



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP**  
**SEVENTEENTH MEETING (APIRG/17)**  
**(Burkina Faso, 2 to 6 August 2010)**

**Agenda Item 3.6: Aeronautical Implementation Management (AIM)**

**TRANSITION FROM AIS TO AIM GUIDED BY THE IMPLEMENTATION OF THE  
ROADMAP FOR THE TRANSITION FROM AIS TO AIM**

*(Presented by the Secretariat)*

**SUMMARY**

This paper provides an update on developments related to the transition from AIS to AIM.

The roadmap for the transition from AIS to AIM has been developed to address more specifically and in greater detail, the direction given in Doc. 9750 for the future development of aeronautical implementation. The changes foreseen are such that this development is being reformed to as the transition from aeronautical information secure (AIS) to aeronautical information management to aeronautical information management (AIM).

The roadmap offers practical guidance and advice to regional planning groups and States for development of the implementation and funding strategies which will be required for the global plan initiatives related to aeronautical information. It identifies the major milestones recommended for a uniform evolution across all regions of the world, specifics steps that need to be achieved and timelines for implementation.

Action by APIRG/17 is contained in paragraph 4.

**1. INTRODUCTION**

1.1 The AFI region AIS/MAP TF/5 meeting held in Dakar, Senegal, 11-12 May 2009 recalled that the ANC noted the Roadmap for the transition from AIS to AIM, which is available at <http://www.icao.int/anb/AIM>

1.2 It was highlighted that the Roadmap for the transition from AIS to AIM has been developed to address in greater detail the direction given for aeronautical information in the Global Air Navigation Map (Doc. 9750). It is intended as a high level document to provide a framework for States in their evolution toward AIM, and to clarify the purpose and scope of the transition. The roadmap identifies the major intestines towards a uniform global evolution to AIM and indicates specific steps and timelines for implementation. The Roadmap is intended to serve as a strategic positioning initiative to add impetus to the continuing improvement of aeronautical information services in terms of quality, integrity and definition of new services and products to better serve aeronautical users. The expectations are that the transition to AIM will not involve many changes in terms of the scope of information to be distributed. The major change will be the increased emphasis on data distribution.

## 2. DISCUSSION

2.1 APIRG AIS/MAP TF/5 meeting whilst reviewing the roadmap noted that three phases with 21 steps are envisaged for States and ICAO to complete the transition to AIM:

PHASE 1 – CONSOLIDATION  
 PHASE 2 – GOING DIGITAL  
 PHASE 3 – INFORMATION MANAGEMENT

2.2 In the first phase, existing Standards will need to be reformed and strengthened and their implementation in all States ensured. This will concern mainly: quality requirements; AIRAC adherence; the implementation of WGS – 84 and the provision of terrain and obstacle data. The projects in the first phase will be conducted to identify gaps in order to focus on near-term work program activities.

2.3 During Phase 2 of the transition to AIM, the main focus will be on the establishment of data-driven processes for the production of current products in all States. States that have not yet done so will be encouraged “to go digital” by using computer technology or digital communications and introducing structured digital data from databases into their production processes. The emphasis will, therefore, not be on the introduction of new products or services but will be on the introduction of highly structured databases and tools such as geographic information systems. An aeronautical information conceptual model will provide guidance for States to implement such digital databases.

2.4 During phase 3, steps will be taken to enable future AIM functions in States to address the new requirements that will be needed to implement the Global Air Traffic Management Operational Concept in a met-centric information environment. The digital databases introduced in Phase 2 will be used for the transfer of information in the form of digital data. This will require the adoption of a Standard for an aeronautical data exchange model to ensure interoperability between all systems not only for the exchange of full aeronautical data sets, but also for short-term notification of changes.

## 3. CONCLUSION

3.1 It is recalled that the Third Regional AIM Congress organized by the Global AIM Consortium in co-operation with ICAO was by hosted by ATNS of South Africa and was held in Johannesburg, South Africa from 23-25 June 2009. The main objective of the Congress was to inform and involve the ICAO AFI Region in the evolution of the concept of AIM and act as catalyst for change.

3.2 The Global AIM Community was well represented with forty-seven (47) States present in the audience. The Third Regional AIM Congress entitled “*Implementing AIM*” was designed to engage African States and colleagues in other regions in the transition from AIS to AIM.

## 4. ACTION BY APIRG/17

4.1 The meeting is invited to review and endorse the following draft Conclusion and Decision concerning the AFI Region transition from AIS to AIM.

**Draft Conclusions 17/xx - transition from AIS to AIM**

That recognizing the limitations of the current AIS, which does not meet the new global ATM system requirements envisioned by the ATM Operational Concept, and taking into consideration the ICAO roadmap for the transition from AIS to AIM:

- a) AFI States, that have not yet done so, be urged to develop national plans to implement the transition from AIS to AIM and send them to the ICAO Regional Offices of Dakar and Nairobi before 31 December 2010; and
- b) that AFI AIM Implementation Task Force would monitor the progress of transition from AIS to AIM in the AFI Region and support all regional and national planning efforts.

**Draft Decision 17 xx: - Planning for the transition from AIS to AIM**

That, based on the ICAO Global ATM Operational Concept and the ICAO Roadmap for the transition from AIS to AIM, the AFI AIM Implementation Task Force (AFI AIM TF):

- a) develop performance goals for the transition from AIS to AIM in the AFI Region and identify achievable milestones; and
- b) carry out a review of the AIS parts of the AFI Basic ANP and FASID in order to introduce/develop planning material related to the transition from AIS to AIM.

4.2 Finally the APIRG is invited to review and endorse the draft AIM Performance Objectives at Appendix A, concerning the transition from AIS to AIM by States in the AFI Region.

**AIM PERFORMANCE OBJECTIVES**

<b>REGIONAL PERFORMANCE OBJECTIVES / NATIONAL PERFORMANCE OBJECTIVES</b>				
<b>TRANSITION FROM AIS TO AIM</b>				
<b>Benefits</b>				
<b>Environment</b>	. reductions in fuel consumption;			
<b>Efficiency</b>	. improved planning and management of flights;			
	. efficient use of airspace;			
<b>Safety</b>	. improved safety			
<b>KPI Region</b>	Status of implementation of the AIRAC system in the AFI Region			
	Status of implementation of QMS in the AFI Region			
	Status of implementation of AIS Automation in the AFI Region			
<b>Proposed Metrics</b>	Number of States complying with the AIRAC procedures			
Agreements between AIS and data Originators	Number of Posting of AIS information on the ICAO AFI Forum			
	Number of States having developed and signed service Level			
	Number of States having organized QMS awareness campaigns and training programmes			
	Number of States having implemented QMS			
	Number of States having developed eAIP			
	Number of States having developed a National Plan for the transition from AIS to AIM			
<i>Strategy</i>				
<i>Short term (2010)</i>				
<i>Medium term (2011 – 2015)</i>				
<b>ATM OC COMPONENTS</b>	<b>TASKS</b>	<b>TIMEFRAME START-END</b>	<b>RESPONSIBILITY</b>	<b>STATUS</b>
<b>AUO, ATM SDM</b>	<ul style="list-style-type: none"> <li>Improve the compliance with the AIRAC system</li> </ul>	Ongoing	States & AFI AIMTF	Valid
	<ul style="list-style-type: none"> <li>Use of the internet, including the ICAO AFI Forum, for the advance posting of the aeronautical information considered of importance to users;</li> </ul>	2009 – 2011	States & ICAO	Valid
	<ul style="list-style-type: none"> <li>Signature of service Level Agreements between AIS and data originators;</li> </ul>	2009 – 2011	States	Valid

	<ul style="list-style-type: none"> <li>Foster the implementation of AFI QMS based on the AFI Region Methodology for the implementation of QMS ;</li> </ul>	2009 – 2011	ICAO & AFI AIMTF & States	Valid
	<ul style="list-style-type: none"> <li>Monitor the implementation of QMS until complete implementation of the requirements by all AFI States;</li> </ul>	2008 - 2013	ICAO & AAITF	Valid
	<ul style="list-style-type: none"> <li>Foster the development of eAIPs by AFI States;</li> </ul>	2009 - 2013	States & AFI AIMTF	Valid
	<ul style="list-style-type: none"> <li>Monitor the implementation of AIS automation in the AFI Region in order to ensure availability, sharing and management of electronic aeronautical information;</li> </ul>	2008 -2013	ICAO & AFI AIMTF	Valid
	<ul style="list-style-type: none"> <li>Foster the development of National/regional AIS databases;</li> </ul>	2010 – 2015	ICAO & AFI AIMTF & States	Valid
<b>Linkage to GPIs</b>	GPI-5: performance-based navigation; GPI-11: RNP and RNAV SIDs and STARs; GPI-18: Aeronautical Information			

**Abbreviations used in the Global ATM Operational Concept:**

<b>AO</b>	Aerodrome Operations
<b>AOM</b>	Airspace Organization and Management
<b>ATM SDM</b>	ATM Service Delivery Management
<b>AUO</b>	Air User Operations
<b>CM</b>	Conflict Management
<b>DCB</b>	Demand and Capacity Balancing
<b>TS</b>	Traffic Synchronization