



International Civil Aviation Organization

The Sixth Meeting of the Aeronautical Information Services – Aeronautical Information Management Implementation Task Force (AAITF/6)

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Agenda Item 9: Any other business

AIM Implementation Plan of Mongolia

(Presented by Mongolia)

SUMMARY

This paper outlines the AIM Implementation Plan of Mongolia which was developed based on ICAO Roadmap for the Transition from AIS to AIM.

1. INTRODUCTION

1.1 Mongolia has developed its AIM Implementation Plan in accordance with the Roadmap for the Transition from AIS to AIM and standards and recommended practices of Annex 15.

1.2 Roadmap for the Transition from AIS to AIM defines the transition to AIM into 3 phases, 21 steps and AIM Implementation Plan of Mongolia was developed based on these 21 steps. The implementation of this plan is currently at 40% and Mongolia is going to implement Aeronautical Information Management by 2016.

2. ROADMAP IMPLEMENTATION OF MONGOLIA

2.1 The following Roadmap steps in the AIM Implementation Plan of Mongolia have been achieved or basically achieved;

- *P-04 - Monitoring of States' differences to Annex 4 and Annex 15;*
- *P-05 - WGS-84 Implementation;*
- *P-08 – Aeronautical information conceptual model;*
- *P-11 – Electronic AIP;*
- *P-17 – Quality (The effectiveness of quality management system shall be continually improved through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review).*

2.2 The following Roadmap steps in the AIM Implementation Plan of Mongolia are in the process of implementation:

- *P-01 and P-02 – Data quality monitoring and data integrity monitoring (50% implemented respectively)*
The data quality and data integrity are monitored in accordance with the Appendix 1 of Civil Aviation Rule – 175. However, monitoring the quality and integrity of raw data has been a challenge;
- *P-03 – AIRAC adherence monitoring (80% implemented)*
Operationally significant changes are issued in accordance with AIRAC system. Procedure for the Provision of Originated Data to the AIS is being approved by the Civil Aviation Authority of Mongolia in order to ensure timely and effective provision of raw data by data providers.
- *P-06 – Integrated aeronautical information database (30% implemented)*
Aeronautical database of Mongolia is completed but electronic terrain and obstacle database is only in the beginning stage.
- *P-07 – Unique identifiers*
Mechanism for the unique identification of aeronautical features is in place for our databases which are AIXM 3.3 compliant. Improvements will be made to comply with the requirements of newer exchange models such as 4.5.
- *P-09 – Aeronautical data exchange*
2 automation systems of AIS Mongolia are fully compliant with AIXM 3.3 in terms of exchanging static data. Despite, they don't have exchange layers. Necessary improvements will be made as later versions of AIXM are introduced.
- *P-10 – Communication networks (10% implemented)*
Network based on Internet Protocol (IP) has been introduced. More data exchange bandwidth is required for the current network. We expect more ICAO documents in terms of network specifications.
- *P-12 – Aeronautical information briefing (50% implemented)*
Improvements are made to selectivity of the information presented to pilots in the Pre-flight information bulletin. The combination of graphical and textual information is not exploited well.
- *P-13 – Terrain and P-14 – Obstacles (10% implemented respectively)*
Mongolia has a large, sparsely populated territory thus compilation and provision of terrain and obstacle data sets have proven to be very costly and time consuming. eTOD is currently being implemented. We plan to have eTOD ready by 2015.
- *P-16 – Training*
Training program has been developed which reflects the competencies required by the Annex 4, 15 and automation systems and all employees are trained according to this program. Necessary training programs will be developed in the future to comply with the new requirements on skill and competencies introduced by the transition to AIM.
- *P-18 – Agreements with data originators*
Procedure for the Provision of Originated Data to the AIS has been developed and is expected to be approved by the Civil Aviation Authority of Mongolia.

2.3 The following Roadmap steps in the AIM Implementation Plan of Mongolia are not implemented and only in the research stage:

- *P-15 – Aerodrome mapping;*
- *P-19 – Interoperability with meteorological products;*
- *P-20 – Electronic aeronautical charts;*
- *P-21 – Digital NOTAM.*

3. AERONAUTICAL INFORMATION AUTOMATION SYSTEMS OF MONGOLIA

3.1 Civil Aviation Authority of Mongolia has successfully implemented in phases eAIS and eAIP systems in 2008 and 2010 respectively and has automated its NOTAM processing, PIB, ATS Messages and Aeronautical Information Publication services. The next phase will take place between 2011 and 2012 which will extend the system with:

- Aeronautical charting functionality;
- Terrain and obstacle data management;
- Internet self-briefing;
- Meteorological data processing.

3.2 These systems have offered us numerous advantages such as reducing the risk of errors due to the human factor, ensuring full consistency between graphical and textual information and saving both time and costs.

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