Twenty-Second Meeting of the AFI Planning and Implementation Regional Group (APIRG/22)
(Accra, Ghana, 29 July – 2 August 2019)

Agenda Item 4.-Other Air Navigation Issues

4.4 Initiatives by States and Industry and other air navigation issues

Update on the progress made by Uganda on AMHS Implementation

(Presented by UGANDA)

SUMMARY	
This information paper presents the update on the progress made by Uganda towards the implementation of the ATS Message Handling System (AMHS) Action by the Meeting The meeting is invited to: a) Take note of the information provided in this paper b) Update information on the status of AMHS implementation in Uganda c) Request the ICAO regional offices to provide workshops and seminars on the awareness on AMHS. d) Encourage coordination between neighboring states who have already implemented AMHS to ensure the prompt conclusion of bilateral agreements.	
Strategic Objectives	A: *Safety*; B: *Air Navigation Capacity and Efficiency* **Related ASBU Bloc 0 Modules, Performance Improvement Areas and Applications:** B0-FICE/PIA2-AMHS

1 INTRODUCTION

1.1 ATS Message Handling System (AMHS) also known as Aeronautical Message Handling System is a standard for aeronautical ground-ground communications (e.g. for the transmission of NOTAM, Flight Plans or Meteorological Data) based on X.400 profiles that has been defined by the ICAO.

1.2 The ATSMHS is provided by a set of end systems, which collectively comprise the ATS Message Handling System. The systems co-operate to provide users (human or automated) with a data communication service. The AMHS network is composed of interconnected ATS Message Servers that perform message switching at the application layer (Layer 7 in the OSI model).

1.3 In line with APIRG/20 conclusions 20/22 and 20/23, the VSAT backbone was upgraded to support the interconnection and operation of AMHS, the national AMHS Implementation Plans were developed, and MoUs for the interconnection of AMHS systems were drafted.

2. DISCUSSION

2.1 In 2016, Uganda embarked on the implementation of a number of projects, among them AHMS. The three-year project resulted in the implementation of AMHS at six upcountry aerodromes for internal message transmission, and external links from Entebbe.

2.2 Steps taken in the implementation of AHMS included:

a) Installation of Servers and User Agents at Entebbe and 6 upcountry airports
b) Integration of the ATM and AIM systems with the AMHS.
c) Unit Test and improvement.
d) Regional and International testing of network. Tests were done with ATNS
e) Onsite training of engineers and operators

2.3 Challenges faced included:

a) Lack of sufficient initial training to enable the development of system and operational specifications prior to the implementation of AMHS.
b) Delayed implementation of bilateral agreements and MoUs with neighboring states.

2.4 Uganda currently transmits ATS Messages through the AMHS both internally and externally through her backup link with South Africa. However, our main exchange link is still through AFTN gateway with Nairobi due to interconnectivity challenges.

2.5 Considering that AMHS is for international end to end communication, there is need for collaboration at regional level to effect the project completion.

3 ACTION BY THE MEETING

3.1 The meeting is invited to: -

a) Take note of the information provided in this paper;
b) Update information on the status of AMHS implementation in Uganda;
c) Request the ICAO regional offices to provide workshops and seminars in order to increase awareness on AMHS.
d) Encourage coordination between neighboring states who have already implemented AMHS to ensure the prompt conclusion of bilateral agreements.

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