International Civil Aviation Organization

Twentieth Meeting of the ICAO Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/20)

Chitose, Japan, 9 – 13 June 2025

Agenda Item 4: AIS-AIM Updates

UPGRADING MALAYSIAN AERONAUTICAL INFORMATION MANAGEMENT SYSTEM (MyAIMS)

(Presented by Malaysia)

SUMMARY

This paper presents on the proposes a modernization plan for Malaysia's Aeronautical Information Management System (MyAIMS) to enhance efficiency, compliance with ICAO standards (Annex 15, AIM, SWIM), and cybersecurity while supporting future aviation technologies.

1. INTRODUCTION

1.1 The Malaysian Aeronautical Information Management System (MyAIMS) is a critical component of Malaysia's aviation infrastructure, ensuring the accurate and timely dissemination of aeronautical information to pilots, air traffic controllers, and other stakeholders. With the rapid advancement in aviation technology and the increasing demand for digital transformation, there is a pressing need to upgrade MyAIMS to align with global standards such as ICAO's Aeronautical Information Management (AIM) framework and System Wide Information Management (SWIM).

2. DISCUSSION

Current System Assessment

2.1 Existing MyAIMS Capabilities Provides aeronautical data (NOTAMs, AIP, charts) supports traditional AIS (Aeronautical Information Services) functions limited integration with modern ATM (Air Traffic Management) systems.

Proposed Upgrades

2.2 The aviation sector is undergoing significant digital transformation through key technological advancements. The transition to AIXM 5.1+ standardizes digital aeronautical data exchange, enabling seamless integration with regional ANSPs, while SWIM implementation further enhances interoperability by enabling real-time data sharing among aviation stakeholders—both critical steps toward future ATM modernization.

2.3 To safeguard these digital systems, robust cybersecurity measures, including ICAO guidelines and blockchain technology, ensure secure aeronautical data transactions. Complementing these efforts, the migration from legacy systems to cloud-based infrastructure delivers scalability, high availability, and disaster recovery capabilities, creating a more resilient and efficient aviation ecosystem.

Expected Benefits

a) Improved Data Accuracy & Timeliness– Reduced human errors through automation.

b) Regulatory Compliance – Alignment with ICAO Annex 15 and global AIM standards.

c) Cost Efficiency – Lower operational costs via reduced manual processes.

d) Enhanced Collaboration – Better coordination with regional aviation authorities.

Challenges & Mitigation Strategies

Challenge	Mitigation Strategy
High implementation costs	Secure multi-year government funding through annual budget allocations
Resistance to change	Conduct comprehensive staff training programs, change management workshops, and appoint internal "champions" to drive adoption
Cybersecurity threats	Implement regular security audits, penetration testing, and strict compliance with ICAO Annex 17
System downtime during transition	Parallel run & robust testing before full deployment

Implementation Roadmap

Phase	Timeline	Key Activities
Phase 1 Planning & Feasibility Study	Q3-Q4 2024	• Conduct RFI (Request for Information) and market analysis • Secure budget approval from the government
Phase 2: System Design & Procurement	Q3 2025 – Q1 2026	• Finalize vendor selection through RFP process • Design AIXM 5.1+/SWIM architecture (interoperability, data flows) • Establish compliance with ICAO Annex 15 and cybersecurity frameworks
Phase 3: Development & Testing	Q2-Q4 2026	• Vendor delivers and configures system components • Conduct end-to-end integration testing
Phase 4: Deployment & Training	Q1-Q2 2027	• Gradual rollout (pilot testing with select units) • Train AIS personnel on new workflows and tools • Monitor system stability and user feedback
Phase 5: Full Operational Capability	Q3 2027	• Complete migration from legacy systems • Final performance evaluation against benchmarks • Handover to maintenance team

Conclusion & Recommendations

2.4 The upgrade of MyAIMS is essential to ensure Malaysia's aviation sector remains competitive, secure, and compliant with global standards. Key recommendations include:

a) Secure funding through government.

b) Adopt a phased implementation approach to minimize disruptions.

c) Invest in continuous training for AIS/ATM personnel.

d) Establish a regulatory framework for AIM modernization.

Next Steps:

a) A dedicated task force will oversee the MyAIMS upgrade, handling vendor selection and system procurement.

b) The new system will undergo rigorous testing before deployment while maintaining parallel operation with the legacy system.

c) Finally, a full transition will be executed with contingency support to ensure uninterrupted operations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and

b) discuss any relevant matters as appropriate.

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