INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP FIFTEENTH MEETING (APIRG/15)

(Nairobi, Kenya, 26 – 30 September 2005)

Agenda Item 4: Air Navigation and Aviation Security (AVSEC) Issues
4.3: Air Traffic Management (ATS, AIS & SAR)

AERONAUTICAL INFORMATION SERVICES (AIS) AUTOMATION:

THE KENYA AIS AUTOMATED SYSTEMS IMPLEMENTATION

(Presented by Kenya)

Summary

This paper presents an overview of actions being undertaken by Kenya in the implementation of the automated AIS Systems as recommended in the AFI/7 RAN meeting.

Reference: Annex 15, Doc 8126, AFI/7 RAN Report Doc 9702, APIRG 13, Conc. 13/44 and 13/45 and AIS/MAP/TF/2 Report

1. Introduction

1.1 With the development of new technologies, and the increasing need of reliable data, it is important that Aeronautical Information/data be of the highest possible quality. Conscious of the importance of accuracy, integrity and timeless in processing/dissemination of Aeronautical data for reliable/safe and efficient ATM system, Kenya initiated in 1995 a project for the Automation of AIS systems at the International Airports AIS Aerodrome Units.

2. DISCUSSION

2.1 Annex 15 Rec.3.6.6, states inter-alia "Automation in AIS should be introduced with the objective of improving the speed, accuracy, efficiency and cost effectiveness of aeronautical information services"

2.1.1 Pursuant to this requirement, between 1995 and 1998 Kenya undertook a project of AIS automation. This project covered AIS aerodrome units at all her airports used for International operations. Presently work is in progress to upgrade the existing automated AIS systems, while extending the same services to all other manned aerodromes.

2.1.2 Further, AIS aerodrome units are being established at the terminal building in JKIA, MOI and Eldoret international Airports. This will facilitate availability of PIBs and timely processing of flight plans.

2.2 <u>Aeronautical Information Publication/Maps and charts system (AIP/MAP).</u>

2.2.1 As part of the AIS Automation Programmes, Kenya has installed an AIP/MAP system at the AIS headquarters to ensure quality checks on the production processes of the AIP Text/Charts.

2.2.2 The AIP/MAP system is a Database management information system based on the Euro-control Aeronautical Information Exchange Model (AIXM); used for the management of AIP, AIP Amendments, AIP Supplementary, AIC and Aeronautical Maps and charts.

2.2.3 The system provides three (3) level operations (Administration, Supervision and Operator) to ensure data integrity and data security through validation and authentication.

2.3 KENYA AIRSPACE MASTER PLAN

2.3.1 Kenya has developed a ten-year master plan to assist in the implementation of communication, navigation, surveillance and Air Traffic Management (CNS/ATM) Systems. Within the plan AIS system will evolve, increasing the level of safety and the airspace management. The implementation of system evolutions will be in phases to enable:

- ❖ The display of General Information (NAVAIDS, MET etc) to APP and TWR controllers;
- ❖ Automation stripping facilities at secondary airports, which are not equipped with ATC systems;
- ❖ Issue of combined AIS/MET/FPL/ PIB;
- ❖ Internet access to AIS Information and database;
- ❖ Development/production and use of e-AIP from the Internet taking into account data integrity and security.

3. Conclusion

3.1 Worldwide exchange of Aeronautical Information/data is pre-requisite of Aeronautical Information Management (AIM). Global arrangements for the origination, storage retrieval, exchange and the in-flight provision of such information are essential. Therefore, to enhance safety and efficiency, States should co-operate within their regions for the implementation of integrated AIS Automated systems to facilitate the realization of the Global AIM concept.

4. Action by the meeting

4.1 The meeting is invited:

1. To note the progress made by Kenya in the implementation of AIS Automation.

2. To note that in implementing the AIS automated systems, Kenya has adopted the different elements that will make an integrated AFI Regional AIS Automated system and encourage the neighbouring states that have not yet automated their system to take this into account during their implementation process to facilitate harmonization.

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