



## **FOURTEENTH AIR NAVIGATION CONFERENCE**

**Montréal, Canada, 26 August to 6 September 2024**

- Agenda Item 2 Timely and safe use of new technologies**  
**2.2: Addressing safety risks related to evolving aviation technologies**

### **VTOL PILOTS AND AIRCRAFT MAINTENANCE TECHNICIANS PERSONNEL LICENSING REQUIREMENTS DISCUSSIONS AND EVOLUTION**

(Presented by Brazil)

#### **EXECUTIVE SUMMARY**

This paper proposes initiating discussions within the Personnel Training and Licensing Panel (PTLP) regarding the establishment of a standardized framework for developing and/or enhancing personnel licensing requirements applicable to professionals engaged in vertical take-off and landing (VTOL) capable aircraft operations.

#### **1. INTRODUCTION**

1.1 New technologies arising from advancements in urban mobility are closely linked to and being implemented within national civil aviation systems.

1.2 These technologies are pushing the development of new operational scenarios, which highlight regulatory gaps that civil aviation authorities (CAA) need to address.

1.3 Each Member State is beginning to establish its own regulatory framework to meet this challenge, potentially leading to significant differences in personnel licensing processes. This situation poses a risk to the established technical alignment advocated by Annex 1 — *Personnel Licensing Standards and Recommended Practices (SARPs)*.

1.4 Discussions concerning personnel licensing Standards have not yet begun within the Advanced Air Mobility Study Group (AAM SG), and the ICAO Personnel Training and Licensing Panel (PTLP) is still awaiting input from the AAM SG.

1.5 Given this regulatory landscape, efforts must be made to maintain current levels of standardization and international confidence in each national personnel licensing system when issuing licenses and ratings to professionals operating in the VTOL aircraft environment.

## 2. DISCUSSION

2.1 Some manufacturers of VTOL-capable aircraft have initiated their aircraft certification processes. Moreover, all current business cases indicate that VTOL-capable aircraft operations will commence by 2026.

2.2 Given this outlook, certain CAAs are under pressure to establish a regulatory framework to encompass VTOL-capable aircraft operations within their airspace.

2.3 However, due to the high degree of innovation associated with each VTOL-capable aircraft, there is a significant risk of non-aligned regulatory solutions, particularly concerning the personnel licensing process, among Member States.

2.4 Nevertheless, as seen in the regulatory proposals published by the Federal Aviation Administration (FAA) ([Federal Register :: Integration of Powered-Lift: Pilot Certification and Operations; Miscellaneous Amendments Related to Rotorcraft and Airplanes](#)), European Union Aviation Safety Agency (EASA) ([ToR RMT.0731 Issue 2.pdf \(europa.eu\)](#)) and Brazil (<https://www.gov.br/anac/pt-br/acao-informacao/participacao-social/consultas-setoriais/consultas/2024/cs-03-2024/CS032024regulatoryproposal.pdf>), different solutions are being presented for discussion and refinement.

2.5 This diversity can jeopardize the current level of confidence in each Member State's licensing process, particularly concerning the new set of licences and ratings related to VTOL-capable aircraft operations.

2.6 Another collateral effect of lacking a standardized approach to the regulatory framework and process for personnel licensing in VTOL-capable aircraft is that integrated certification processes will not gain acceptance across Member States, thereby increasing costs and reducing effectiveness.

## 3. CONCLUSION

3.1 A harmonized regulatory framework is crucial to the international aviation system. Despite ongoing aircraft certification processes and expected operations to commence by 2026, ICAO has not yet initiated discussions on a personnel licensing framework and process for VTOL-capable aircraft.

3.2 Without specific SARPs in place, the current level of trust in personnel licensing processes among States could be compromised. Furthermore, the certification processes for VTOL-capable aircraft may be jeopardized, potentially impacting the proposed timelines for the commencement of VTOL-capable aircraft operations.

3.3 The Air Navigation Conference is invited to:

- a) note the information presented in this paper; and
- b) recommend to the Air Navigation Commission the establishment of a new Job Card for PTLP focusing on the development of new SARPs related to VTOL-capable aircraft.