International Civil Aviation Organization

Aeronautical Telecommunication Network/Internet Protocol Suite Working Group

Fifth Meeting (ATN/IPS WG/5)
(Cairo, Egypt, 11 - 13 March 2013)

Agenda Item 3: **Follow-up the progress of MID Region ATS Message Management Centre (MID AMC) Project**

CONNECTING THIRD PARTY SYSTEM TO AMHS NETWORK

(Presented by Jordan)

SUMMARY

This paper explains how to connect a third party system that does not support AMHS to the Network using XML based file interface which can facilitate the full migration to AMHS at national level.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

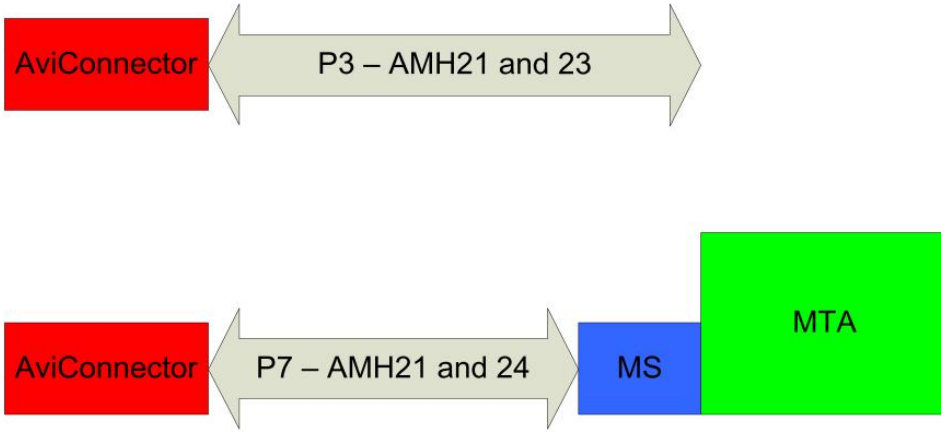
1.1 Jordan has migrated three International lines to AMHS; Connections with Jeddah, Cairo and Abu-Dhabi COM Centers.

1.2 Existence of legacy end systems retards the full national migration to AMHS since all legacy systems do not support AMHS and have only interfaces to AFTN.

1.3 Jordan has ordered from supplier User Agent Interface that allows for connecting third-party applications to the aviation messaging network without the need to handle all communication protocol aspects inside the third-party application itself, this solution is called "The Connector".

2. DISCUSSION

2.1 The Connector is a simple to use means to receive and transmit messages from/to the AMHS or AFTN. It enables the end-user system to transmit and receive messages to/from the AMHS or AFTN. In case of AMHS communication it supports P3 and P7 protocol. In case of AFTN communication it supports besides asynchronous connections a variety of TCP/IP based connection variants proprietary to the Jordan Messaging Switch:



2.2 The communication with the end-user system uses an XML based file interface for data exchange between the system application and “The Connector”.

2.3 Message flow is bi-directional. However, if required, the direction of message flow can be restricted by configuration parameter to either 'reception only' or 'submission only'.

2.4 The Connector fully supports AMHS address translation to hide the complexity of AMHS addresses from the end-user system. For proper functioning of address translation, a connection to an LDAP source containing the conversion tables needs to be available.

2.5 Furthermore, “the Connecter” supports File Transfer Body Part (FTBP) which allows exchanging messages including binary data with other system.

2.6 Jordan CARC has connected the automated Flight Permission System (FPS) to the AMHS network using “the Connector”. Airline agencies can send certificates or any other documents needed to get flight permission to the FPS using FTBP.

2.7 The Airline can use a standalone AMHS User Agent to file a flight permission request or change message to the FPS through the AMHS Network; in the other direction the user can receive the reply of his request through same network.

2.8 Using the Connector with FTBP can automate the receiving of important document as attachment with the flight permission request message instead of using Fax.

2.9 Sending documents with a request message can also decrease human errors and processing time for the request message.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information in this paper.

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