

International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 - 8 May 2025)

Agenda Item 4.2: Outcomes of the RASG-MID Groups (ASRG, SEIG, ASPIG and AIIG)

AOC Certification: GCAA's Digital Leap Toward Regulatory Excellence

(Presented by United Arab Emirates)

SUMMARY

This paper presents the

This paper highlights the UAE GCAA's transformation of the Air Operator Certificate (AOC) issuance process through a distinctive, end-to-end automation framework. In support of the UAE's Zero Bureaucracy initiative and AMC-08, and aligned with ICAO's five-phase certification methodology, this initiative has introduced a digital system that has reduced the total process workload to just 20% of its original scale. While Artificial Intelligence (AI) is employed, it serves a facilitative role connecting systems, streamlining interdepartmental actions, and providing real-time updates rather than guiding the certification process itself.

Action by the meeting is at paragraph 4

REFERENCE

- ICAO Doc 8335
- GCAA AMC -08

1. INTRODUCTION

- 1.1 The UAE General Civil Aviation Authority (GCAA) has embraced the national Zero Bureaucracy vision by streamlining its regulatory systems through technology and automation.
- 1.2 The transformation initiative focuses on automating the AOC issuance process an overhaul designed to eliminate manual bottlenecks, standardize workflow, and enhance end-to-end visibility for both applicants and internal stakeholders.
- 1.3 AI is integrated primarily as an enabler that links internal GCAA systems, including departments such as Airworthiness, Flight Operations, Personnel Licensing, Foreign Operators Affairs, and Air Navigation Services. It also connects with administrative and support systems such as Finance and Document Review platforms like Q-Pulse, enhances workflow coordination, and facilitates status tracking. The process itself remains governed by structured rules and oversight principles set by GCAA.

2. DISCUSSION

2.1 Data Collection and Analysis: The Foundation of Transformation

- 2.1.1 Initial efforts focused on data mining and analytics to uncover inefficiencies in the traditional paper-based system, including:
 - Repetitive manual entries
 - Gaps in traceability
 - Departmental misalignments
- 2.1.2 These insights guided the development of an integrated digital platform that supports structured application flow and predictive monitoring.

Action: Institutionalize data review protocols to continuously optimize the automation cycle.

2.2 Automation-Driven Workflow Simplification

- 2.2.1 The reengineered process has removed redundant approval loops and paper-intensive steps, replacing them with automation-based checkpoints.
- 2.2.2 Key enhancements include:
 - Electronic submission and validation
 - Real-time feedback loops
 - API integration with external databases (e.g., licensing, trade, WPS)
- 2.2.3 AI plays a supporting role in linking datasets, triggering automated alerts, and facilitating interdepartmental collaboration—but does not influence regulatory decisions.

Action: Expand system integration with cross-government platforms to increase automation coverage.

2.3 Challenges in Digital Transformation

- 2.3.1 Key challenges encountered include:
 - Transitioning stakeholders from traditional to digital practices
 - Managing integration with legacy systems
 - User onboarding and acceptance
- 2.3.2 These were addressed through a structured change management program, inclusive of training, user testing, and live support.

Action: Develop an annual transformation readiness assessment to ensure continued user adaptation.

2.4 Efficiency Gains and Performance Tracking

- 2.4.1 The streamlined platform has yielded:
 - Up to 20% reduction in processing time
 - Improved audit trails and transparency
 - Enhanced coordination between applicants and GCAA teams
- 2.4.2 This modernization complies with AMC-08 Issue 08 and ICAO's structured certification standards.

Action: Launch a real-time monitoring dashboard for operational performance and applicant feedback.

3. CONCLUSION

- 3.1 The GCAA's automation initiative reflects a commitment to eliminating bureaucracy while enhancing efficiency, transparency, and service quality.
- 3.2 The unique automation framework, supported by AI for integration rather than decision-making, preserves regulatory control while enabling faster, coordinated operations.
- 3.3 This achievement underscores the UAE's leadership in aviation innovation and regulatory modernization.

4. ACTION BY THE MEETING

The meeting is invited to:

• Take note of the information paper content.