International Civil Aviation Organization

Eleventh Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/11)

Bangkok, Thailand, 19-22 March 2024

Agenda Item 6:   Review and update the AMHS/ATN/AIDC Implementation Status

        6.1 AMHS implementation Status

        6.2 AIDC Implementation Status

        6.3 AIDC over AMHS

PCAA UPGRADATION OF AMHS AND AIDC IMPLEMENTATION STATUS

(Presented by Pakistan Civil Aviation Authority)

SUMMARY

This paper presents brief overview of Pakistan Civil Aviation Authority (PCAA) up gradation of AMHS and AIDC implementation status.

1.   INTRODUCTION

1.1   Pakistan being member state is providing AMHS services and responsible for worldwide distribution of AMHS/AFTN as per ICAO APAC Routing Directory. AMHS is also configured to route AIDC messages to the adjacent ACC's.

2.   DISCUSSION

2.1   Review and update the AMHS/ATN/AIDC Implementation:

        2.1.1   AMHS Implementation Status:

The first AMHS installed by PCAA during the year 2009 completed its useful life and its servers were malfunctioning frequently. The old AMHS was also not capable of performing operations as per new SARP'S introduced by ICAO. Therefore, PCAA procured a new upgraded AMHS during the year 2021. The new AMHS has extended functionalities to meet the future requirements.

        2.1.2   AIDC Implementation Status:

PCAA is in the process of implementing the AIDC with adjacent ACC's. The objectives of AIDC implementation are to reduce manual intervention and to reduce human error in ground-to-ground coordination. The status of AIDC implementation in Pakistan is as under:

International / Domestic	Trial run	Status	Remarks
Lahore-Delhi	2022	Under trial	AIDC link was established between both ACC's. However, Delhi ATM system was rejecting Lahore ABI messages with LR/061 due to generation of extra space in the route field of ABI message. Trials are halted till up gradation of Lahore ATM system or software up gradation of AIDC interface at Delhi ACC.
Karachi-Mumbai		Under trial	
Karachi-Ahmadabad		Under trial	Automatic message exchange i.e. (ABI, EST) happens for most of east bound flights between Karachi and Ahmadabad. Auto ACP message not generated by Karachi ATM system. Trial underway.
Karachi-Muscat		Trial planned in 2024	
Karachi-Lahore	2023	Under trial	AIDC link was successfully established between both ACC's. End to end exchange of flight information messages was successful over half of TCPs. Trial is still underway through airspace structure modification in pairing ATM system of both ACC's.
Islamabad-Lahore	2019	Trial delayed	Islamabad ATM system treats truncation delimiter as mandatory in the transmission of ABI message; on the contrary Lahore ACC ATM system does not handle truncation delimiter in the received ABI message. Trials are suspended till the up gradation of ATM ICD at any of the ACC or till the planned up gradation of ATM system at ACC Lahore.

2.1.3   AIDC over AMHS:

All AIDC messages are routed through the AMHS servers installed at JIAP Karachi. Necessary configurations and parameterization in AMHS and testing of AIDC message completed. There is no AFTN latency issue as Karachi-Mumbai AFTN data link successfully replaced with AMHS / X-400

link. Steps are initiated to replace the existing Karachi-Beijing AFTN data link with new TCP/IP/MPLS link for exchange of messages in AMHS/X-400 format and coup with the AFTN latency issues. Also coordinated with Muscat for conversion of existing AFTN over TCP / IP link to AMHS / X-400 link.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

    a) note the information contained in this paper; and

    b) discuss any relevant matter as appropriate.

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