



**ASSEMBLY — 38TH SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 36: Air Navigation — Emerging Issues**

**AIM IMPLEMENTATION IN IRAN  
(IRAN AIM DIGITALIZATION)**

(Presented by Iran (Islamic Republic of))

**EXECUTIVE SUMMARY**

This working paper overviews the progress and status of Iran AIM within the framework of ICAO roadmap for the transition from AIS to AIM, focusing on the Digitalization step of phase-2 of the roadmap, taken by Iran AIS Department.

<i>Strategic Objectives:</i>	This working paper relates to the Safety Strategic Objective.
<i>Financial implications:</i>	Voluntary contributions
<i>References:</i>	ICAO Roadmap for transition from AIS to AIM.

**1. INTRODUCTION**

1.1 ICAO defines AIM as “The dynamic, integrated management of aeronautical information through the provision and exchange of quality-assured digital aeronautical data in collaboration with all parties.” Therefore, to achieve the broad concept of AIM, a puzzle of Digitalization, Quality Assurance, Timeliness, Data Security, Standardization, Interoperability, Seamlessness, etc. should be perfectly matched.

1.2 ICAO Roadmap for the transition from AIS to AIM is to complete in three phases that include 21 steps.

- a) Phase-1: Consolidation to the ICAO AIS standards;
- b) Phase-2: Migration to digital databases; and
- c) Phase-3: Managing information for the ATM process model.

## 2. DISCUSSION

2.1 Iran AIS in line with the ICAO roadmap for transition from AIS to AIM and according to the MIDANPIRG Conclusions has developed Iran AIM National Plan in September 2009, to facilitate the transition.

2.2 **Phase-1:** Consolidation (2009-2013): the implementation of all AIP, AIRAC and NOTAM standards, monitoring of annex differences with the national standards, rules and procedures and filed differences, implementation of AIS QMS (ISO 9001:2008) since 2009 and full implementation of WGS-84 in Iran en route phase. These steps have completed, Phase-1.

2.3 **Phase-2:** Going digital (2010-2016): migration to AIS digital databases is a challenging and complex task in the way to transit successfully to AIM. e-TOD, aerodrome mapping, data integrity and quality monitoring etc. are important steps in the completion of Phase-2. Iran AIS projects that have been completed within the framework of Phase-2 are as follows:

- a) provision of Iran AIP on CD-ROM (since 2005);
- b) provision of all Iran Integrated Aeronautical Information Package on Web: [www.airport.ir/ais](http://www.airport.ir/ais) (since 2008);
- c) initiating a comprehensive AIM Automation Project including the following functions:
  - designing AICM (Aeronautical Information Conceptual Model) for Iran AIM;
  - designing conceptual model for an AIS/MET/FPL database;
  - online briefing;
  - integrated AIS functions/databases; and
  - service-oriented concept.
- d) implementation of e-TOD Area-1 for the whole Tehran FIR (2012-2013);
- e) implementation of e-TOD Area-4 for Tehran/Imam Khomani International Airport which is CAT II OPS AD;
- f) provision of Digital World Aeronautical Chart (1:1000,000); and
- g) provision of Digital ENR Chart.

2.4 Iran AIS current project within Phase-2 (digitalization) is the integration of e-TOD, WAC and ENR Chart databases on a single GIS platform in order to facilitate management of AIM digital databases to provide the required information services.

## 2.5 **Iran AIM organizational chart**

2.5.1 As stated by the ICAO *Aeronautical Information Services Manual* (Doc 8126): An AIS should be established as a separate entity within the civil aviation administration and it should be responsible for the head of civil aviation administration at the same level compared to other air navigation services entities such as the Aerodrome (AGA) Division, Communications (COM) Division or Air Traffic Services (ATS) Division. It should not be established as a part of any of these divisions. In addition, AIS officers should be remunerated at least at the same level as the personnel in the AGA, COM and ATS divisions.(Doc 8126, paragraph 3.1.2.3 refers).

2.5.2 With effect from 20 August 2012, and after 4 years of follow-ups and planning in Iran Airports Holding Company (IAHC), AIS has been separated from the Directorate of Air Traffic Services and connected directly to the head of Air Navigation Services of IAHC. This separation prepared the ground to empower AIS to transit successfully to AIM. The performance of new AIM within the ANS providers in Iran has been beyond the expectation and completely satisfactory after its independence.

## 2.6 **Steps completed for the monitoring of data quality within AIS QMS**

- a) signature of SLA (Service Level Agreement) with four major aeronautical data originators:
  - procedure Design Office;
  - technical and Facilitation Office;
  - airports Design and Development Office; and
  - CNS Office;
- b) development of Standard Input Forms (SIF) for input aeronautical data-by-data originators;
- c) designing internal review forms for all AIS products (AIP, Charts, NOTAM, etc.); and
- d) quality control (QC) of all AIS products (AIP, Charts, NOTAMs, etc.) by AIS Quality Manager.

## 2.7 **AIM Personnel Licensing**

2.7.1 As stated in Annex 15 — *Aeronautical Information Services*: “Within the context of the established quality management system, the skills and knowledge required for each function shall be identified, and personnel assigned to perform those functions shall be appropriately trained. States shall ensure that personnel possess the skills and competencies required to perform specific assigned functions, and appropriate records shall be maintained so that the qualifications of personnel can be confirmed.” (Annex 15, paragraph 3.2.4 refers).

2.7.2 In line with the above mentioned standard and some MIDANPIRG Recommendations on the subject, Iran AIS has started planning to define a mechanism for AIM personnel licensing and the outcome has been the signature of the related national regulation under Civil Aviation Directory(CAD 3115) in which three types of AIM personnel licenses have been defined:

- a) AIM General (Basic License);
- b) AIS Briefing License (Dynamic Data Operator); and
- c) AIS Officer License (Static Data Operator).

## 2.8 **Next steps**

2.8.1 To finalize Phase-2 and facilitate transition to Phase-3, the followings steps have been planned to be met well in 2016:

- a) web-based World Aeronautical Chart/ENR Chart;
- b) integration of all AIS, FPL and MET databases;
- c) inclusion of MIDAD into Iran AIM National Plan and updating of the National Plan;
- d) connecting to other AIS databases;
- e) initiating study phase for e-TOD Areas 2 and 3; and
- f) signing of SLA with all other data originators.

## 3. **CONCLUSION**

3.1 The status of transition from AIS to AIM is going on well as they have been planned.

3.2 The set phases and their relevant steps will be completed within the set time and deadline.

3.3 It would be of help if ICAO initiates awareness campaigns, symposia and trainings to facilitate such a transition.

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