

International Civil Aviation Organization

MIDANPIRG Communication Navigation and Surveillance Sub-Group (CNS SG)

Fourth Meeting (Cairo, Egypt, 25 – 27 September 2011)

Agenda Item 3: Review of the ATN/IPS Working Group Report

ESTABLISHMENT OF THE MID ATS MESSAGE MANAGEMENT CENTER (AMC)

(Presented by the Secretariat)

SUMMARY

This paper presents progress made by the ATN/IPS working group for the establishment of the MID AMC and the follow-up actions taken.

Action by the meeting is at paragraph 3.

REFERENCES

- ATN/IPS WG/3 Report
- MIDANPIRG/12 Report

1. Introduction

1.1 MIDANPIRG/12 meeting held in Amman, Jordan 17-21 October 2010 was apprised on Jordan's proposal for the establishment and hosting of the MID AMC. In this regard the meeting recommended that Jordan should provide a complete project plan with details, on hardware, software and the daily operation of the AMC to the next ATN/IPS WG meeting. It was highlighted that ICAO will help and facilitate the transfer of the AMC software from EUROCONTROL to Jordan in the same way as it was handled for other ICAO Regions

2. DISCUSSION

- 2.1 The meeting may wish to note that MIDANPIRG/12 noted that a periodical data collection and publication in the MID ANP and FASID for the AFTN/CIDIN/AMHS circuits and other related information is a human resource extensive task and would need to be supported by electronic tools, e.g. centralized database. Where these information are maintained in ICAO EURO Region through the AMC.
- 2.2 The meeting may wish to note that during the ATN/IPS WG/3 meeting Jordan provided presentation on the AMC and noted that MID Region could utilize the AMC to obtain this information. Consequently, the meeting urged MID State to access the AMC website http://www.eurocontrol.int/amc and keep all information related to their States updated. Accordingly, the meeting ATN/IPS WG/3 agreed to the following Draft Conclusion:

DRAFT CONCLUSION 3/1: UPDATE THE AMC SYSTEM

That, MID States be urged to keep the data related to their COM CENTER updated in the AMC system.

- 2.3 The meeting may wish to note that the transition from AFTN to AMHS requires an orderly operation of the AMHS on a global scale, it is also necessary to coordinate and synchronize the allocation of AMHS addresses. In response to this requirement, ICAO is utilizing the European ATS Messaging Management Centre (AMC), in cooperation with the European Organization for the Safety of Air Navigation (EUROCONTROL), which established the procedures for coordination and synchronization of AMHS addresses in the short-to medium-term.
- 2.4 The meeting may wish to recall that a State Letter AN 7/49.1-09/34 was sent to States indicating the above agreement with EUROCONTROL, it also indicated that in order to use the AMC it is necessary for users to be trained before they are actually allowed to enter data in the AMC. In order to foster timely implementation of AMHS, ICAO MID Regional Office conducted a three days training in October 2009.
- 2.5 The ATN/IPS WG/3 meeting recalled MIDANPIRG/12 Conclusion 12/38: POSTING OF AMHS PLANS IN AMC, and as follow-up to the conclusion, ICAO MID Regional Office, sent State Letter AN 7/5.1 11/016 dated 20 January 2011, requesting MID States to take necessary action to expedite the posting of their AMHS plans in the AMC and start using the AMC. It was noted that some MID States have not accessed the AMC application and no details are being posted or updated by States.
- 2.6 The meeting may wish to note that MID COM Centres participate in EUR-AMC as external COM operators that have access to some of the AMF-O functions, but they cannot use an important function like routing management which is currently available to EUR CCC operators. Therefore, during the second meeting of ATN/IPS WG, Jordan proposed to establish and host a MID AMC, by providing complete project along with hardware, software and the daily operation of the AMC, where ICAO MID Regional Office will help in the transfer of the AMC software from EUROCONTROL.
- 2.7 MIDANPIRG/12 was in agreement that the manual "Maintenance of the Routing Directory" is becoming difficult and complicated and agreed that, ICAO MID Regional Office request EUROCONTROL to extend the Routing Table function provided by the AMC system to the MID Region.
- 2.8 Based on above, ICAO MID Regional Office sent an official letter requesting the provision of the routing function and additional functions to the MID Region. Accordingly, a meeting between EUROCONTROL and Jordan took place in EUROCONTROL Headquarters on 5 July 2011, during which the requirements for a Network Management Center for the MID Region, was discussed. The summary of discussion of the meeting between EUROCONTROL and Jordan is at **Appendix A** to this working paper. Furthermore, the summary has identified three options for supporting the MID Region.
- 2.9 The ATN/IPS WG/3 meeting discussed in details the three options and was in total agreement with option C which is supporting the MID Region to establish its own AMC. In this regard, Jordan provided an official letter confirming their full commitment to the MID-AMC project.
- 2.10 Based on the above, the ATN/IPS WG/3 meeting agreed that following the receipt of the official commitment from Jordan, the ICAO MID Regional Office is to request the support from EUROCONTROL. Accordingly, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 3/2: SUPPORT FROM EUROCONTROL TO ESTABLISH MID AMC

That, ICAO MID Regional Office request EUROCONTROL's support for the establishment of MID AMC by providing needed documents, AMC operation training and other related issues.

- 2.11 Based on the above, and after receiving the commitment letter from Jordan ICAO MID Regional office requested EUROCONTROL to provide Jordan with the following in order to support the establishment of the MID AMC:
 - a) support / Interpretation of AMC Implementation Specification;
 - b) support for development of synchronization functions and procedures between the regions; and
 - c) provide advanced training to the MID AMC who will be like web administrator in addition they will also perform the management of data flow.
- 2.12 EUROCONTROL had responded to the above request directly to Jordan as follows:
 - EUROCONTROL support as described in the state letter mentioned above will be chargeable, as they expect to provide that support to a non-contracting state "Jordan" since its outside the EUROCONTROL states, so a contract should be signed between Jordan and EUROCONTROL.
 - The first 2 points will costs 10K Euro (it needs 10 man days) and the training cost will be determined later, but as an indicator a man day in EC costs 650 Euro, so the training cost would depend on number of days and trainees.
 - EUROCONTROL provides AMC service for the whole world on behalf of ICAO and they have an agreement with ICAO, so if this project "MID AMC" is an ICAO project and ICAO would pay for that cost NOT Jordan, then it's a different case and might cost less, the worst case would be that EC decide to charge ICAO and then ICAO refund them from Jordan.
 - EUROCONTROL asked about some technical details, time frame for the project and about Jordan readiness to start the project.
- 2.13 Based on the above, the meeting may wish to agree for providing Jordan all the support and agreed to the following draft conclusion:

Why	States and ICAO to provide the full support to the MID AMC project
What	Support to Jordan including the information
Who	ICAO and MID States
When	MIDANPIRG/13

DRAFT CONCLUSION 4/XX: SUPPORT TO MID-AMC

That, MID States and ICAO MID Regional Office commit fully to the MID AMC project and provide all necessary support to Jordan for the successful launch of the MID AMC.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) note the information in this working paper and its Appendices; and
 - b) endorse Conclusion in para. 2.2, 2.10 and 2.13

APPENDIX A





Meeting on additional functions for MID Region in the EUR-AMC

Objective: To discuss the possibilities of providing full AMC Service or support the ICAO MID Region as requested by the Regional Director of the ICAO Cairo Office.

Participants:

Mr. Yuksel Eyuboglu, EUROCONTROL

Mr. Dimitris Apsouris, EUROCONTROL

Mr. Yaser Ziad JORDAN

Mrs. Muna Annaddaf, JORDAN

Meeting Venue: EUROCONTROL HQ, Brussels

Meeting Date: 5th July, 2011

Agenda:

- 1. Welcome and Introduction.
- 2. Approval of Agenda.
- 3. Presentation of ATS activities in MID Region and EUR/NAT Region.
- 4. Discussion on the requirements for Network Management Center for MID Region.
- 5. Identifications of options concerning possible EUROCONTROL support.
- 6. Recommendation on the way forward.
- 7. AOB

Discussion:

1. Under Agenda Item 3, the AMHS implementation activities in both EUR/NAT and MID regions were presented briefly.

- Concerning item 4, with respect to the network management requirements of the MID Region, EUROCONTROL was informed that the MID Region needs one additional function (Routing Management) not the full AMC service. The Routing Management Function is currently provided only to the EUR/NAT States.
- Under agenda item 5 possible options were discussed to satisfy the needs of the MID Region as follows:
 - **3.1 Provision of AMC Routing Management Function to the MID Region.** This option is considered short term, easy to implement and no modification will be required in the AMC. Only additional AMC operational effort will be required to carry out the routing management function for MID Region. It is estimated that this effort would be approximately 50k€ per year. The current AMC operator contract will be renewed in the last quarter of 2011. This option can be included in that contract.
 - **3.2 Modification of AMC, so that each region manages its own data.** Major modification would be needed for the AMC architecture, including modification of the functions, procedures, documents, training materials and the AMC application. This is considered the most complex solution and may take 1 or 1.5 year to implement. In this option since each region manages its own data no additional AMC operator costs required for Europe, however there would be additional development and implementation costs. The related development and implementation costs for this option could be estimated by EUROCONTROL if this option is selected.

3.3 Supporting the MID Region to develop its own AMC.

This is a long term option; EUROCONTROL will be able to provide development, implementation and operational support on request. This includes:

- Support / Interpretation of ATS Messaging Management Manual,
- Support / Interpretation of AMC Implementation Specification,
- Support for development of MID Region AMC Application,
- Setting up of the AMC infrastructure, including LAN/WAN and Application Server, Database Server, Web Server, firewalls etc...
- Support for setting up the organization including the steering group and technical support group,
- Possible provision of AMC application with or without source code,
- Support for development of synchronization functions and procedures between the regions.
- Training the AMC operators and the users.
- etc...
- 4. under agenda item 6,
 - **Action 1:** it was decided that EUROCONTROL will provide more information concerning the contents, time scales and costs especially for option 3.
 - **Action 2:** In parallel, the MID Region, via Cairo Office Regional Director (preferably ICAO HQ), will send an official request to the DG of EUROCONTROL indicating the option(s) they intend to implement.
- 5. Next meeting is not planned; the work will be carried out by e-mail or teleconference if required.