



International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Fourth Meeting (ATM SG/4)
(Amman, Jordan, 29 April – 3 May 2018)

Agenda Item 8: Review of Air Navigation Deficiencies in the ATM and SAR Fields

NEED FOR EXPEDITING AMHS IMPLEMENTATION

(Presented by United Arab Emirates)

SUMMARY

The purpose of this working paper is to present the challenges posed by ageing AFTN and the difficulties faced by ANSPs due to the unavailability of ATS messages that are lost when transmitted. These issues reiterate the need for expediting AMHS implementations. ICAO MID Office is invited to follow up AMHS Implementation as planned in the MID Region Air Navigation Strategy and MIDANPIRG15 Conclusion 15/30: “AFTN/CIDIN AFS CONNECTIVITY AND AMHS IMPLEMENTATION” and to initiate coordination with ICAO regional offices to make it one of the focus areas of interest. Such initiatives shall reduce the dependency on AFTN and resolve the ATS messages loss issue.

Actions by the meeting are at paragraph 3.

1. INTRODUCTION

1.1 The Air Traffic Service provision is highly dependent on ATS messages availability, which in turn depends heavily on the availability of AFTN.

1.2 The legacy links used for AFTN, in some parts of the world, is unreliable and is often causing message loss.

2. DISCUSSION

2.1 The unavailability of ATS message delays flights from receiving ATC clearances in time for critical phases of a flight such as pushback, for obtaining optimum flight levels, for allocating preferred routes etc.; despite of the fact that the concerned ATS Reporting Offices (ARO) and/or the Airline Operation Centres (AOC) has filed the ATS message in the appropriate time.

2.2 Similarly, the missing ATS messages limit the ATC in locating the CNS capabilities of the flight to determine the safety margins to be applied, requested route and flight level to be assigned and other vital information such as the registration mark, etc.; leaving it to ATC to confirm everything from the pilot adding workload to ATC as well as pilots in critical phases of the flight.

2.3 The AFTN/CIDIN circuit interruptions are one of the major hindrances for the smooth and timely transmission and reception of ATS Messages. The outages in the links between the inter-regional messages centres are tragic. In some cases, they are as frequent as once a month. These outages result in loss of ATS messages filed by AROs and AOCs.

2.4 There are several reasons for these outages, they range from system or link unserviceability to political conditions of the State. These issues result in messages being lost before reaching the addressees, or garbled with unidentified characters, or mixed with some other type of messages.

2.5 It is better to move away from these legacy links, as such fixing of issues in those links in the past lasted for few months at most before resurfacing again.

2.6 Attempts are to be made to permanently solve these issues. One of these attempts is to move away from AFTN and expedite AMHS implementation based on X.400 protocols, at least between the stations where the message is known to get lost. Such a move will bring in improved, stable, reliable and high-speed connectivity.

2.7 AMHS Implementation in MID Region is progressing. There shall be a focus to achieve the plans as described in B0-FICE of MID Region Air Navigation Strategy.

2.8 The implementations in the MID Region can reap its full benefit when concerned regions are implementing AMHS in time. This is where the ICAO MID Office has to play a vital role by:

- a) identifying the areas where messages are lost; and
- b) coordinating the need for expediting AMHS Implementation with the corresponding ICAO Regional Offices.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) take note of the causes which inflict serious AFTN outages and their causes as well as potential solutions;
- b) urge States to expedite AMHS Implementation as planned in MID Region Air Navigation Strategy (MID Doc 002); and in Conclusion 15/30 of MIDANPIRG/15 AFTN/CIDIN AFS CONNECTIVITY AND AMHS IMPLEMENTATION stating:

“That States be urged to:

- i. refrain from establishing new AFTN and CIDIN connections at the International level;
 - ii. gradually phase out the current connections based on AFTN or CIDIN standards; and
 - iii. expedite their AMHS implementation.”
- c) request ICAO MID Office to Initiate necessary coordination with adjacent ICAO Regional Offices for expediting the implementation of AMHS in the focus areas.