of national systems to enhance aviation safety and efficiency, including current ICAO regulations pertinent to UAS/RPAS, with a focus on strategies for the detection and mitigation of unauthorized drones around airports; recent advancements in technology for detecting illegal drones.
- Exchange of countermeasures and best practices for managing unlawful drone activities within the Asia-Pacific region; insights into the operational benefits and experiences from the field, etc.
- Interaction with all experts during the Q & A sessions after each presentation.

2.7 The session explored safety challenges, technical limitations, and advancements in UAS operations, emphasizing the harmonization of manned and unmanned aircraft. Specifically, the webinar addressed the integration of drones into existing aviation systems, highlighting advancements in anti-drone technology and effective drone management strategies. Discussions also covered the use of drones in flight inspections, offering valuable insights to enhance aviation safety and operational efficiency.

2.8 Significant advancements in FRA and UAS RPAS/AAM UAM have prompted the ICAO APAC RSO to recommend Member States' priorities and challenges for future focus. Please share your feedback through email (hykwon@icao.int) or verbally as necessary.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper
- b) Encourage Member States to engage and share their developmental needs and experiences; and
- c) Discuss pertinent issues to further improve regional airspace management and enhance safety protocols.

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