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**Agenda Item 1: Follow-up actions taken by the AIS/MAP/SG/10 Meeting**

**1.3 Follow-up on implementation of actions adopted by the CAR/SAM 11th Air  
Navigation Conference regarding the new AIM concept**

**AIS-MAP Transition to Aeronautical Information Management**

(Paper presented by the Secretariat)

**SUMMARY**

This working paper presents the Meeting with information related with the implementation in the CAR/SAM Regions of the actions adopted by the Eleventh Air Navigation Conference, as regards the AIM concept, and proposes actions that should be taken into consideration by CAR/SAM States for the transition of the AIS to AIM.

**References:**

- report of AIS-MAP/SG/10 meeting;
- Report of GREPECAS/14 meeting; and
- Air Navigation Commission AN-WP/8309.

**1. Background**

1.1 The AIS/MAP/SG/10 meeting examined information on the AIM concept, which presents various stages for the control of information/aeronautical data since its origin, passing through the storage, recovery, Exchange and delivery of digital aeronautical information (AIM) within the door to door flight operations context, all of this contemplated in the pre- and post-flight planning.

1.2 In this sense, it agreed that, currently, the CAR/SAM States aeronautical information services need long periods for the production and distribution of permanent information, fact which difficult its rapid distribution and, therefore, its degree of effectiveness. It also considered that all manual process carried out this way represents a risk to data integrity, due to its vulnerability to possible human error.

1.3 In this respect, AIS/MAP/SG/10 meeting agreed that the Aeronautical Information Management Task Force include, within its terms of reference and work programme, the tasks necessary for the preparation, and a plan for the CAR/SAM Regions' transition from AIS to AIM, harmonized with the ATM global operational concept activities, in accordance with indications of the ICAO Eleventh Air Navigation Conference and Global Air Navigation Plan, subject that will be dealt with by this Meeting.

## 2. Discussion

2.1 The Eleventh Air Navigation Conference (AN-Conf/11), held in Montreal in 2003, accepted the operational concept and recognized that, within the global ATM system, the AIS would turn into a most valuable and important tool. As the global ATM system makes progress with the operational concept based on a collaborative decision-making (CDM), it will become more necessary to have available timely high quality authorized sources as regards aeronautical information services (AIS) and meteorology (MET).

2.2 The Conference elaborated Recommendation 1/8, which urges ICAO to define the requirements for the safe and effective provision of global air navigation Management (AIM); adopt a model for the exchange of aeronautical information; and develop new specifications for Annex 4 – Aeronautical Charts and Annex 15 – Aeronautical Information Services, which would rule the electronic availability of aeronautical information and charts.

2.3 It will first be necessary to develop a “global strategy” / “roadmap” to plan, manage and facilitate the global transition from AIS to AIM. The roadmap should recognize that not all States or regions can immediately make the transition to AIM and that its application should be in an evolutionary manner, on the basis of regional needs. This transition should be supported by the global air navigation plan, the regional plans and the States’ execution plans, which should contain the progressive transition steps that should be taken as the implementation of the aeronautical implementation management makes progress.

2.4 To this end, the plans of all States and of the ICAO regions should be all aligned in order to guarantee, as possible, that the Solutions are internationally harmonized and integrated.

2.5 In its turn, Annex 4 and Annex 15 dispositions, plus the required orientation texts, must facilitate aeronautical information at a conceptual level and also provide models for the global exchange of digital data. It is expected that these models greatly base themselves on the aeronautical information / aeronautical information exchange model (AICM / AIXM) concept model developed by EUROCONTROL and United States. Nevertheless, it has been considered that it will be necessary that ICAO previously examine the documentation on these models before they are globally used, to assure that the expected results are achieved.

2.6 Annex 4, Annex 15 and guideline text will also require modifications and an appropriate presentation of the aeronautical information to the final user, to ensure they support the new digital needs. This should include the technology that is the necessary requirement in the AIM context to have aeronautical information Electronic Publications (eAIP), Electronic charts and the use of the Geographical Information System (SIG).

2.7 In the development of these requirements, account should be taken that during the transition phase from the current AIS to AIM, it is essential to maintain the provision of traditional AIS products. Nevertheless, States should bear in mind that the quality, coherence, availability and punctuality of the data that AIS manages during this transition stage should comply with the strict requirements for the exchange of digital information, a substantially higher level than those currently considered acceptable.

2.8 As a previous requirement for the transition to AIM, States that have not yet done so should give high priority to the application of Annex 15 standards and recommended practices (SARPs) and, in particular, those related with the World Geodetic System – 1984, and with the quality and automation management system. This would be the basis to be able to migrate towards the aeronautical information Management (AIM).

2.9 In this sense, the ICAO Air Navigation Commission is aware of the need to update the new Aeronautical Information Services Manual (Doc 8126) and the World Geodetic System – 1948 Manual (WGS-84) (Doc 9674), and that a new manual on AIM quality management system should be provided.

2.10 On the other hand, there is awareness that a new series of legal and institutional aspects could restrict AIM evolution. In this sense, ICAO will hold the *Worldwide Symposium on Enabling the Net-Centric Information Environment* in Montreal, from 2 to 4 June 2008. It is expected that this Symposium will deal with legal and institutional topics related with the transition from AIS to AIM. On the basis of the experience acquired in the Symposium, a work plan should be developed with the aim of considering the solution of fundamental aspects.

## 5. **Action suggested**

5.1 The Meeting is invited to:

- a) take note of the information provided in this working paper; and
- b) take into consideration especially paras. 2.7 and 2.8, reiterate CAR/SAM States aeronautical civil authorities through GREPECAS, on the need to give high priority to the application of Annex 15 standards and recommended practices (SARPs), on the complete application of the World Geodetic System – 1984 (WGS84), on the implementation of the quality and automation Management system as a previous measure to start the migration of the AIS/MAP service towards the Aeronautical Information Management (AIM).