



International Civil Aviation Organization

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

Sixth Meeting
(Tehran, Iran, 9 – 11 September 2014)

Agenda Item 4: Developments related to MID-AMC

REVIEW OF THE MID-AMC STG/1 MEETING SoD

(Presented by the Secretariat)

<p style="text-align: center;">SUMMARY</p> <p>This paper presents the CNS related MIDANPIRG/14 Conclusions and Decisions and the follow-up actions taken by concerned parties.</p> <p>Action by the meeting is at paragraph 3.</p>
<p style="text-align: center;">REFERENCES</p> <p>- MIDANPIRG/14 Report</p>

1. INTRODUCTION

1.1 The MIDANPIRG/14 meeting was held in Jeddah, Saudi Arabia, from 15 to 19 December 2013. The meeting under Decision 14/21 established the MID-AMC Steering Group as follows:

DECISION 14/21: ESTABLISHMENT OF MID-AMC STEERING GROUP

That,

- a) a MID-AMC Steering Group is established with TOR as at **Appendix 4.5A** to the Report on Agenda Item 4.5; and*
- b) States appoint a Member and Alternate for the MID-AMC Steering Group.*

2. DISCUSSION

2.1 The First meeting of the MID-ATS Message Management Center Steering Group (MIDAMC STG/1) was held via teleconference facility on 18 June 2014. The meeting was attended by (5) States (Egypt, Iran, Jordan, Lebanon and UAE), MID-AMC Team and Mr. Raza Gulam, Regional Officer CNS.

2.2 The meeting had concern on the low level of participants as low level of reply to State letter for the assignment of member for the MID-AMS STG, this group being an important group for the running of the MID-AMC which is regional requirement for the smooth operation of the AMHS system the main Aeronautical Fixed Services. The meeting encouraged all Sates to send their nominations to ICAO in order for the second MID-AMC STG/2 to be held face to face.

2.3 The meeting noted that the main reason for not having the MID-AMC fully operational is the lack of training. This was based on the survey conducted and the direct discussion during the meeting.

2.4 The MID-AMC STG1 noted Status of Implementation of the AMHS in the MID Region, where six (6) States have operational AMHS links, three (3) States have signed a contract with vendors to purchase AMHS systems, four (4) States have AMHS system in place but not yet operational and two States (2) have not provide any info about AMHS Implementation plan, the meeting developed the following status of implementation table for the AMHS and the elements to be monitored under the MID Air Navigation.

2.5 The Summary of Discussion for the MID-AMC STG/1 meeting is at **Appendix A** to this working paper.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the action in the Summary of Discussion and proposes ways and means for the conduct of the training and operation of the MID-AMC.



INTERNATIONAL CIVIL AVIATION ORGANIZATION

First meeting of the MIDANPIRG MID-AMC Steering Group

(MID-AMC STG/1)

Via Teleconference, 18 June 2014

SUMMARY OF DISCUSSIONS

1. INTRODUCTION

1.1 The first meeting of the MID-ATS Message Management Center Steering Group (MID-AMC STG/1) was held via teleconference facility on 18 June 2014. The meeting was attended by (5) States (Egypt, Iran, Jordan, Lebanon and UAE), MID-AMC team and Mr. Raza Gulam, Regional Officer CNS.

1.2 The meeting adopted the agenda as follows:

Agenda Item 1: Adoption of the Provisional Agenda and Election of Chairpersons

Agenda Item 2: Follow-up on MIDANPIRG/14 Conclusions and Decisions
relevant to MID-AMC STG

Agenda Item 3: MID-AMC and AMHS implementation in the MID Region

Agenda Item 4: Future Work Programme

Agenda Item 5: Any other business

2. DISCUSSIONS

2.1 The meeting adopted the above agenda. However, the meeting agreed that election of the chairperson to be done when the MID-AMC Steering Group meet face to face.

2.2 The meeting noted that MIDANPIRG/14 adopted *DECISION 14/20: ESTABLISHMENT OF MID-AMC STEERING GROUP* and *CONCLUSION 14/21: MID-AMC OPERATION*. It was further noted that ICAO MID Regional office issued follow-up State Letter AN 7/5.1–14/084 dated 16 April 2014, only six (6) States (Iran, Jordan, Lebanon, Saudi Arabia, Sudan, and UAE) have replied and provided the filled survey.

2.3 The meeting recalled that after completing the development of the MID-AMC, MIDANPIRG/13 decided to launch the trial period on 12/12/2012 for one year. Since that date fifty-four (54) users from Twelve (12) MID States have registered on the MID-AMC (Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, and UAE). Also Twelve (12) MID States (Bahrain, Iraq, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE and Yemen), signed Memorandum of Agreement (MOA) related to the MID-AMC.

2.4 The MID-AMC STG1 discussed the Six States (Iran, Jordan, Lebanon, Saudi Arabia, Sudan, and UAE) survey result, that indicated the following:

- 83% of States have AMHS system in place and all users have got AMHS training but 17% have got training on AMC. And 83% of the users think they need MID AMC training
- 83% of states are aware about the MID AMC Objectives and Need while 50% are aware about the MID-AMC project phases.
- 67% of the MID AMC users are not aware about their responsibility and MID AMC operator role
- 83% of the users visit the MID AMC when they get notification mail from the MID AMC operator, which means they visit the MID AMC at least twice per AIRAC cycle
- 83% are aware about the Minimum Requirement to login to the MID AMC
- The MID AMC Design and response, Accreditation procedure were evaluated "Good"
- 100% of users have not identified any wrong data in the Network Inventory and address Management functions
- 17 % is aware about the phases differences between the MID AMC and the EUR AMC
- 100% evaluated the MID AMC operator performance is "Good" and they have not got any misleading information

2.5 Based on the above the MID-AMC STG1 concluded with the following actions on each of the derived results:

Reference	Result	Action
1-	The MID AMC Design, response rate, the MID AMC operator performance are Good, moreover, the MID AMC does not provide wrong or inconsistent data.	To urge the users informing the MID AMC operator about any future Bug or wrong information
2-	Some users are not aware about the MID AMC project phases and cycles.	Conduct a presentation about the MID-AMC objectives, Need and project plan in MID-AMC STG1
3-	Some MID AMC users are not aware about MID AMC User types and responsibilities, all available functions	Arrange MID AMC training
4-	Users use the MID- AMC when they get notification from the MID AMC operator	Task the MID AMC operator to send additional emails to guide users about functions usage and any relevant update

5-	The MID AMC login minimum requirements are not clear for all users	Task the MID AMC operator to post on the bulletin board the minimum requirements and send emails to all users clarifying these requirements
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2.6 The MID-AMC STG1 noted Status of Implementation of the AMHS in the MID Region, where six (6) States have operational AMHS links, three (3) States have signed a contract with vendors to purchase AMHS systems, four (4) States have AMHS system in place but not yet operational and two states (2) have not provide any info about AMHS Implementation plan, the meeting developed the following Status of implementation table for the AMHS and the elements to be monitored under the MID Air Navigation Strategy:

	Bahrain-OB	Egypt-HE	Iran-OI	Iraq-OR	Jordan-OJ	Kuwait-OK	Lebanon-OL	Libya-HL	Oman-OO	Qatar-OT	Saudi Arabia-A	Sudan-HS	Syria-OS	UAE-OM	Yemen-OY
AMHS Capability	A	AI	CS	CS	AI	CS	A	A	AI	AI	AI	A	NI	AI	NI
Interconnection	NO	O	NO	NO	O	NO	NO	NO	O	O	O	NO	NI	O	NI
Legend:															
A Available	I Implemented		CS Contract Signed		NI No Information		NO Not Operational		O Operational						

2.7 The meeting received detailed presentation on the need for the MID-AMC and the whole project plan along with conclusion for the action form MID States and the MID-AMC team at **Appendix A**.

2.8 The MID-AMC STG1 meeting concluded that MID-AMC training is an very essential and important issue that needs to be conducted for the project success, as most of the users have not got any training even the one that was arranged in Cairo 2009.

2.9 Based on the above Jordan proposed to arrange a paid training in Jordan for the Key users, and that other training can be arranged later for the read-only users. It was obvious that the payment of the training requires higher authority approval. Accordingly, the meeting agreed that this issue to be addressed during the CNS SG/6 meeting which will be held in Iran 9-11 September. However, it was also emphasized that training needs to be conducted as soon as possible to enable launching of the MID-AMC services.

2.10 While discussing the future work programme, the meeting agreed that it was necessary to conducted one face to face meeting to elect chairperson and to put roles and responsibilities of the MID-AMC Steering Group Member. The meeting also requested MID-AMC to attend the CNS SG/6 and provide update on the project including the action developed by the meeting in para 2.5.



MID ATS Messaging Management Center (MID AMC) Project Plan

Objective



To present the progress has been done toward establishment of the ATS Messaging Management center in the ICAO MID Region (MID AMC).

Presentation Outline



- ☐ Background
- ☐ The need for MID AMC
- ☐ MID AMC Project Plan
- ☐ Conclusions

AMHS Implementation in the MID

- ❑ Six (6) states have operational AMHS links.
- ❑ Three (3) states have signed a contract with vendors to purchase AMHS systems.
- ❑ Four (4) states have AMHS system in place but not yet operational
- ❑ Two states (2) have not provide any info about AMHS Implementation plan .
- ❑ Two AMHS networks (Triangle) in the ICAO MID Region:
 - “Amman- Cairo-Jeddah”
 - “Amman- Jeddah- Abu Dhabi”



Presentation Outline



- ☐ **Background**
- ☐ The need for MID AMC
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The need for MID AMC

MID COM centers participate in EUR-AMC as external COM operators that have access to some of the operational functions, but they can't use an important function like routing management which is currently available to EUR AMC operators.

The Aeronautical fixed telecommunication network in the MID Region has some operational issues like Asymmetric routes which can cause message loss.

The Routing function can integrate AMHS routing with AFTN/CIDIN routing, and ensure optimal consistent routes.

Problems in operational AMHS net.

1. Asymmetric routing
2. Routing to other ICAO area in AMHS



The Good

Area	Outgoing channel
OE	Jordan (AFTN)

Convert SVC ADS ...
UNKNOWN into NDR

UNKNOWN ADS
OSDIYFY

Area	Outgoing channel
OS	Jordan (AMHS)

DD OSDIYFY





The Ugly

Area	Outgoing channel
OE	Egypt (AFTN)

UNKNOWN ADS
OSDIYFY

Subject message
did not pass this
gateway, SVC ADS
... UNKNOWN
conveyed as IPM

Area	Outgoing channel
OS	Jordan (AMHS)

DD OSDIYFY

The ATS
originator
receives service
msg SVC ADS ...
UNKNOWN
instead of NDR.

Area	Outgoing channel
OE	Kuwait (AMHS)

OSDIYAXX is
unknown address,
Syria sends NDR

The translation of NDR
into service msg SVC
ADS ... UNKNOWN
fails as the subject
message did not pass
this gateway.

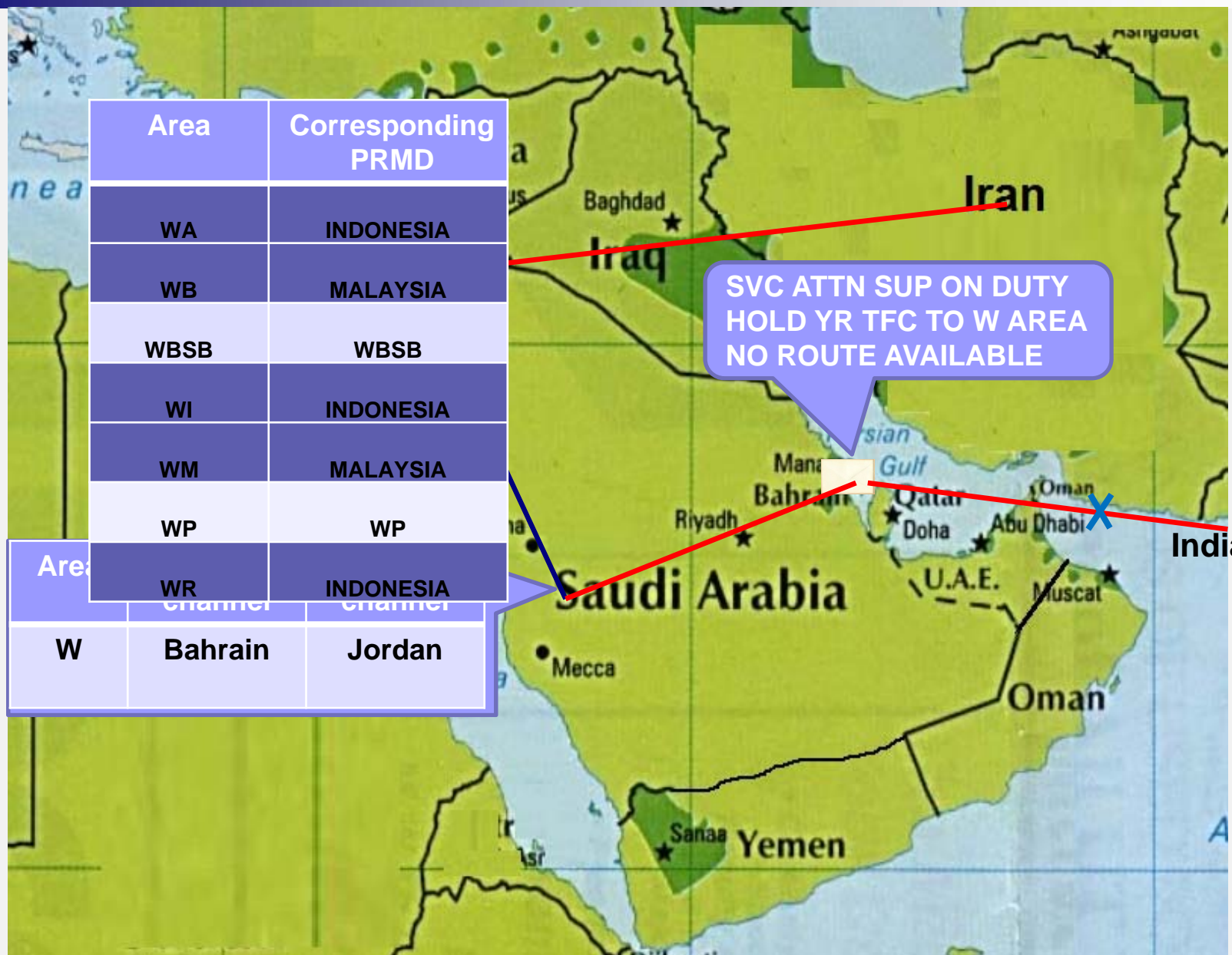
Area	Outgoing channel
OS	Jordan (AMHS)

/C=XX/ADMD=ICAO/PRMD=OS
/O=AFTN/OU=OSDIYAXX

The originator is not
informed about
message loss.

Problems in operational AMHS net.

1. **Asymmetric routing**
2. Routing to other ICAO area in AMHS



Presentation Outline



- ☐ **Background**
- ☐ **The need for MID AMC**
- ☐ **MID AMC Project Plan**
- ☐ **Conclusions**

MID AMC Project Plan



1. Project Stakeholders:

- Jordan Civil Aviation Regulatory Commission (*project sponsor*)
- MID States
- ICAO
- EUROCONTROL
- MID AMC Project Manager
- MID AMC Project Assistant
- MID AMC Support Team
- MID AMC Operators

MID AMC Project Plan



2. MID AMC Project Goals

- To facilitate transition from AFTN/CIDIN to AMHS.
- To support states with AMHS in operation or on their way to implement.
- To provide Routing management function that can ensure optimum consistent routes.
- To provide an electronic tool to keep ANP FASID data up-to-date.

MID AMC Project Plan



3. Deliverables:

- Development of MID AMC project
- Synchronization with European AMC
- Training for MID AMC Users
- Development of MID AMC manuals
- Launch of the MID AMC project

4 . MID AMC Project Plan Schedule



Task	Responsibility	Delivery Date
Acquiring Technical and operational specifications of AMC from EUROCONTROL, and sign the agreement for Copyrights and patent usage.	ICAO MID office	20/11/2011 <i>Done</i>
Develop technical specifications for MID AMC Project	MID AMC Team	7/12/2011 <i>Done</i>
Tendering process (Launch a tender, Evaluation of tenders, Purchasing order)	Jordan CARC MID AMC Team	5/1/2012 <i>Done</i>
Phase 1 development (Including Network Inventory function, Address Management function, Miscellaneous)	MID AMC Support Team	10/5/2012 <i>Done</i>
Factory Testing Acceptance (FAT) – phase1	MID AMC support team and Project team	18/5/2012 <i>Done</i>

MID AMC Project Plan Schedule (Cont'd)



Task	Responsibility	Delivery Date
Refresher External AMC user course for MID AMC operators	MID AMC Project Manager	12/4/2012 <i>Done</i>
Development a synchronization procedure with European AMC	-MID AMC Team -ICAO MID office -Eurocontrol	June/2012 <i>Done</i>
Phase 2 development (Routing Management, Statistics)	MID AMC Support Team	13/6/2012 <i>Done</i>
Factory Testing Acceptance (FAT) – phase 2	MID AMC support team and Project team	20/6/2012 <i>Done</i>

MID AMC Project Plan Schedule (Cont'd)



Task	Responsibility	Delivery Date
MID AMC Implementation	MID AMC support team	30/6/2012 <i>Done</i>
Training on MID AMC operation	- MID AMC Project manager - MID AMC support team	2-5/7/2012 <i>Theoretical part done</i>
Site acceptance Test (SAT)	- MID AMC Support & project Team	12/7/2012 <i>Done</i>
Sign MOUs with MID states	-Jordan CARC -MID states -ICAO MID office	<i>Ongoing</i>

MID AMC Project Plan Schedule (Cont'd)



Task	Responsibility	Delivery Date
Develop operational specification manuals for all MID user types (MID AMC Operator, MID AMC user, Read only users, External AMC User)	MID AMC Project Team	12/7/2012 <i>Ongoing</i>
Training for MID AMC users (MID states)	MID AMC Project Manager	1//7/2012 <i>No Plan</i>
Submit data to MID AMC	- MID states - MID AMC operator	12/7/2012 <i>Done</i>
Launch of the MID AMC trial period	MID AMC Support & project Team	12/12/2012 <i>Done</i>

MID AMC Project Plan Schedule (Cont'd)



Task	Responsibility	Delivery Date
Develop Computer based training package for MID AMC Operator	CBT Team	15/5/2013 <i>Ongoing</i>
Training for MID AMC users (MID states)	CBT Team	20/12/2013
Provide regular feedback to ICAO office and MID AMC	MID states	<i>Ongoing during the trial period</i>
Final Evaluation for MID AMC (Go-Nogo)	MID AMC Team MID States	
Launch of the MID AMC	MSG / MIDANPIRG	

MID AMC Project Plan



5. Human Resources Plan:

- MID AMC Project Manager: Mona Annaddaf
- MID AMC Project Assistant: Eid Othman
- MID AMC operation team:
 - Eid Othman
 - Yaser Zayyad
 - Zakaria Hussien
 - Majdolin Al-trad
 - Maysoon Oweineh
- MID AMC Support team:
 - Mona Annaddaf
 - Eid Othman
 - Yaser Zayyad
 - MID AMC Supplier

Presentation Outline



- ☐ **Background**
- ☐ **The need for MID AMC**
- ☐ **MID AMC Project Plan**
- ☐ **Conclusions**

Conclusions

- The Benefits of the project justifies the efforts and expenditure for the its implementation.
- The benefits are maximized if the implementation is extended to the most of the region States.
- The active participation of MID States by using MID-AMC in trial period and provision of regular feedback about the operation and performance will add value to the success of project.

Conclusions



- States signature of the Memorandum of Agreement MOA will reflect the commitment of the region to the harmonization, integration and coordination with the other regions and on international level.



Thank you !