International Civil Aviation Organization

MID ATS Message Management Center Steering Group

Second Meeting (MIDAMC STG/2)
(Cairo, Egypt, 10- 12 March 2015)

Agenda Item 4:   **Enhancement of the MID AFS Network services**

ATS EXTENDED SERVICES

(Presented by Jordan)

SUMMARY
This paper presents the possible usage of the ATS extended services file transfer body part and proposes conducting limited trials. Action by the meeting is at paragraph 3.
REFERENCES
–   ICAO Doc 9880

1.   INTRODUCTION

1.1   The Basic ATS Message Service was primarily conceived for easy intercommunication with users at the AFTN by the Gateway facility, however, it includes some enhancement over the legacy AFTN; like length of message, Character set, reliability and integrity of data user.

1.2   The Extended ATS Message Service includes the provisions for the Basic ATS service and a number of services and functional enhancements

2.   DISCUSSION

2.1   The ICAO SARP (DOC 9880) specify four types of Extended services; Conveyance of unstructured binary data, Secure messaging, use of directory services and use of IPM heading extensions.

2.2   EUROCONTROL works on the European Directory services (EDS), which is based on X.500 and can support receipt capability assessment, address conversion and Routing management.

2.3   Users can send non textual information when a system support unstructured binary data transfer like transfer of metrological messages in Binary Universal Form (BUFR) format.

2.4   The World Metrological Organization (WMO) initially decided to migrate from alphanumeric codes to BUFR for the representation of Metrological data, therefore, ATS Extended services was introduced to meet the Metrological requirement. Later the WMO regarding the user of BUFR format to using Extensible Markup Language (XML). XML describes data with a character string and is suitable for computer based processing.

2.5   Most of ATS system in the MID can run extended services and specially File Transfer body Part (FTBP), however, they have not yet been used for operational wise.

Possible Use of the FTBP

2.6   In Some cases, AFS User may needs to send a messages with attachment, FTBP can facilitate this type of information exchange

2.6.1   ***Exchanging messages related to Flight Permission messages***

2.6.1.1   When Airliner need to get overflying/landing permissions to/over an Aerodrome, they/ or the agent send a flight permission Request to the designated Authority, few messages exchanged to complete this process and it may include the need to send some document.

2.6.1.2   In Current AFS Network, the Flight permission request and related messages are exchanged via AFTN/CIDIN, and other documents should be sent via FAX or email.

2.6.1.3   Introduction of a User Agent at the originator side can make use of the FTBP service to exchange messages with attachment and any further enhancement.

2.6.2   ***Distribution of   the Aeronautical Information Publications (AIP) amendments and supplements***

2.6.2.1   Usually Aeronautical Information Services office distributes the updated AIP document via email, CD, or internet.

2.6.2.2   Introduction of a User Agent with FTBP can make it possible to deliver updated data to a group of users at once.

2.7   The ATS Extended services might be used for other purposes when announced about its functionality and availability in an AMHS domain.

2.8   The meeting may wish to recall that the extended service messages cannot be exchanged over AFTN/CIDIN Network and the node which run Basic AMHS system. The use of this service is envisaged when the AMHS transition completed.

2.9   It is worth to mention that exchanging messages with an attachment might have technical consequences in the AMHS system like the need for large disks size to store the large size messages.

2.10   Furthermore, a higher bandwidth might be needed to exchange the ATS extended messages.

2.11   Based on above, a trial on exchanging File Transfer body part messages is desired to identify and record the technical requirements and consequences of this services when put into operation in future.

3. **ACTION BY THE MEETING**

3.1   The meeting is invited to:

    a)   note the information in this Paper;

    b)   provide comments if applicable; and

    c)   agree to perform a trial on the ATS Extended services with limited States.

- END -