International Civil Aviation Organization

WORKING PAPER

A37-WP/161[1]
TE/90
24/09/10
(Information paper)

ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 39: Transition from Aeronautical Information Services (AIS) to Aeronautical Information Management (AIM)

AUTOMATION OF AERONAUTICAL INFORMATION

(Presented by the Kingdom of Saudi Arabia)

EXECUTIVE SUMMARY

This paper is a presentation of automation of aeronautical information at the General Authority of Civil Aviation (GACA), in compliance with the ICAO SARPs, and is based on the Aeronautical Information Exchange Model (AIXM**).**

Strategic Objectives:	This working paper relates to Strategic Objectives A and D.
Financial implications:	Not applicable.
References:	Annex 15, *Aeronautical Information Services* Doc 9906, *Quality Assurance Manual for Flight Procedure Design*

[1] Arabic version provided by Saudi Arabia.

1. INTRODUCTION

1.1 The change from aeronautical information services (AIS) to aeronautical information management (AIM) requires transition from the manual operations based services and hard copies to automated data processing and digital services. The first step taken at the GACA/Air Navigation Services (ANS) to achieve this objective was automation of aeronautical information in a new environment based on:

a) access to and storage of aeronautical data in digital form;

b) data quality requirements (in terms of accuracy, regularity, etc.) and maintenance of their integrity and security;

c) making data available in digital form, including the website and a complete automated NOTAM system;

d) providing services, including production of aeronautical information publications in hard copy and electronic form (aeronautical information publication (AIP), aeronautical charts, aeronautical information circular (AIC), etc.) using data stored in the database and as the least human intervention from the technical point of view;

e) all these activities require the programming tools and database on the international aeronautical information exchange model (AIXM) which determines the ICAO data requirements.

2. INCREASING THE EFFICIENCY OF THE SYSTEM

2.1 The AIXM was designed to assist in the management and distribution of aeronautical information data, which are in digital form. There is one main purpose for issuing the AIXM Version 5, which is enabling the "digital NOTAM". In this concept, the traditional free text of the information included in NOTAMs is replaced by regular information suitable for automation.

2.2 Version 3.3 of AIXM is now used as a base for our automated aeronautical information system. This issue is confined to the management of "fixed data". The most recent ICAO requirements for the provision of electronic obstacle data sets (from Amendment No. 33 to Amendment No. 36 to Annex 15 — *Aeronautical Information Services*, were the automated data procedures according to the most recent issue of the Procedures for Air Navigation Services/Aircraft Operations (PANS/OPS, Doc 8168), and completion of airport planning requirements (in accordance with the European conditions-RTCA/ED99A EUROCAE).

2.3 Consequently, a plan was developed to upgrade our automation system for testing on the most recent issue of AIXM so as to help in the transition from AIS to AIM.

3. CONCLUSION

3.1 The Kingdom of Saudi Arabia supports ICAO in the transitory and methodical stage used to change from AIS to AIM.

— END —