INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE SECOND MEETING OF MIDANPIRG MIDAMC STEERING GROUP

(MIDAMC STG/2)

(Cairo, Egypt, 10 – 12 March 2015)

The views expressed in this Report should be taken as those of the MIDANPIRG MIDAMC Steering Group and not of the Organization. This Report will, however, be submitted to the MIDANPIRG and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting
and published by authority of the Secretary General

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PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Second meeting of the MID ATS Message Management Center Steering Group (MIDAMC STG/2) was held at the Meeting Room of the ICAO Middle East Regional Office in Cairo, Egypt, from 10 to 12 March 2015.

2. OPENING

2.1 On behalf of Mr. Mohamed R. M. Khonji, the Regional Director of the ICAO Middle East Office, Mr. Raza Gulam, Regional Officer, Communication, Navigation and Surveillance, welcomed the participants to Cairo and wished them a successful and fruitful meeting. He Congratulated the Region and the MIDAMC team for the successful launch and the official operation of the MIDAMC services, that was done on 5 February 2015 after the successfully conducting the MIDAMC training in January 2015.

2.2 Mr. Gulam, highlighted t the importance of the MIDAMC as successful Regional project and urged the steering group to drive the project in order to utilize the MIDAMC facility to the maximum benefit for the region. In closing, he highlighted that that the main activity for this group is the AMHS implementation which is one of the elements in the MID Air Navigation Strategy. Accordingly, the group needs to provide support and closely monitor the AMHS implementation. He thanked the participants for their presence and wished the meeting every success in its deliberations.

3. ATTENDANCE

3.1 The meeting was attended by a total of twenty six (26) participants, from ten (10) States (Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia, Sudan, United Arab Emirates and Tunisia). The list of participants is at the **Attachment A**.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was chaired by Ms. Muna Ribhi Naddaf, Head of AFS Engineering, Civil Aviation Regulatory Commission, Jordan.

4.2 Mr. Raza Gulam RO/CNS was the Secretary of the meeting.

5. LANGUAGE

5.1 The discussions were conducted in English. Documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

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

Agenda Item 2: Follow-up on MIDANPIRG/14 and MSG/4 Conclusions and Decisions relevant to MIDAMC STG

Agenda Item 3: MIDAMC and AMHS Implementation in the MID Region

Agenda Item 4: Enhancement of the MID AFS Network Services

Agenda Item 5: MIDAMC Functions and Tools

Agenda Item 6: Future Work Programme

Agenda Item 7: Any other business

7. CONCLUSIONS AND DECISIONS - DEFINITIONS

7.1 All MIDANPIRG Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

a) **Conclusions** deal with the matters which, in accordance with the Group's terms of reference, merit directly the attention of States on which further action will be initiated by ICAO in accordance with established procedures; and

b) **Decisions** deal with matters of concern only to the MIDANPIRG and its contributory bodies.

8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

DRAFT DECISION 2/1: MIDAMC POSTING ON FORUM

DRAFT CONCLUSION 2/2: PROPOSAL FOR AMENDMENT TO MID FASID – AFTN PLAN

DRAFT CONCLUSION 2/3: AMHS PATH BETWEEN MID AND EUR REGIONS

DRAFT CONCLUSION 2/4: MIDAMC ACCREDITATION PROCEDURE

DRAFT DECISION 2/5: AMHS TABLE THROUGH MIDAMC

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA AND ELECTION OF CHAIRPERSON

1.1 The meeting reviewed and adopted the Provisional Agenda as at Para 6 of the History of the Meeting.

1.2 Ms. Muna Ribhi Naddaf, Head of AFS Engineering, Civil Aviation Regulatory Commission, Jordan, was unanimously elected as the Chairperson of the MIDAMC Steering Group.

REPORT ON AGENDA ITEM 2: FOLLOW-UP ON MIDANPIRG/14 AND MSG/4 CONCLUSIONS AND DECISIONS RELEVANT TO MIDAMC

2.1 The meeting reviewed the progress made with regard to the implementation of the MIDANPIRG/14 and MSG/4 Conclusions and Decisions relevant to MIDAMC as at **Appendix 2A**. The meeting urged States to take necessary measures to expedite the implementation of those Conclusions which have not yet been closed.

REPORT ON AGENDA ITEM 3: MIDAMC AND AMHS IMPLEMENTATION IN THE MID REGION

3.1 The meeting recalled that, the MID Region Air Navigation Strategy was endorsed by the Fourth meeting of the MIDANPIRG Steering Group (MSG/4), as the framework identifying the regional air navigation priorities, performance indicators and targets. The Strategy included tables for all twelve priority, 1 Modules along with their associated elements, applicability, performance indicators, supporting metrics and performance target.

3.2 The meeting noted that three (3) elements have been included in the MID Region Air Navigation Strategy under B0-FICE, two of which the MIDAMC could support in the implementation. The two elements are AMHS Capability and AMHS Implementation/ Interconnection.

3.3 The meeting received an update from Sudan on the AMHS implementation and noted that On 15 of February, Sudan AMHS link with Saudi Arabia was put into operation and the AMHS link with Cairo will be implemented on by December 2015, depending on the upgrade of the NAVISAT network. Sudan will provide the AMHS Post Implementation Review to the CNS SG/7 planned early 2016.

3.4 The meeting encouraged all States connected to Khartoum COM Center to migrate to AMHS links and requested Sudan to provide progress to the CNS SG/7 meeting.

3.5 The meeting noted that I.A.C. has signed a contract with Avitech AG to purchase AMHS system but due to sanctions still not able to implement the system. The meeting encouraged Iran to complete the preparations (IP Links, CAAS address scheme, etc.) in order that when the system is supplied it can be installed and implemented in the shortest possible period.

3.6 The meeting congratulated the MIDAMC team for the official announcement of operation, which commenced from the AIRAC cycle number "142" on 5 February 2015. In this regard the meeting noted that the MIDAMC contacted MID users to update their AMHS and routing tables data on the MIDAMC application. The following States (Bahrain, Egypt, Iran, Saudi Arabia, Sudan and UAE) updated the connections information and provided the routing tables. Accordingly, the meeting urged the rest of the States to update their data in the MIDAMC including the routing table since this was requested by MIDANPIRG/14 conclusion 14/22.

3.7 The meeting noted with appreciation the following updates concerning the AMHS implementation in the MID States and requested MIDAMC to include this updated in their periodic update to the CNS SG/ and the MIDAMC meetings.

a) MIDAMC team supported Sudan to introduce AMHS in Khartoum COM center;

b) Kuwait COM center AMHS system is installed and preparing IP network;

c) Qatar has established a Backup COM center and MIDAMC recommended to Qatar to change the addressing scheme from XF to CAAS;

d) Qatar and UAE conducted tests for the back-up center and agreed to keep connection only with the main center in Qatar;

e) Bahrain and Qatar COM centers have setup a new AMHS link which is on hold;

f) Iraq installed an AMHS system and Network establishment is under process;

g) Iran is under process for establishment of link between Tehran and Baghdad; and

h) Lebanon installed AMHS system and upgrade of links are progressing; Lebanon and Jordan decided to establish an IP network using Site-to-Site VPN technology for testing.

3.8 The meeting discussed the connections for the back-up Com center and was of the view that procedure and handling for the back-up Com Center is internal State issue. However, the meeting agreed that this could be discussed on the MIDAMC forum and presented to the next CNS SG and /or MIDAMC STG meetings, for further study and agreement as deemed necessary.

3.9 The meeting recalled that CAAS addressing scheme is the target addressing scheme when AMHS put into operation. Accordingly, the meeting encouraged States that have not done so, to change the AMHS addressing scheme to CAAS using the pro-forma as in **Appendix 3A** in coordination with the MIDAMC team.

3.10 The meeting noted that AMHS is already implemented in: Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan and UAE, accordingly over achieving the MID AN Strategy target. However the meeting emphasized that rest of the States need to work hard to implement the AMHS.

3.11 The meeting noted that the AMHS is already implemented and interconnected in Seven (7) States (Egypt, Jordan, Oman, Qatar, Saudi Arabia, Sudan and UAE). It was highlighted that the 14% gap with the agreed performance target, is expected to be achieved as soon as Bahrain and Kuwait complete the Interconnection. The meeting urged States that have not yet done so, to complete the interconnection and request support from the MIDAMC, as deemed necessary.

3.12 The meeting updated the status of the two elements from the MID AN Strategy as provided below:

Elements	***Applicability***	***Performance Indicators/Supporting Metrics***	***Targets***	***Status***
AMHS Capability	*All States*	Indicator: % of States with AMHS capability Supporting Metric: Number of States with AMHS capability	70% of States with AMHS capability by Dec. 2017	73% (11 States)
AMHS Implementation /Interconnection	*All States*	Indicator: % of States with AMHS implemented (interconnected with other States AMHS) Supporting Metric: Number of States with AMHS implemented (interconnections with other States AMHS)	60% of States with AMHS interconnected by Dec. 2017	46% (7 States)

3.13 The meeting discussed the difficulties/issues faced in the implementation of the AMHS after procurement and developed the following none extensive list:

- Coordination issues;
- network infrastructure;
- use of VPN for low traffic and testing; and
- first time tests failures.

3.14 The meeting agreed to that the MIDAMC post these difficulties and the possible solutions on the MIDAMC Forum and requested all States to add their comments and use the forum more effectively. The meeting agreed to the following Draft Decision:

DRAFT DECISION 2/1: MIDAMC POSTING ON FORUM

That, MIDAMC Team post the implementation issues/difficulties and possible solutions on the MIDAMC Forum by 30 April 2015.

REPORT ON AGENDA ITEM 4: ENHANCEMENT OF THE MID AFS NETWORK SERVICES

4.1 The meeting noted that according to the study by the MIDAMC, the performance for Baghdad AFTN connections and the connection with the AFI Region require improvement. Accordingly, the meeting suggested additional circuit between Baghdad and Tehran Com Centers and Additional circuit between MID and AFI Regions, mainly due to the missing flight plans. The meeting urged Iraq and Iran to complete the new connection between Baghdad and Tehran Com Centers and requested the ICAO MID Regional Office to coordinate with AFI Region for defining the requirement for additional exit entry point with MID Region

4.2 The meeting recalled, that the CNS SG/6 agreed that the deficiencies related to old AFTN connections be deleted from MANDD, pending the approval of an amendment to the MID FASID to delete these connections from the plan.

4.3 The meeting noted that Lebanon and Jordan are in the final process for the implementation of the long outstanding circuit between Amman and Beirut Com Centres. Accordingly, the meeting agreed that the related deficiencies in both States will not be deleted, and both States agreed to provide the Corrective Action Plans.

4.4 The meeting noted that ANSIG/1 meeting reviewed and updated the MID Regional AFTN plan contained in the MID FASID Doc 9708 to refelect the necessary changes in order to delete those connections that are not implemented since long time and already replaced by other circuits to meet the AFTN requirements in the MID Region. The meeting further updated the AFTN Plan and agreed to the following Draft Conclusion:

DRAFT CONCLUSION 2/2: PROPOSAL FOR AMENDMENT TO MID FASID – AFTN PLAN

That, the ICAO MID Regional Office process a proposal for amendment to the MID ANP, Volume II, to amend the FASID - Table CNS1A as at ***Appendix 4A****, in accordance with standard procedure.*

4.5 The meeting recalled that SITA provided the CNS SG/6 meeting with the status of progress and schedules related to the deployment of the gateway and connectivity to AMHS, and noted that SITA's AMHS Gateway is operational since November 2014 and ready for AMHS interconnections. Every connection will require a SITA IP access to the AMHS gateway using an already available or to be available SITA router.

4.6 The meeting recalled that CNS SG/6 meeting requested SITA to provide the MIDAMC team the list of SITA Users and the AFTN connections in the MID Region and tasked the MIDAMC to develop the plan to migrate to AMHS/SITA Gateway.

4.7 Based on the above, SITA provided the list as at **Appendix 4B**. The meeting reviewed the list and found a lot of discrepancies. Accordingly, the meeting requested SITA to check the information and provide a correct list. Furthermore, according to SITA they are currently Sending to Kuwait, Lebanon, Qatar and UAE and Receiving from Lebanon, Qatar and UAE in this regard both Kuwait and UAE confirmed that they do not have connection with SITA neither they send and receive directly from/to SITA. the meeting agreed that SITA to clarify the exact current sending and receiving Com centres and advise any financial implication with the migration to AMHS.

4.8 The meeting noted that the move to this new communication path for SITA requires AMHS deployment and appropriate interconnections to AMHS on a Regional basis to reduce inter-Regional traffic. Furthermore, SITA informed that currently they receive from and send to all ANSPs within ICAO MID Region.

4.9 SITA analysis showed that the most effective interconnection topology is to have AMHS interconnections with Saudi Arabia and Qatar. The traffic to the other ANSPs can then be routed through the interconnection of other ANSPs to Saudi Arabia and Qatar. In this regard Saudi Arabia did not agree with the topology of the interconnection. Accordingly, the meeting agreed that Jordan could be the host of the other SITA AMHS interconnection.

4.10 The meeting reviewed and updated the "Transition Plan for Interconnection between MID AMHS Network and the SITA Type X Network" and the "Action Plan to Migrate from Gateway Type B to Gateway Type X in Qatar and Jordan as at **Appendices 4C** and **4D.**

4.11 The meeting noted that HLSC/2, agreed that there is a need for a centralized repository of information provided by States and international organizations. This information repository would support the availability of notices to airmen (NOTAMs), aeronautical information circulars (AICs), aeronautical information publication supplements (AIPs) and other types of operational information intended to support the conduct of comprehensive risk assessments related to operations in conflict zones.

4.12 In response to above the meeting noted that entry "ICAO" has been added to ICAO Location Indicator Document 7910. It does not have a star (*) next to it to indicate "not connected to the AFS". In this frame, the meeting pointed out that if there is an intention to send either an AFTN or an AMHS message to such an "ICAO" address, it will never reach the intended recipient. COM centres all around the world do not know who the intended recipient is and consequently where to route the message.

4.13 Based on the above the meeting noted that, EUR Region requested all Regions to provide a response on how ICAO MID Region will deal with this issue. The meeting agreed that the region wait for the details on action by the Region from ICAO HQ, since the ICAO identifier, remains to be assessed in detail over the course of the next few months by the special Task Force.

4.14 The meeting recalled that, the fourth meeting of the MSG Group tasked the MIDAMC STG to develop a plan to implement AMHS communication paths between Jeddah-Vienna, and Bahrain-Vienna before 31 March 2015, to enable the exchange of OPMET data in digital format between the MID and EUR Regions.

4.15 Based on the above, MIDAMC accessed the current AFS interconnection, where Athens and Nicosia are the entry/exit points between the MID and EUR Regions, both of them do not have AMHS system in place so far, however, they plan to implement AMHS in near future.

4.16 To establish an AMHS Network between Jeddah-Vienna and Bahrain-Vienna, the work falls into three dimensions:

1) AMHS Intra-regional connection in the MID Region, which is the AMHS path between Jeddah/Manama COM Centres and the gateways of the MID Region (Cairo, Beirut COM Centers)

2) AMHS Intra-regional connection in the EUR region, which is the path between Vienna COM Center and the gateways of the EUR Region (Athens and Nicosia COM Centers)

3) The Inter-regional connection between the entry/exit point of MID and EUR Regions

4.17 The meeting noted that AMHS path between Jeddah- Cairo COM Centers already exists. Manama and Beirut COM Centers do not exists and should be expedited using the existing bandwidth and it may be increased later if needed. Furthermore, the establishment of an AMHS link inside the MID should be according to the Regional AMHS Implementation plan.

4.18 The meeting recalled that, both Bahrain and Jeddah have CIDIN traffic and the transition from CIDIN to AMHS will require a significant amendment in AFTN, CIDIN and AMHS routing tables not only in the State itself but also in adjacent COM Centers and others in the Network. Therefore, concerned COM Centres and the MIDAMC Operator should identify all dependencies when the CIDIN Relay traffic is taken off a dedicated CIDIN connection in normal routing situations and in all alternate routing cases as well.

4.19 The meeting was informed by Tunis that they have already implemented the AMHS system and will be migrating the link with ROME to AMHS by Dec. 2015. Tunis will implement direct link Tunis-Vienna By Dec 2016. Furthermore Egypt and Tunis will migrate to AMHS by September 2015. Accordingly the meeting agreed to consider Tunis as a back-up plan for the connection of MID ROC Centers and added Tunis in the plan. It was highlighted that Tunis will present WP to the next EUR AFS Group meeting on the subject.

4.20 Based on above, the meeting developed the plan as at **Appendix 4E** and agreed to the following Draft Conclusion:

DRAFT CONCLUSION 2/3: AMHS PATH BETWEEN MID AND EUR REGIONS

That, in order facilitate the establishment of AMHS path between MID and EUR Region and implement the AFS requirements for the ROC centers in the MID Region:

*a) ICAO MID Regional office communication the plan in **Appendix 4E** to concerned by 15 April 2015; and*

b) Bahrain and Lebanon be urged to expedite AMHS Implementation by Dec 2015.

4.21 The meeting was informed that Oman concluded the tests on AMHS with India (Mumbai) and it is under progress with Pakistan (Karachi). Accordingly, the meeting highlighted the importance that Oman provide necessary information being one of the exist/entry with APAC Region.

4.22 The meeting did not have enough information on the AMHS exit/entry with AFI Region, and agreed to discuss in detail all exist/entry for the Region in the next MIDAMC STG meeting. Furthermore, the meeting highlight the importance of coordination with the other ICAO Regions for the implementation of the AFS network.

4.23 The meeting recalled that, the ANSIG/1 meeting urged States to expedite their AMHS implementation and discouraged the implementation of AFTN and CIDIN Circuits specially at International level and agreed to Draft Conclusion 1/9:

DRAFT CONCLUSION 1/9: AFTN/CIDIN AFS CONNECTIVITY AND AMHS IMPLEMENTATION

That State be urged to,

a) *refrain the establishment of new AFTN and CIDIN connections at the International level;*

b) *gradually phase out the current connections based on AFTN or CIDIN standards; and*

c) *expedite their AMHS implementation.*

4.24 The meeting noted that Five (5) COM Centers in the MID Region have CIDIN links (Bahrain, Egypt, Lebanon, Saudi, and UAE), and all these States already have AMHS system in place. Furthermore, based on the plan developed for the AMHS path between MID and EUR Regions all the MID States having CIDIN will migrate to the AMHS. Accordingly, the meeting urged the States that have CIDIN traffic to migrate to AMHS.

4.25 The meeting recalled that the Basic ATS Message Service was primarily conceived for easy intercommunication with users at the AFTN by the gateway facility. However, it includes some enhancement over the legacy AFTN; like length of message, Character set, reliability and integrity of data user.

4.26 The meeting noted that the World Metrological Organization (WMO) initially decided to migrate from alphanumeric codes to BUFR for the representation of Metrological data, therefore, ATS Extended services was introduced to meet the Metrological requirement. Later the WMO decided to use Extensible Markup Language (XML). Since most of ATS systems in the MID can run extended services and specially File Transfer body Part (FTBP), and these services can provide significant operational improvements when used. Accordingly, the meeting agreed that trials be conducted for the use of extended services.

4.27 Based on the above the meeting agreed that, as an initial step, the trail will be conducted between Jordan and Sudan. However, since these trials have significant impact on the network, the meeting agreed that these trials be conducted on predefined conditions and scenarios. Accordingly, the meeting formed ATS Extended Trial Team composed of volunteer experts from (Egypt, Jordan, Kuwait, Iran, Oman, Saudi Arabia, Sudan and UAE) and agreed that teleconferences be conducted to facilitate the works of the team and to develop the trial plans. The meeting agreed that the Secretariat to facilitate the teleconferences and to invite all MIDAMC STG Members. The names of the experts who will participate in the Teleconference and developing of the plans is at **Appendix 4F**.

4.28 The meeting was apprised of the current Static routes in AFS that do not allow for the automatic failover or redundant paths, so if failure occurs, operators must manually adjust the routes to move data through an alternative path.

4.29 The meeting noted that in order to enhance the availability, reliability of the AFS Network and minimize downtime to the minimum, dynamic routing can be deployed. Dynamic routing protocols can update routing tables in the event of device or interface failure, so if there are multiple possible paths, these protocols will continue to allow data flow. However, to achieve this stage detailed studies and trails are needed to be done. the meeting noted that, in order to participate

in these trials the States should have, among others the following:

a. Backup/Test AMHS System
b. At least two operational AMHS Link
c. Human resources (Network Expert, system engineer, AFS Operator)
d. Vendor support preferable

4.30 The meeting agreed that these capabilities are not available in many States and in order to keep the momentum, the meeting agreed to conduct survey as at **Appendix 4G** ,at the MIDAMC STG member level and decide further actions in the next meeting based on the survey results.

REPORT ON AGENDA ITEM 5: MIDAMC FUNCTIONS AND TOOLS

5.1 The meeting recalled that, the accreditation procedure for the registration of the MIDAMC users was agreed under the following MIDANPIRG/14 Conclusion 14/22, which defined three types of users: MIDAMC Operator, MIDAMC User, and Read-only User. Access to MIDAMC functions varies according to each user category.

5.2 The goal of the procedure is to make sure that only well-identified people with an appropriate level of responsibility are authorised to access the MIDAMC application.

5.3 During the first year of trial and operation, the MIDAMC team received several requests from users outside the ICAO MID Region, who needed to have/create an account on the MIDAMC application. Accordingly, the meeting reviewed and updated a new accreditation procedure as at **Appendix 5A**, and agreed to the following Draft Conclusion:

DRAFT CONCLUSION 2/4: MIDAMC ACCREDITATION PROCEDURE

*That, the accreditation procedure for registering in the MIDAMC be amended as at **Appendix 5A.***

5.4 The meeting noted that MIDAMC Operator uses the official email domains to validate user request to register as read-only users. Accordingly, the meeting reviewed and updated the list of these domains as at **Appendix 5B**.

5.5 The meeting noted that MIDAMC has an agreed Synchronization procedure with the EUR AMC operator to keep information updated on both AMCs. The meeting highlighted the importance of keeping the information in the MIDAMC updated. Accordingly, the meeting urged States that have not updated the information on the MIDAMC to do so.

5.6 The meeting reviewed the com chart for the MID Region, and the connections as at **Appendices 5C** and **5D**, and noted that these can be produced any time using the MIDAMC application.

5.7 The meeting noted with appreciation the MIDAMC team routine tasks on daily basis to support the operations of MIDAMC application and AMHS implementation in the States.

5.8 The meeting was apprised that MIDAMC send the three AMHS tables every AIRAC cycle. However, it was noted that when there is no change in the table this was not sent. In this regard, the meeting noted that some systems installed in the Region require all three tables even if it was not changed. Accordingly, the meeting agreed that the MIDAMC send the three tables every AIRAC cycle and agreed to the following Draft Decision:

DRAFT DECISION 2/5: AMHS TABLE THROUGH MIDAMC

That, the MIDAMC be urged to send the three AMHS tables every AIRAC cycle even if no changes in the tables.

REPORT ON AGENDA ITEM 6: FUTURE WORK PROGRAMME

6.1 The meeting recalled that, through Decision 14/21, MIDANPIRG/14 agreed to the Terms of Reference of the MIDAMC Steering Group (MIDAMC STG).

6.2 The meeting reviewed the MIDAMC STG Terms of Reference (TORs) at **Appendix 6A**, as approved by the MIDANPIRG SG/14 meeting and agreed that they are still valid and current.

6.3 Taking into consideration, the date of the MIDANPIRG/15 meeting (Bahrain, 8-11 June 2015), and the CNS SG/7 meeting in the first Quarter of 2016. The meeting agreed that the MIDAMC STG/3, be tentatively scheduled to be held in second Quarter of 2016; the venue will be Cairo, unless a State is willing to host the meeting.

REPORT ON AGENDA ITEM 7: ANY OTHER BUSINESS

7.1 The meeting noted that MID IP Network project is considered mature and it is under consideration along with other projects under the MID ATM Enhancement Program (MAEP).

APPENDICES

APPENDIX 2A

FOLLOW-UP ACTION PLAN ON MIDANPIRG/14 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
DECISION 14/2: UPDATED OF THE MIDANPIRG PROCEDURAL HANDBOOK That, the Seventh Edition of the MIDANPIRG Procedural Handbook be endorsed as at **Appendix 4.1B** to the Report on Agenda Item 4.1.	Update the MIDANPIRG Procedural Handbook and post it on the web	ICAO	Seventh edition of the Procedural Handbook	Feb. 2014	Completed
CONCLUSION 14/4: ASSISTANCE FOR THE DEVELOPMENT/UPDATE OF THE NATIONAL AIR NAVIGATION PERFORMANCE FRAMEWORK That, ICAO, in coordination with concerned States and Stakeholders (IATA, CANSO, ACI, etc): a) develop a plan for joint missions to identified States to support the development/update of the National Air Navigation Performance Framework in an effective and timely manner; and b) agree on the priorities and plans of action to be reflected in the National Air Navigation Performance Framework to improve the efficiency of air navigation at national and regional level, in accordance with the MID Air Navigation Strategy.	Implement the Conclusion	ICAO States	State Letter Missions to States/ development of National Performance Framework	Feb. 2014 Dec. 2014	Actioned SL AN 1/7-14/124 dated 6 May 2014 One mission was conducted to assist Iran on 7-8 Sep. 2014
CONCLUSION 14/5: MID REGION AIR NAVIGATION PRIORITIES That, a) the ASBU Block 0 Modules prioritization Table at **Appendices 4.1E** to the Report on Agenda Item 4.1 be endorsed as the initial version of the MID ASBU Implementation Plan; and b) the ASBU Block 0 Modules prioritization Table be reviewed on regular basis and be extended to cover Block 1 Modules, as appropriate.	Regular Review	MIDANPIRG/14 MIDANPIRG Subsidiary bodies	ASBU prioritization Table	Dec. 2013 Sep. 2014	Actioned Completed Ongoing

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONCLUSION 14/6: DRAFT MID REGION AIR NAVIGATION STRATEGY That, a) the Draft MID Region Air Navigation Strategy at **Appendix 4.1F** to the Report on Agenda Item 4.1 be: i. endorsed as the initial version of the MID Region Air Navigation Strategy; and ii. further reviewed and completed by the different MIDANPIRG subsidiary bodies b) MID States be urged to: i. develop their National Air Navigation Performance Framework, ensuring the alignment with and support to the MID Region Air Navigation Strategy; ii. incorporate the agreed MID Region Performance Metrics into their National reporting and monitoring mechanisms; and iii. provide the ICAO MID Regional Office, on annual basis, with relevant data necessary for regional air navigation planning and monitoring.	Implement the Strategy	MIDANPIRG/14 MIDANPIRG Subsidiary bodies ICAO States States	Initial version of the Strategy Review and Update Strategy State Letter National Performance Framework Feedback	Dec. 2013 Sep. 2014 Feb. 2014 May 2014 Dec. 2014	Completed (Replaced and superseded by MSG Conclusion 4/3) Strategy endorsed by MSG/4 SL AN 1/7-14/123 dated 6 May 2014 SL AN 1/7–15/036 dated 2 Feb. 2015
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.	Implement the work programme of the MID-AMC STG	MIDANPIRG/14	MID-AMC STG established	Dec. 2013	Completed SL AN 7/5.1-14/084 dated 16 April 2014

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONCLUSION 14/22: MID-AMC OPERATION That, a) States be urged to: i. provide their AFTN/AMHS/CIDIN Routing tables to MID-AMC by 30 March 2014; ii. register users to MID-AMC according to the accreditation procedure defined at **Appendix 4.5B** to the report on Agenda Item 4.5; iii. complete testing of all MID-AMC functions by 30 June 2014; and b) the operation date of the MID-AMC be determined by the MID-AMC Steering Group.	Implement the Conclusion	ICAO States States MID-AMC STG	State Letter Routing Tables Testing/ feedback Operation date	Jan. 2014 Mar. 2014 Jun. 2014 Jun. 2014	Actioned SL AN 7/5.1-14/084 dated 16 April 2014 Reference MSG Conclusion 4/9) Training for MIDAMC conducted in Amman, Jan.2015
DECISION 14/24: DEVELOPMENT AND ENDORSEMENT OF THE MID eANP That, in support to the ICAO efforts to align the regional Air Navigation Plans (ANP) with the Fourth Edition of the Global Air Navigation Plan (GANP) (Doc 9750): a) the development of the MID eANP based on the Council-approved ANP Template, be included in the work programme of the different MIDANPIRG subsidiary bodies; and b) the relevant Parts of the MID eANP be presented, as soon as available, to MSG/4 and/or MIDANPIRG/15 for endorsement.	Implement the Conclusion	MIDANPIRG subsidiary bodies MSG/4 and MIDANPIRG/15	MID eANP Parts	TBD Sep 2014 May 2015	Completed (Replaced and superseded by MSG Conclusion 4/4)

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
CONCLUSION 14/30: ESTABLISHMENT OF MID REGIONAL OPMET CENTRE That, a) Saudi Arabia in coordination with ICAO establish a MID Regional OPMET Centre (ROC) by the first half of 2015 to improve the regional and inter-regional OPMET efficiency; b) Bahrain in coordination with ICAO establish a back-up Regional OPMET Centre (ROC); and c) MID States be encouraged to continue cooperation in the exchange of OPMET data in the MID Region.	Implement the Conclusion	Saudi Arabia in coordination with ICAO Bahrain in coordination with ICAO	Establishment of MID ROC Establishment of back-up MID ROC	Jun. 2015 Jun. 2015	Actioned Implementation plan for the establishment of ROC endorsed by MSG/4.
CONCLUSION 14/32: ELIMINATION OF AIR NAVIGATION DEFICIENCIES IN THE MID REGION That, States be urged to: a) use the MID Air Navigation Deficiency Database (MANDD) for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies; and b) submit a Formal Letter to the ICAO MID Regional Office containing the evidence(s) that mitigation measures have been implemented for the elimination of deficiency(ies) when requesting the elimination of deficiency(ies) from the MANDD.	Implement the Conclusion	ICAO States	State Letter CAP and necessary updates/ evidences	Mar. 2014 When necessary	Actioned SL 2/2-14/109 dated 17 Apr. 2014 SL AN 2/2 - 15/035 dated 2 Feb. 2015

FOLLOW-UP ACTION PLAN ON MSG/4 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
MSG CONCLUSION 4/1: GLOBAL AIR NAVIGATION PLAN (DOC (9750) REVIEW AND UPDATE					Completed
That, States and air navigation stakeholders in the MID Region be urged to:	Implement the Conclusion	ICAO	State Letter	Dec 2014	SL AN 1/5-14/339 dated 23 Dec. 2014
a) review and provide inputs to the questionnaire at Appendix 3A; and		States	Feedback	15 January 2015	
b) provide feedback on the use of the fourth edition of the GANP and its possible improvement before 15 January 2015.					
MSG CONCLUSION 4/3: MID REGION AIR NAVIGATION STRATEGY					Actioned
That,					
a) the MID Air Navigation Strategy at **Appendix 4B** is endorsed as the framework identifying the regional air navigation priorities, performance indicators and targets; and	Implement the Conclusion	MSG/4	AN Strategy	Nov. 2014	
b) MID States be urged to:		ICAO	State Letter	Jan. 15	SL AN 1/7 - 15/035 dated 2 Feb. 2015
i. develop their National Air Navigation Performance Framework, ensuring the alignment with and support to the MID Region Air Navigation Strategy; and		States	National Plans		
ii. provide the ICAO MID Regional Office, on annual basis (by end of November), with relevant data necessary for regional air navigation planning and monitoring.		States	Feedback	On annual basis (Nov.)	

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
MSG CONCLUSION 4/4: DEVELOPMENT OF THE MID eANP That, c) the ANP WG/2 finalize the MID eANP for endorsement by MIDANPIRG/15; and ~~*d)*~~ States be urged to review the MID eANP Volumes I, II and III available on the ICAO MID website, and provide updates/inputs to the ANP WG/2 meeting.	Implement the Conclusion	ANP WG/2 States	Draft MID eANP VOL I, II and III	Dec 2014 Dec 2014	Completed (Refer to ANP WG/2 Draft Conclusion 2/1)
MSG CONCLUSION 4/5: MAEP ESTABLISHMENT That, MAEP be established as an ICAO TCB project with a Project Management Office (PMO) hosted by the ICAO MID Regional Office.	Implement the Conclusion	MSG/4	MAEP establishment	Nov. 2014	Ongoing
MSG CONCLUSION 4/9: LAUNCHING OF THE MID-AMC SERVICE That, a) States, that have not yet done so, be urged to assign their MIDAMC STG members before **30 December 2014**; and *b)* the first AIRAC date following the training of the MID States key users (5 February 2015) be officially declared as the date of operation of the MIDAMC application.	Implement the Conclusion	ICAO States	State Letter	Dec 2014	Completed SL AN 7/5.1-15/041 dated 4 Feb 2015
MSG CONCLUSION 4/21: AMHS ROUTING FROM MID TO EUR REGIONS That, the MID-AMC develop a plan to implement AMHS communication paths between Jeddah-Vienna, and Bahrain-Vienna before **31 March 2015**, to enable the exchange of OPMET data in digital form between the MID and EUR Regions.	Implement the Conclusion	MIDAMC	AMHS Plan	Apr. 2015	Ongoing

CONCLUSIONS AND DECISIONS	FOLLOW-UP	TO BE INITIATED BY	DELIVERABLE	TARGET DATE	REMARKS
DRAFT DECISION 4/4: REVISED TORS OF THE MSG, CNS SG AND PBN SG That, the MIDANPIRG Procedural Handbook be updated to include the revised version of the MSG, CNS SG and PBN SG Terms of Reference (TORs) at **Appendices 7A, 7B** and **7C**, respectively.	Implement the Decision	MIDANPIRG/15	Eighth edition of MIDANPIRG Procedural Handbook	Jun..2015	Ongoing

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APPENDIX 3A

The Common AMHS Addressing Scheme (CAAS)

The Common AMHS Addressing Scheme (CAAS) is defined in the Third Edition of Doc 9705. It is briefly described in the following table.

Attribute	Attribute value	Remark
Country-name (C)	C = "XX", as already obtained by ICAO from ITU-T	
ADMD-name (A)	A = "ICAO", as already registered by ICAO at ITU-T	
PRMD-name (P)	P = a name to be defined by each State/ATSO and registered by ICAO. Such a name will identify a State, an Organization, or an organization within a State.	In the absence of such a name being registered by the State at ICAO, a default value will be used to ensure that the attribute value is always defined. This default value is the ICAO Nationality letters, as may be found in Doc 7910 (see attached tables). In cases where the Nationality letters are ambiguous, a designator made of four characters replaces the Nationality letters.
Organization-name (O)	O = a value corresponding to local/national geographical information, e.g. a region or a geographical area within a State where the user is located.	The syntax and value are to be defined by the considered State/ATSO. The table associating such an organization-name to each ICAO location indicator (4 characters) is registered and published by ICAO (see attached tables).
Organizational-unit-name (OU1)	OU1 = the ICAO location indicator (4 characters) of the considered user;	
Common-name (CN)	Either, CN = the 8-letter AF-address (or AFTN indicator) of the considered user, irrespective of whether it is a direct or indirect user. Or, CN = the 5-letter CIDIN Ax address of the user in case of a CIDIN user being an indirect AMHS user.	

Example: MF AMHS Address of Albi's ARO (belongs to Toulouse region):

/C=XX/A=ICAO/P=France/O=LFBO/OU=LFCI/CN=LFC IZPZX

APPENDIX 4A

TABLE CNS 1A AERONAUTICAL FIXED TELECOMMUNICATIONS NETWORK (AFTN) PLAN

EXPLANATION OF THE TABLE

Column

1 The AFTN Centres/Stations of each State are listed alphabetically. Each circuit appears twice in the table. The categories of these facilities are as follows:
M - Main AFTN COM Centre
T - Tributary AFTN COM Centre
S - AFTN Station

2 Category of circuit:
M - Main trunk circuit connecting Main AFTN communication centres.
T - Tributary circuit connecting Main AFTN communication centre and Tributary AFTN Communications Centre.
S - AFTN circuit connecting an AFTN Station to an AFTN Communication Centre.

3 Type of circuit provided:
LTT/a - Landline teletypewriter, analogue (e.g. cable, microwave)
LTT/d - Landline teletypewriter, digital (e.g. cable, microwave)
LDD/a - Landline data circuit, analogue (e.g. cable, microwave)
LDD/d - Landline data circuit, digital (e.g. cable, microwave)
SAT/a/d - Satellite link, with /a for analogue or /d for digital

4 Circuit signalling speed in bits/s.

5 Circuit protocols

6 Data transfer code (syntax):
ITA-2 - International Telegraph Alphabet No. 2 (5-unit Baudot code).
IA-5 - International Alphabet No. 5 (ICAO 7-unit code).
CBI - Code and Byte Independency (ATN compliant).

7 Remarks

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
BAHRAIN						
BAHRAIN						
ABU DHABI	M		9.6Kbps	CIDIN	IA-5	
BEIRUT	M		9.6Kbps	CIDIN	IA-5	
DOHA	T		64 – 9.6Kbps	None	IA-5	
JEDDAH	M		64 – 9.6Kbps	CIDIN	IA-5	
~~KABUL~~	~~T~~		--	~~None~~		
KUWAIT	M		64 – 9.6Kbps	None	IA-5	
MUSCAT	M		64 – 9.6Kbps	None	IA-5	
SINGAPORE	M		9.6Kbps	None	IA-5	
TEHRAN	M		64 – 9.6Kbps		IA-5	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
EGYPT						
CAIRO	M					
AMMAN	M		64 Kbps	AMHS	IA-5	
ATHENS	M		64 – 9.6Kbps 64 –	CIDIN	IA-5	
BEN GURION	M		9.6Kbps 9.6 Kbps	None	IA-5	
BEIRUT	M		128 Kbps	CIDIN	IA-5	
JEDDAH	M		128-9.6Kbps	AMHS	IA-5	
KHARTOUM	T		9.6Kbps 9.6Kbps	None	IA-5	
NAIROBI	M		64-9.6Kbps	None	IA-5	
TUNIS	~~T~~ M		64-9.6~~19.2~~Kbps	None	IA-5	
TRIPOLI	T		9.6Kbps	None	IA-5	
TRIPOLI	T		9.6Kbps	None	IA-5	STNDBY
DAMASCUS	T			None	IA-5	
ASMARA	T			None	IA-5	
IRAN						
TEHRAN	M					
BAHRAIN	M		64 Kbps	None	IA-5	
KABUL	T		-	-	~~IA-5~~ -	
KUWAIT	M		64 Kbps	None	IA-5	
ABU-DHABI	M		64-9.6 Kbps	None	IA-5	
KARACHI	M		64Kbps	None	IA-5	
ANKARA	M		64Kbps	None	IA-5	
MUSCAT	M		64Kbps	None	IA-5	
DAMASCUS	T		50 BD	None	ITA-2	
BAGHDAD	T		64Kbps	None	IA-5	PLANNED
IRAQ						
BAGHDAD	T		-			
AMMAN	T		2MBps	None	IA-5	VPN
BEIRUT			2MBps	None	IA-5	
KUWAIT	T	SAT	9.6Kbps	None	IA-5	
ANKARA						
JORDAN						
AMMAN						
ABU DHABI	T		2MBps	AMHS		VPN
BAGHDAD	T		2MBps	AMHS	-	VPN Planed
BEIRUT	T		2MBps	AMHS	-	VPN Planed
BEN GURION	M		9.6 Kbps	None	IA-5	
CAIRO	T		64 – 9.6Kbps	AMHS	IA-5	
DAMASCUS	T		64 – 9.6Kbps	None	IA-5	
JEDDAH	M		64Kbps	AMHS		

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
KUWAIT						
KUWAIT	M					
BAHRAIN	T	LDD/d	64 – 9.6Kbps	None	IA-5	
DAMASCUS	M	LDD/a	64- 9.6 Kbps	None	IA-5	
BEIRUT	M	LDD/a	64-9.6 Kbps	None	IA-5	
DOHA	T	LDD/a	64 – 9.6Kbps	None	IA-5	
Hamad-Airport			256Kbps		IA-5	Back-up
KARACHI	M	LDD/d	64-9.6 Kbps	None	IA-5	
TEHRAN	M	LDD/d	64 – 9.6Kbps	None	IA-5	
BAGHDAD	T	SAT/ad	9.6Kbps	None	IA-5	
LEBANON						
BEIRUT	M					
AMMAN	~~T~~ M		2Mbps	AMHS	IA-5	VPN in process Not.Op. VPN
BAGHDAD	T		2Mbps	-	IA-5	
BAHRAIN	M		64-9.6Kbps	CIDIN	IA-5	
CAIRO	M		9.6Kbps	CIDIN	IA-5	
DAMASCUS~~*~~	T		64-9.6Kbps	None	IA-5	
JEDDAH	M		64-19.2Kbps	None	IA-5	
KUWAIT	M		64-9.6Kbps	None	IA-5	
NICOSIA	M		9.6 Kbps	CIDIN	IA-5	
LIBYA						
TRIPOLI	T					
MALTA	T					
TUNIS	M					
BENGHAZI	T					
CAIRO	M		64 – 9.6Kbps	None	IA-5	
KHARTOUM	T		9.6Kps	None	IA-5	
OMAN						
MUSCAT	M					
ABU DHABI	T		64Kbps	AMHS	~~IA-5~~	
BAHRAIN	M		64Kbps	None	IA-5	
MUMBAI	M		64Kbps	None	IA-5	
JEDDAH	M		64Kbps	None	IA-5	
SANA'A	T		100 BD	None	ITA-2	
KARACHI	M		64Kbps	None	IA-5	
TEHRAN	M		64Kbps	None	IA-5	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
QATAR						
DOHA						
BAHRAIN	M		9.6Kbps	None	IA-5	
KUWAIT	M		64-9.6Kbps	None	ITA-2	
ABU DHABI	T		64Kbps	AMHS		
SAUDI ARABIA						
JEDDAH	M					
ADDIS-ABABA	M	SAT	9.6Kbps	None	IA-5	
BAHRAIN	M		64 – 9.6Kbps	CIDIN	IA-5	
BEIRUT	M		64-19.2Kbps	None	IA-5	
CAIRO	M		128–9.6Kbps	AMHS	IA-5	
MUSCAT	M		64 Kbps	None	IA-5	
SANA'A	T	SAT	9.6Kbps	None	IA-5	
AMMAN	M		64Kbps	AMHS	IA-5	
KHARTOUM	T		64Kbps	AMHS	IA-5	
ABUDHABI	T	SAT	64Kbps	AMHS	IA-5	
NICOSIA	M		64Kbps	CIDIN	IA-5	
SUDAN						
KHARTOUM	T					
ADDIS ABABA	M		9.6Kbps	None	IA-5	
ASMARA	T		9.6Kbps	~~X21~~ None	IA-5	
CAIRO	M		9.6Kbps	~~X21~~ None	IA-5	
JEDDAH	M		64Kbps	AMHS	IA-5	
TRIPOLI	T		9.6Kbps	~~X21~~ None	IA-5	
NDJAMENA	M		9.6Kbps	~~X21~~ None	IA-5	
SYRIA						
DAMASCUS						
ATHENS	M		2 X 50 BD	None	ITA-2	
AMMAN	T		64 – 9.6Kbps	None		
BEIRUT	M		64-9.6Kbps ~~50 BD~~	None	ITA-2	
CAIRO	M		9.6Kbps ~~50 BD~~	None	ITA-2	
KUWAIT	M		64-9.6Kbps ~~50 BD~~	None	ITA-2	
TEHRAN	T		50 BD	None	ITA-2	

State/Station	Category	Requirement				Remarks
		Type	Signalling Speed	Protocol	Code	
1	2	3	4	5	6	
UAE						
ABU DHABI	M					
BAHRAIN	M		9.6Kbps	CIDIN	IA-5	
AMMAN	T	VPN	2 Mbps(64)	AMHS	IA-5	
MUSCAT	M		64Kbps	AMHS	IA-5	
DOHA	T		64Kbps	AMHS	IA-5	
TEHRAN	M		~~64~~ 9.6Kbps	None	IA-5	
JEDDAH	T	SAT	64Kbps	AMHS	IA-5	
YEMEN						
SANA'A						
JEDDAH	M		9.6Kbps	None	IA-5	
MUSCAT	M		100Kbps	None	IA-5	

- END -

APPENDIX 4B

SITA Users in the ICAO MID Region

2 first letters	3 first letters	AFTN Address	Used in SiTA to AFTN messages as	Used in AFTN to SITA messages as	Comment	SITA Code
HE	HEC	HECASITX	Originator		SITA	
HE	HEC	HECAAFRK	Originator		Air France	AF
HE	HEC	HECAMSRO	Originator		Egyptair	MS
HE	HEC	HECASVAO	Originator		Saudi Arabian Airlines	SV
OB	OBB	OBBBSITX	Originator		SITA	
OB	OBB	OBBISITX	Originator		SITA	
OB	OBB	OBBIGFAO	Originator		Gulf Air	GF
OB	OBD	OBDBUAEK	Originator		Emirates Airline	EK
OE	OEJ	OEJNSITA	Originator		SITA	
OE	OEJ	OEJNSITX	Originator		SITA	
OE	OEJ	OEJNSVAN		SITA Recipient		
OE	OEJ	OEJDSVAO	Originator		Saudi Arabian Airlines	SV
OE	OEJ	OEJNSVAO	Originator		Saudi Arabian Airlines	SV
OE	OEJ	OEJNSVAX	Originator		Saudi Arabian Airlines	SV
OE	OER	OERKSVAC	Originator		Saudi Arabian Airlines	SV
OI	OIF	OIFMIRAX	Originator		Iran Air	IR
OI	OII	OIIEIARO	Originator		Iliamna Air Taxi	V8
OI	OII	OIIEIRAO	Originator		Iran Air	IR
OI	OII	OIIIIRA0	Originator		Iran Air	IR
OI	OII	OIIIIRAO	Originator		Iran Air	IR
OI	OII	OIIIIRAZ	Originator		Iran Air	IR
OI	OII	OIIIIRMX	Originator		Mahan Airlines	WS
OI	OII	OIIIKACT	Originator		Kuwait Airways	KU
OI	OII	OIIISVAX	Originator		Saudi Arabian Airlines	SV
OI	OII	OIIRIRAO	Originator		Iran Air	IR
OI	OIN	OINGIRAK	Originator		Iran Air	IR
OI	OIN	OINGIRAO	Originator		Iran Air	IR
OJ	OJA	OJAIRJAO	Originator		Royal Jordanian	RJ
OL	OLB	OLBAAFKK		SITA Recipient		
OL	OLB	OLBAAFRK		SITA Recipient		
OL	OLB	OLBAAICX		SITA Recipient		
OL	OLB	OLBAAIXX		SITA Recipient		
OL	OLB	OLBAAPZX		SITA Recipient		
OL	OLB	OLBAAZKK		SITA Recipient		
OL	OLB	OLBABAKO		SITA Recipient		
OL	OLB	OLBADAAP		SITA Recipient		
OL	OLB	OLBAEKAP		SITA Recipient		
OL	OLB	OLBAEKKZ		SITA Recipient		
OL	OLB	OLBAGFAP		SITA Recipient		

OL	OLB	OLBAIMJX		SITA Recipient		
OL	OLB	OLBAIRQX		SITA Recipient		
OL	OLB	OLBAKKBA		SITA Recipient		
OL	OLB	OLBAKKRJ		SITA Recipient		
OL	OLB	OLBAKLKK		SITA Recipient		
OL	OLB	OLBAKLKL		SITA Recipient		
OL	OLB	OLBAKPKH		SITA Recipient		
OL	OLB	OLBAKUAP	Originator	SITA Recipient	Used both direction	
OL	OLB	OLBAKWIX		SITA Recipient		
OL	OLB	OLBAKZRJ		SITA Recipient		
OL	OLB	OLBALQAP		SITA Recipient		
OL	OLB	OLBAMEAW	Originator	SITA Recipient	Used both direction	
OL	OLB	OLBAMNJX		SITA Recipient		
OL	OLB	OLBANFFX		SITA Recipient		
OL	OLB	OLBASITX		SITA Recipient		
OL	OLB	OLBASVAK	Originator	SITA Recipient	Used both direction	
OL	OLB	OLBASVAX		SITA Recipient		
OL	OLB	OLBASVKK	Originator	SITA Recipient	Used both direction	
OL	OLB	OLBATCOB		SITA Recipient		
OL	OLB	OLBATCOM		SITA Recipient		
OL	OLB	OLBATZZX		SITA Recipient		
OL	OLB	OLBAYFYX	Originator	SITA Recipient	Used both direction	
OM	OMA	OMAAETDX	Originator		Etihad Airways	EY
OM	OMD	OMDBALKW	Originator		Srilankan	UL
OM	OMD	OMDBBBCO	Originator		Biman Bangladesh Airlines	BG
OM	OMD	OMDBUAEK	Originator		Emirates Airline	EK
OM	OMD	OMDBUAEV	Originator		Emirates Airline	EK
OM	OMD	OMDBUAEX	Originator		Emirates Airline	EK
OO	OOI	OOIEIRAO	Originator		Iran Air	IR
OS	OSD	OSDIFASD		SITA Recipient		
OS	OSD	OSDIFASX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIGFAS		SITA Recipient		
OS	OSD	OSDIHISX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIIAWX		SITA Recipient		
OS	OSD	OSDIJETX		SITA Recipient		
OS	OSD	OSDIJXSX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIKACK		SITA Recipient		
OS	OSD	OSDIKACR	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIMIXH	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDISAXH		SITA Recipient		
OS	OSD	OSDISITX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDISSXH		SITA Recipient		
OS	OSD	OSDISYRC		SITA Recipient		
OS	OSD	OSDISYRO	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDITARC		SITA Recipient		
OS	OSD	OSDIUASX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIYAYF	Originator	SITA Recipient	Used both direction	

OS	OSD	OSDIYDYX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDIYTYX	Originator	SITA Recipient	Used both direction	
OS	OSD	OSDOJXSX		SITA Recipient		
OS	OSD	OSDISYR0	Originator		Syrian Arab Airlines	RB
OS	OSD	OSDISYRF	Originator		Syrian Arab Airlines	RB

Transition Plan for Interconnection between AMHS and the SITA Type X Network

Task	Task Owner	Date	Status	Note
1. Send the list of SITA AFTN connections in the MID Region that should migrate to AMHS connection to the MID AMC Team	SITA	10/9/2014	Done	SENDING: KUWAIT, LEBANON, QATAR, UAE RECEIVING: LEBANON, QATAR AND UAE
2. Send the list of SITA Users in the MID Region (Including their AFTN address/SITA address) to the MID AMC Team	SITA	27/10/2014	Done	List of addresses at appendix A LIST NOT CORRECT
3. SITA TO PROVIDE THE CORRECT AND UPIDATED LIST	SITA		Ongoing	Result in an updated list of addresses
4. Identify Involved COM Center	MID AMC STG	15/4/2015	Ongoing	DEPEND ON 3
5. Identify Regional SITA Type X Gateway Connections in the MID	MID AMC STG SITA	12/3/2015	Done	Qatar and Jordan are the proposed connections as agreed in the MID AMC STG/2 meeting
6. Create a plan to migrate to the AMHS/SITA gateway	MID AMC STG	12/3/2015	Done	Separate action plans have been developed for each target Gateway
7. Put the first Connection Type X into Operation	Jordan MID AMC STG SITA	1/5/2015 (AIRAC Cycle)		
8. Coordinate Routing Change with affected COM centers	States	28/5/2015		

Transition Plan for Interconnection between AMHS and the SITA Type X Network

	MID AMC STG	(AIRAC Cycle)		
9. Put the Second Gateway connection Type X into Operation	Qatar CAA MID AMC STG	TBD (AIRAC Cycle)		
10. Coordinate Routing Change with affected COM centers	States MID AMC STG	TBD (AIRAC Cycle)		
11. Coordinate the User Migration from AFTN to AMHS	SITA Users MID AMC STG			
12. Assist, Monitor and offer support to MID states and SITA Users	MID AMC STG SITA Operator			

Action Plan to Migrate from Gateway Type B to Gateway Type X in Jordan and Qatar

Gateway Type X in Jordan

Task	References	date	Note
1. Installation and Testing of IPv4 Connection	- IP Infrastructure Tests Guidelines EUR Doc 027	Jun 2015	
2. Develop Configuration document of the AMHS Interoperability Test	-ICAO EUR Doc 020 – Appendix E -ICAO EUR Doc 021	Jul 2015	
3. Installation and testing of Redundant IPv4 Connection	- IP Infrastructure Tests Guidelines EUR Doc 027	Aug 2015	
4. Conduct AMHS Interoperability Test	-ICAO EUR Doc 020 – Appendix E	Aug 2015	
5. Develop Configuration document of the AMHS Pre-operational Test	-ICAO EUR Doc 020 – Appendix F	Sep 2015	
6. Conduct AMHS Pre-operational Test	-ICAO EUR Doc 020 – Appendix F	Sep-Oct 2015	
7. Update routing tables in Jordan AMHS System and migration to Gateway Type X	-MID AMC Manual	Oct 2015	

Action Plan to Migrate from Gateway Type B to Gateway Type X in Jordan and Qatar

Gateway Type X in Qatar

Task	References	date	Note
1. Installation and Testing of IPv4 Connection	- IP Infrastructure Tests Guidelines EUR Doc 027	Jun 2015	
2. Develop Configuration document of the AMHS Interoperability Test	-ICAO EUR Doc 020 – Appendix E -ICAO EUR Doc 021	Jul 2015	
3. Installation and testing of Redundant IPv4 Connection	- IP Infrastructure Tests Guidelines EUR Doc 027	Aug 2015	
4. Conduct AMHS Interoperability Test	-ICAO EUR Doc 020 – Appendix E	Aug 2015	
5. Develop Configuration document of the AMHS Pre-operational Test	-ICAO EUR Doc 020 – Appendix F	Sep 2015	
6. Conduct AMHS Pre-operational Test	-ICAO EUR Doc 020 – Appendix F	Sep-Oct 2015	
7. Update routing tables in Qatar AMHS System and migration to Gateway Type X	-MID AMC Manual	Oct 2015	

APPENDIX 4E

ROC PLAN					
	Task	Timeframe	Assigned to	Champion	Status
	AMHS Intra-regional Trunk Connections				
1	Establish Jeddah – Beirut IP Network	July 2015	Saudi Lebanon	IM MS	
2	Establish Bahrain – Beirut IP Network	Jun 2015	Bahrain Lebanon	YH MS	Already in progress
3	Establish Cairo – Beirut IP Network		Egypt Lebanon	AF/TZ/MR MS	
4	Establish Bahrain – Jeddah IP Network		Bahrain Saudi	IM YH	
5	Perform the Interoperability test between Jeddah and Beirut COM centers	Aug 2015	Saudi Lebanon	IB MS	
6	Perform the Interoperability test between Bahrain and Beirut COM centers	Sep 2015	Bahrain Lebanon	MS YH	
7	Perform the Interoperability test between Cairo and Beirut COM centers	Nov 2015	Egypt Lebanon	AF/TZ/MR MS/EK	Depends on IP network availability
8	Perform the Interoperability test between Bahrain and Jeddah COM centers		Bahrain Saudi	YH IM	
9	Perform the Pre-operational test between Jeddah and Beirut COM centers	Aug 2015	Saudi Lebanon	IM MS	Proposed to be for 14 Days
10	Perform the Pre-operational test between Bahrain and Beirut COM centers	Oct 2015	Bahrain Lebanon	YH MS	
11	Perform the Pre-operational test between Cairo and Beirut COM centers	Dec 2015	Egypt Lebanon	AF/TZ/MR MS/EK	
12	Perform the Pre-operational test between Bahrain and Saudi COM centers		Bahrain Saudi	YH IM	
13	Place the AMHS link into operation between Jeddah and Beirut COM centers, and updating the Routing tables	17/9/2015	Saudi Lebanon MID AMC	IM MS/EK MN	
14	Place the AMHS link into operation between Bahrain and Beirut COM centers , and updating the Routing tables	12/11/2015	Bahrain Lebanon MID AMC	YH MS/EK MN	
15	Place the AMHS link into operation between Cairo and Beirut COM centers, and updating the Routing tables	10/12/2015	Egypt Lebanon MID AMC	AF/TZ/MR MS/EK MN	
16	Place the AMHS link into operation between Jeddah and Bahrain COM centers, and updating the Routing tables		Bahrain Saudi MID AMC	YH IM MN	
17	Evaluate the Trunks	Jun 2016	Bahrain	YH	Depends on

	connections bandwidth and increase it if required between (Bahrain, Beirut, Cairo and Jeddah)		Beirut Cairo Jeddah	MS/EK AF/TZ IM	testing of digital data exchanged
	The AMHS Interconnection with EUR Region Depends on Nicosia and Athens				
18	Establish Cairo – Tunis IP Network	May 2015		AF/TZ/MR IB/MA	
19	Establish Nicosia – Beirut IP Network	June 2016		MS/EK	Lebanon ready
20	Establish Nicosia – Jeddah IP Network	June 2016		IM	Saudi Arabia ready
21	Establish Bahrain – Nicosia IP Network			YH	
22	Establish Cairo – Athens IP Network			AF/TZ/MR	Egypt Ready
23	Perform the Interoperability test between Cairo and Tunis COM centers	June 2015		AF/TZ/MR IB/MA	
24	Perform the pre operational test between Cairo and Tunis COM centers	June 2015		AF/TZ/MR IB/MA	
25	Place the AMHS link into operation between Cairo and Tunis COM centers, and updating the Routing tables	23/7/2015		AF/TZ/MR IB/MA	
26	Perform the Interoperability test between Athens and Cairo COM centers			AF/TZ/MR IB/MA	
27	Perform the Interoperability test between Bahrain and Nicosia COM centers			YH	
28	Perform the Interoperability test between Nicosia and Jeddah COM centers			IM	
29	Perform the Interoperability test between Nicosia and Beirut COM centers			MS/EK	
30	Perform the Pre-operational test between Athens and Cairo COM centers			AF/TZ/MR	
31	Perform the Pre-operational test between Bahrain and Nicosia COM centers			YH	
31	Perform the Pre-operational test between Nicosia and Beirut COM centers			MS/EK	
32	Perform the Pre-operational test between Nicosia and Jeddah COM centers			IM	
33	Place the AMHS link into operation between Athens and Cairo COM centers, and			MID AMC AF/TZ/MR	

	updating the Routing tables				
34	Place the AMHS link into operation between Bahrain and Nicosia COM centers , and updating the Routing tables			MID AMC YH	
35	Place the AMHS link into operation between Nicosia and Jeddah COM centers, and updating the Routing tables			MID AMC IM	
36	Place the AMHS link into operation between Nicosia and Beirut COM centers, and updating the Routing tables			MS/EK	
37	Evaluate the inter-region connections bandwidth and increase it if required			MID AMC	
38	Transition of all regional AFTN/CIDIN Connections to AMHS	Q1, 2017	All MID States		

Champions:
Bahrain: (YH: Yaseen Hasan)
Egypt: (AF: Ahmed Farghally / TZ: Tarek Zaki / MR: Mohamed Mohamed)
Lebanon: (MS: Mohamad Saad / EK: Elias El-Khoury)
Saudi Arabia: (IM: Mr. Ibraheem Mohamed Basheikh)
Tunis: IB: Issam Bouzid / MA: Mr. Mohamed Ali)
MID AMC/Jordan: MN: Muna Ribhi Alnadaf

APPENDIX 4F

ATS extended Services Trial Team

(ASTT)

S/N	State	Name	Title	Email	Tel. and	Mobile
1	Egypt	Mohamed Ramzy Mohamed	Director of AFTN/AMHS	mrma_eg@yahoo.com	+20-22657981	+201007736780
2	Egypt	Tarek zaky ahmed	Telecommunication inspector	Tarekzaky6@gmail.com Tarekzaky5@yahoo.com		+201144207020
3	Egypt	Essam Helmy Mohamed Hassanin	Operations Manager for Cairo Com Center	Essamhelmi07@hotmail.com	+20222607946	+201001122505
4	Egypt	Ahmed Mohamed Ahmed Farghaly	Telecommunication Officer	Ahmed_farghaly222@yahoo.com	+20222607946	+201226371808
5	IRAN	Aliakbar Salehi Valujerdi	Senior AFTN/AMHS Training Expert	aasalehi@airport.ir akbarsalehi@gmail.com	+982163146413	+989124202775
6	IRAN	Alireza Mahdavisefat	Senior AFTN/AMHS Network Steering Expert	mahdavi@airport.ir amahdavis@gmail.com	+982161022406	+989203991356
7	Jordan	Mona Alnaddaf	Head	aftn_ais@carc.gov.jo	+962-6 488 1473	+96279 9876710
8	Kuwait	Hasan Abdul Redah Al-Attar	Comm Engineer	ha.alattar@dgca.gov.kw	+965-24721279	+96599449454
9	Oman	Abdullah Al Shaaili		alshaaili@paca.gov.om	+968-24519492	+96899334647
10	Oman	Mashaal Abdul Aziz Al Balushi	AISO – PACA –	Mashaal@paca.gov.om	+968 - 24519120	+96899628244
11	Saudi Arabia	Ibraheem Mohammed Basheikh	Senior Software Engineer	Ibasheikh@gaca.gov.sa	+966-12671771	+966505671231

12	Sudan	Mubark Galaleldin Abuzaid	System Engineer	Mubark_g@hotmail.com	+249-183770001	+249123499394
13	Tunisia	BOUZID Issam	AFTN/AMHS Opération manager, Deputy Project manager AMHS (OACA)	issam.bouzid@oaca.nat.tn	+21658379979	+216583799795
14	U.A.E.	Yousif Al Awadi	Senior Research and Dataset Officer	yawadi@szc.gcaa.ae	+971-25996630	+971504188799

APPENDIX 4G

The Aeronautical Fixed Services (AFS) Network uses pre-defined routes to exchange traffic, the static routing applied at the obsolete technology AFTN, and currently AMHS Network uses the same mechanism for Routing.

To enhance the network Availability and make use of the AMHS capabilities, dynamic Routing can be applied in the ICAO MID Region. However, no Region has not yet deployed dynamic Routing, therefore the second meeting of the MID AMC steering Group agreed on the necessity to conduct a trial to identify the technical requirements and operational consequences. Moreover, the meeting agreed to launch this survey to identify states position to the new concept and their capabilities to participate in the trial

Current Routing Mechanism Performance

1- How long usually does the Operator need to detect a line outage?

a) Immediately	b)less than 10 minutes	c) until the time of channel check
d) Other, please specify ……..		

2- How long does the Operator need to activate new route (alternative route) including line failure detection time, diversion Request, diversion approval and diversion activation?

a) Less than 10 mins	b) Less than 30 mins	c) Less than 1 hour
d) Other, please specify ……..		

3- How does the operator get aware of Line failure/resuming normal?

a) System alarm	b) Continuous Traffic Monitoring
c) Using Dashboard software Like Nagios, uptime, …, etc	
d) Other, please specify ……..	

4- How do you rate the current Diversion Mechanism using static routes?

a) Efficient
b) Satisfied
c) Neutral
d) Bad
e) Very bad

COM centers Capabilities

5- Do you have Backup/ Test AMHS System?

☐ Yes ☐ No

6- How many operational AMHS Links do you have?

☐ No AMHS Links ☐ One ☐ Two or more

Dynamic Routing Trial

7- Do you agree with principle of Dynamic Routing?

☐ Yes ☐ No

8- Would you like to participate/get involved in the Dynamic Routing trial?

☐ Yes ☐ No

9- If you answer (8) is Yes, please assign a point of contact:
Name:
Position
Email:
Telephone:

Comments *(if any)*:----------

Thank you for your time, it's of great help!

APPENDIX 5A

MIDAMC Accreditation of Users

In order to guarantee the confidentiality and integrity of data contained in the MID-AMC database, it is necessary to grant access rights of a given user category only to people who are duly identified and have the right to view and/or modify such data. This process is called accreditation of users, which is defined hereafter for the accreditation of a user in each category:

There are Four MID-AMC user types:

1) Operator which is equivalent to AMC Operator;
2) User which is equivalent to AMC CCC Operator
3) Read-Only User which is equivalent to AMC Read-Only.
4) External MID AMC User

1- **AMC External Operators** on European AMC of the MID Region:

1.1 MID-AMC Operator transferred those users to MID-AMC as MID-AMC Users.

1.2 AMC External operator to register online on MID-AMC website at www.midamc.jo

2- **New MID-AMC Users**:

2.1 State to send letter (email) to ICAO MID Regional Office to designate a new MIDAMC User.

2.2 New MID-AMC User to register online on MID-AMC website at www.midamc.jo

2.3 MIDAMC Operator coordinate with ICAO MID Office to approve the request in 2.2.

3- AMC Read-Only Users on European AMC of the MID Region:

3.1 MID-AMC Operator transferred those users to MID-AMC as MID-AMC Read-only Users.

3.2 AMC Read-only users to register online on MID AMC website at www.midamc.jo

4- **New MIDAMC Read-only** User:

4.1 New MIDAMC Read-Only User to register online on MID AMC website at www.midamc.jo

4.2 MIDAMC Operator coordinates with the MID AMC User of the corresponding COM center (if any) or with the ICAO MID office to approve the request in 4.1.

5- External MIDAMC User:

Users from outside MID Region and act as either CCC on EUR AMC or External AMC user can register on the MIDAMC as **externa**l MIDAMC User:

5.1 register online at www.midamc.jo

5.2 MIDAMC Operator check the registration on EUR AMC to validate the registration

---

APPENDIX 5B

MID Email Domains List

Bahrain:	Ministry of transportation	@mot.gov.bh
Egypt:	Ministry of Civil Aviation	@ civilaviation.gov.eg
Iran:	Civil Aviation Organization Iran Airports Company	@cao.ir @airport.ir
Iraq:	Iraqi Civil Aviation Authority	@iraqcaa.com
Jordan:	Civil Aviation Regulatory Commission	@carc.gov.jo
Kuwait:	Directorate General of Civil Aviation	@dgca.gov.kw
Lebanon:	Directorate general of Civil Aviation	@dgca.gov.lb @beirutairport.gov.lb @lebcaa.com
Libya:	Libyan Civil Aviation Authority	@caa.ly
Oman:	**Public authority for Civil Aviation**	@paca.gov.om
Qatar:	Civil Aviation Authority	@caa.gov.qa
Saudi:	General Authority of civil Aviation	@gaca.gov.sa
Sudan:	Civil Aviation Authority	@scaa.gov.sd
Syria:	Syrian Civil Aviation Authority	@scaa.sy
UAE:	General Civil Aviation Authority	@gcaa.gov.ae @szc.gcaa.ae
Yemen:	Civil Aviation and Metrological Authority	@camayemen.com

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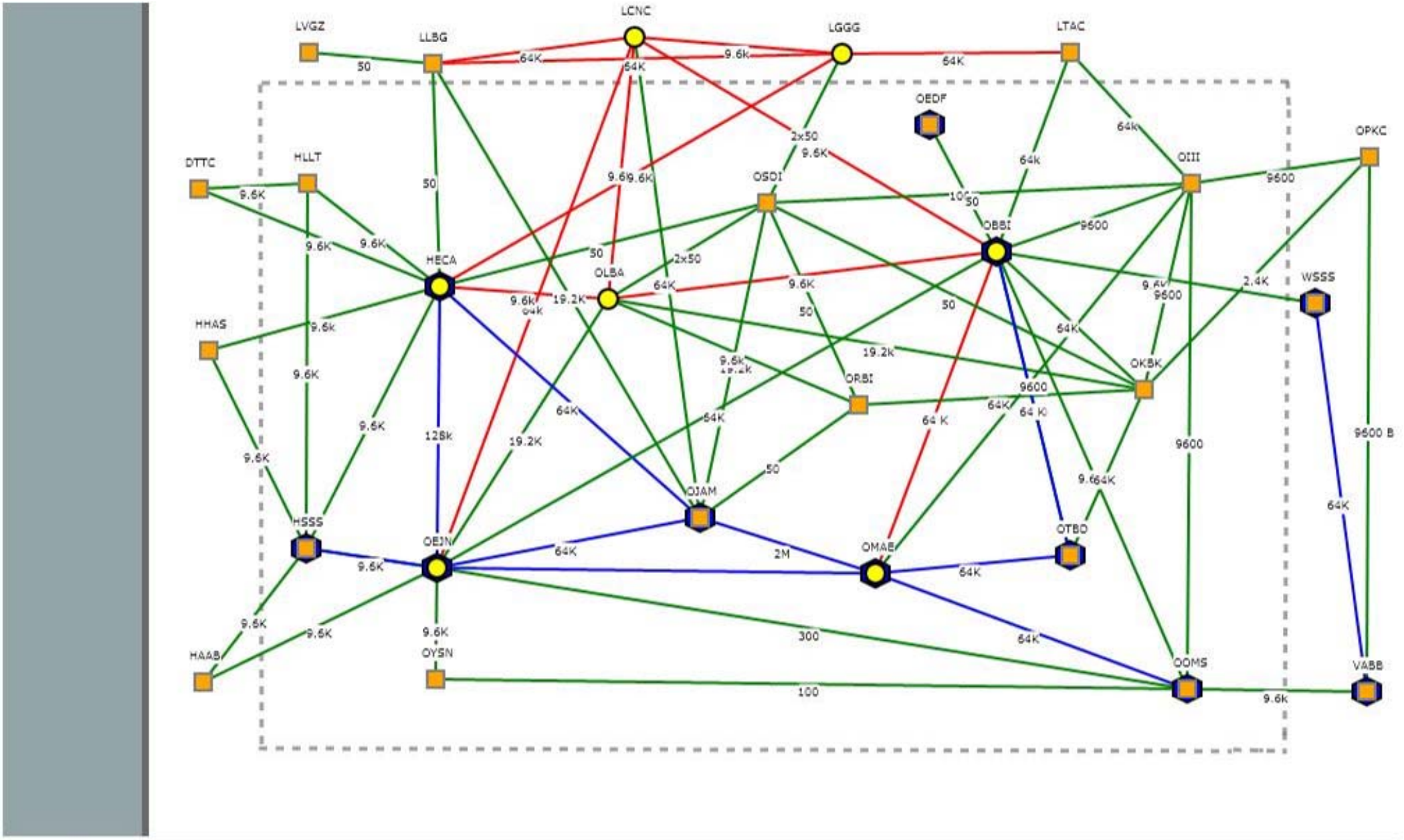
LCNC
LVGZ
LLBG
LGGG
LTAC
OEDF
OPKC
DTTC
HLLT
OSDI
OIII
OBBI
HECA
OLBA
WSSS
HHAS
ORBI
OKBK
OJAM
HSSS
OEJN
OMAE
OTBD
HAAB
OYSN
OOMS
VABB
CIDIN/AFTN COM Centre
AFTN COM Centre
AMHS COM Centre
9.6k CIDIN Link with Line Speed
9.6k AFTN Link with Line Speed
Fully Meshed Island
9.6k AMHS-CEMU Link with Line Speed
9.6k CIDIN-CEMU Link with Line Speed
9.6k AMHS Link with Line Speed
Path

Network Inventory

Background Area [HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OMAE | Location: EMIRATES FIR | Country: United Arab Emirates | HOME | SEARCH

MD Common Name: UAE | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: UAE

MTA Name: OMAE-MTA | ATS Message Server

Maximum Content Length: 15700

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent: 1440 | Non Urgent: 1440 | Normal: 1440 | Report: 1440

AFTN/AMHS Gateway

Currently Authorized Message Length: 1800

Maximum Number of Addresses: 512

Converted General-Text Body Parts

ISO 646 | ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active
AMHS/TCP-I			"P1" - 0x5031	192.168:131.93::102	

Created by: sara20061 | Created on: 2015/03/05 14:00:36 | Last Modified by: sara20061 | Last Modified on: 2015/03/05 14:02:21

Network Inventory

Operational Area [HELP]

Persons & Contacts | Com Centres | AFTN/CIDIN | X400/SMTP | VCG's | Connections

Region: MID | COM Centre: HECA | Location: CAIRO/INTL | Country: Egypt | HOME | SEARCH

MD Common Name: HE | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: HE

MTA Name: MTA-HECA-1 | ATS Message Server

Maximum Content Length:

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent | Non Urgent | Normal | Report

AFTN/AMHS Gateway

Currently Authorized Message Length

Maximum Number of Addresses

Converted General-Text Body Parts

ISO 646 | ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active

Created by: jomrn1980 | Created on: 2014/08/21 12:03:50 | Last Modified by: | Last Modified on:

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OJAM

Location: AMMAN/MARKA

Country: Jordan

HOME

SEARCH

MD Common Name: OJ

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OJ

MTA Name: MTA-OJAM-1

ATS Message Server

Maximum Content Length: 20000

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent: 44000 Non Urgent: 44000

Normal: 44000 Report: 44000

AFTN/AMHS Gateway

Currently Authorized Message Length: 20000

Maximum Number of Addresses: 512

Converted General-Text Body Parts

ISO 646 ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active
AMHS/TCP-I				10.100.100.15	☑

Created by: jomrn1980

Created on: 2014/06/30 13:14:40

Last Modified by: jomrn1980

Last Modified on: 2015/01/01 08:44:57

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OEJN

Location: JEDDAH/KING ABDULAZIZ

Country: Saudi Arabia

HOME

SEARCH

MD Common Name: SAUDI ARABIA

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: SAUDI ARABIA

MTA Name: MTA-OEJN -1

ATS Message Server

Maximum Content Length: 1048576

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent: 1440 Non Urgent: 1440

Normal: 1440 Report: 1440

AFTN/AMHS Gateway

Currently Authorized Message Length: 15700

Maximum Number of Addresses: 512

Converted General-Text Body Parts

ISO 646 ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active

Created by: jomrn1980

Created on: 2014/08/21 13:21:31

Last Modified by: sara20061

Last Modified on: 2015/02/10 13:57:28

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OLBA | Location: BEIRUT/BEIRUT INTL | Country: Lebanon | HOME | SEARCH

MD Common Name: OL | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OL

MTA Name: MTA-OLBA-1 | ATS Message Server

Maximum Content Length: 2000000

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent: 360 | Non Urgent: 8640 | Normal: 2880 | Report: 2880

AFTN/AMHS Gateway

Currently Authorized Message Length: 64000

Maximum Number of Addresses: 512

Converted General-Text Body Parts: ISO 646 | ISO 8859-1

Operational Status: NON OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active
AMHS/TCP-I			0x544350		

Created by: sara20061 | Created on: 2015/03/05 12:24:53 | Last Modified by: sara20061 | Last Modified on: 2015/03/05 12:44:50

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OOMS

Location: MUSCAT/MUSCAT INTL

Country: Oman

HOME

SEARCH

MD Common Name: OO

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OO

MTA Name: MTA-OOMS-1

ATS Message Server

Maximum Content Length:

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent: Non Urgent:

Normal: Report:

AFTN/AMHS Gateway

Currently Authorized Message Length:

Maximum Number of Addresses:

Converted General-Text Body Parts

ISO 646 ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active

Created by: jomrn1980

Created on: 2014/06/30 13:58:14

Last Modified by:

Last Modified on:

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: HSSS | Location: KHARTOUM | Country: Sudan | HOME | SEARCH

MD Common Name: HS | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: HS

MTA Name: MTA-HSSS-1 | ATS Message Server

Maximum Content Length: 2000000

Extended Encoded Information Types in Support of:

- IA5
- FTBP
- General Text Body Part(ISO 646)
- General Text Body Part(ISO 8859-1)

Messages Lifetime (Minutes):

Urgent	360	Non Urgent	8640
Normal	2880	Report	2880

AFTN/AMHS Gateway

Currently Authorized Message Length: 64000

Maximum Number of Addresses: 512

Converted General-Text Body Parts: ISO 646 | ISO 8859-1

Operational Status: OP

Protocol Capabilities

Protocol	P-SEL	S-SEL	T-SEL	Network Address (NSAP or IP)	Active

Created by: jomrn1980 | Created on: 2014/08/21 12:36:42 | Last Modified by: mubark_g | Last Modified on: 2015/02/25 09:11:41

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OJAM

Location: AMMAN/MARKA

Country: Jordan

HOME

SEARCH

MD Common Name: OJ

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OJ

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	HECA	AMHS/TCP-I		Leased Line	64K	JTC	☑		–
	LCNC	CONV. AFTN		Digital Leased Line	64K	Batelco/CYTA	☑		–
	LLBG	CONV. AFTN		AFTN	19.2K		☑		–
	OEJN	AMHS/TCP-I		Leased Line	64K	STC	☑		–
	OMAE	AMHS/TCP-I		VPN	2M		☑		–
	ORBI	AFTN X25			50		☐		–
	OSDI	CONV. AFTN			19.2k		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	OLBA	AMHS	10.100.100.15	VPN	2MHz		☐	Add	–
	ORBI	AMHS/TCP-I		VSAT			☐	Change	–
	ORBI	CONV. AFTN		VSAT			☐	Add	–

REPORT

Network Inventory

Operational Area [HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OBBI | Location: BAHRAIN INTERNATIONAI | Country: Bahrain | HOME | SEARCH

MD Common Name: OB | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OB

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	LCNC	CIDIN PVC			9.6K		☑		–
	LTAC	CONV. AFTN		Digital Leased Line	64k		☑		–
	OEDF	AFTN X25			100		☑		–
	OEJN	CONV. AFTN		SYNC	64K	STC	☑		–
	OIII	CONV. AFTN			9600		☑		–
	OKBK	CONV. AFTN			64K		☑		–
	OLBA	CIDIN PVC			9.6K		☑		–
	OMAE	CIDIN PVC			64 K		☑		–
	OOMS	AFTN X25			9.6K		☑		–
	OTBD	AFTN X25			1200		☑		–
	OTBD	AMHS			64 K		☑		–
	WSSS	AFTN X25		AFTN X.25	9.6K		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	LCNC	CIDIN PVC		Digital Leased Line	64K	Batelco/CYTA	☐	Add	–
	OEJN	AMHS			64K		☐	Change	–
	OLBA	AMHS		VPN			☐	Add	–
	WSSS	AMHS/TCP-I		IPS	64K		☐	Add	–

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: HECA | Location: CAIRO/INTL | Country: Egypt | HOME | SEARCH

MD Common Name: HE | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: HE

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	DTTC	AFTN X25		Leased Line	9.6K		☑		–
	HHAS	AFTN X25			9.6k		☑		–
	HKNA	CONV. AFTN			9.6k		☑		–
	HLLT	CONV. AFTN			9.6K		☑		–
	HSSS	CONV. AFTN		asynch	9.6K	NAFISAT	☑		–
	LGGG	CIDIN PVC			9.6K		☑		–
	LLBG	CONV. AFTN		AFTN	50		☑		–
	OEJN	AMHS/TCP-I		Leased Line	128k	PTT	☑		–
	OJAM	AMHS/TCP-I		Leased Line	64K	JTC	☑		–
	OLBA	CIDIN SVC			9.6k		☑		–
	OSDI	CONV. AFTN			50		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	DTTC	AMHS/TCP-I		Leased Line	64k	TUNISIE TELECOM	☐	Change	–
	HSSS	AMHS		TCP		telecom company Or NAFISAT	☐	Add	–

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OIII

Location: TEHRAN/MEHRABAD INTL

Country: Iran, Islamic Republic of

HOME

SEARCH

MD Common Name: OI

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OI

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	LTAC	CONV. AFTN			64k		☑		–
	OBBI	CONV. AFTN			9600		☑		–
	OKBK	CONV. AFTN			9600		☑		–
	OMAE	CONV. AFTN			9600		☑		–
	OOMS	CONV. AFTN			9600		☑		–
	OPKC	CONV. AFTN			9600		☑		–
	OSDI	CONV. AFTN			50		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: ORBI | Location: BAGHDAD INTERNATIONA | Country: Iraq | HOME | SEARCH

MD Common Name: OR | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OR

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OJAM	AFTN X25			50		☐		–
	OKBK	AFTN X25			64K		☑		–
	OLBA	AFTN X25			9.6k		☐		–
	OSDI	AFTN X25			50		☐		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	OJAM	AMHS/TCP-I		VSAT			☐	Change	–
	OJAM	CONV. AFTN		VSAT			☐	Add	–

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OEJN

Location: JEDDAH/KING ABDULAZI

Country: Saudi Arabia

HOME

SEARCH

MD Common Name: SAUDI ARABIA

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: SAUDI ARABIA

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OBBI	AFTN X25			100		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OEDF

Location: DAMMAM/KING FAHD INTI

Country: Saudi Arabia

HOME

SEARCH

MD Common Name: SAUDI ARABIA

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: SAUDI ARABIA

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OBBI	AFTN X25			100		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area [HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OKBK | Location: KUWAIT/INTL AIRPORT | Country: Kuwait | HOME | SEARCH

MD Common Name: OK | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OK

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OBBI	CONV. AFTN			64K		☑		–
	OIII	CONV. AFTN			9600		☑		–
	OLBA	CONV. AFTN			19.2k		☑		–
	OPKC	CONV. AFTN			2.4K		☑		–
	ORBI	AFTN X25			64K		☑		–
	OSDI	CONV. AFTN			50		☑		–
	OTBD	AFTN X25			64K		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OLBA | Location: BEIRUT/BEIRUT INTL | Country: Lebanon | HOME | SEARCH

MD Common Name: OL | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OL

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	HECA	CIDIN SVC			9.6k		☑		--
	LCNC	CIDIN SVC			9.6k		☑		--
	OBBI	CIDIN PVC			9.6K		☑		--
	OEJN	CONV. AFTN		ASYNC	19.2K	STC	☑		--
	OKBK	CONV. AFTN			19.2k		☑		--
	ORBI	AFTN X25			9.6k		☐		--
	OSDI	CONV. AFTN			2x50		☑		--

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	OBBI	AMHS		VPN			☐	Add	--
	OEJN	AMHS		Leased Line	256 Kbps		☐	Add	--
	OJAM	AMHS	10.100.100.15	VPN	2MHz		☐	Add	--

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: HLLT

Location: TRIPOLI (TRIPOLI INTL)

Country: Libyan Arab Jamahiriya

HOME

SEARCH

MD Common Name: HL

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: HL

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	DTTC	CONV. AFTN		Leased Line	9.6K		☑		–
	FTTT	CONV. AFTN			19200		☑		–
	HECA	CONV. AFTN			9.6K		☑		–
	HSSS	CONV. AFTN		asynch	9.6K	NAV SAT	☑		–
	LIII	CONV. AFTN			64K	PTT Router	☑		–
	LMML	CONV. AFTN		Digital	2.4K		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area [HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: OOMS | Location: MUSCAT/MUSCAT INTL | Country: Oman | HOME | SEARCH

MD Common Name: OO | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: OO

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OBBI	AFTN X25			9.6K		☑		–
	OEJN	CONV. AFTN		ASYNC	300	PTT	☑		–
	OIII	CONV. AFTN			9600		☑		–
	OMAE	AMHS/TCP-I			64K		☑	AMHS Link	–
	OYSN	AFTN X25			100		☑		–
	VABB	CONV. AFTN		64K Leased Line	9.6k		☑	AFTN/IP	–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	VABB	AMHS/TCP-I		IPS	64K		☐	Change	–

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region	COM Centre	Location	Country		
MID	OTBD	DOHA INTERNATIONAL	Qatar	HOME	SEARCH

MD Common Name	Country-Name	ADMD-Name	PRMD-Name
OT	XX	ICAO	OT

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OBBI	AFTN X25			1200		☑		–
	OBBI	AMHS			64 K		☑		–
	OKBK	AFTN X25			64K		☑		–
	OMAE	AMHS/TCP-I			64K		☑	Bilaterally agreed	–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID | COM Centre: HSSS | Location: KHARTOUM | Country: Sudan | HOME | SEARCH

MD Common Name: HS | Country-Name: XX | ADMD-Name: ICAO | PRMD-Name: HS

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	FTTT	CONV. AFTN		asynch	9.6K	NAFISAT	☑		--
	HAAB	CONV. AFTN		asynch	9.6K	NAFISAT	☑		--
	HECA	CONV. AFTN		asynch	9.6K	NAFISAT	☑		--
	HHAS	CONV. AFTN		asynch	9.6K	NAFISAT	☑		--
	HLLT	CONV. AFTN		asynch	9.6K	NAV SAT	☑		--
	OEJN	CONV. AFTN		ASYNC	9.6K	NAFISAT	☑		--
	OEJN	AMHS		tcp		telecom company	☑	active from 15/02/2015	--

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	
	HECA	AMHS		TCP		telecom company Or NAFISAT	☐	Add	--

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OSDI

Location: DAMASCUS/INTL

Country: Syrian Arab Republic

HOME

SEARCH

MD Common Name: OS

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OS

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	HECA	CONV. AFTN			50		☑		–
	LGGG	CONV. AFTN			2x50		☑		–
	OIII	CONV. AFTN			50		☑		–
	OJAM	CONV. AFTN			19.2k		☑		–
	OKBK	CONV. AFTN			50		☑		–
	OLBA	CONV. AFTN			2x50		☑		–
	ORBI	AFTN X25			50		☐		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

Network Inventory

Operational Area

[HELP]

Persons & Contacts | Com Centres | AFTN / CIDIN Capabilities | AMHS Capabilities | VCG's | Connections

Region: MID

COM Centre: OYSN

Location: SANAA/INTL

Country: Yemen

HOME

SEARCH

MD Common Name: OY

Country-Name: XX

ADMD-Name: ICAO

PRMD-Name: OY

Existing Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Remark	
	OEJN	CONV. AFTN		ASYNC	9.6K	NAFISAT	☑		–
	OOMS	AFTN X25			100		☑		–

Planned Connections

	Remote COM	Protocol	Network Address	Link Type	Capacity	Supplier	Active	Event Type	

REPORT

APPENDIX 6A

MIDAMC Steering Group
(MIDAMC STG)

1. TERMS OF REFERENCE (TOR)

1.1 The Terms of Reference of the MIDAMC Steering are:

a) to promote the efficiency and safety of aeronautical fixed services in the MID Region through the operation and management, on a sound and efficient basis, of a permanent MID Regional ATS Messaging Management Center (MIDAMC);

b) foster the implementation of the Air traffic service Message handling service in the MID Region through provision of the guidance materials and running facilitation tools, utilizing the MIDAMC;

c) MIDAMC Steering Group will consist of a focal point from each Participating MID State who would represent the State and acts as the Steering Group Member;

d) MIDAMC Steering Group will be responsible for overall supervision, direction, evaluation of the MIDAMC project and will review/update the MIDAMC work plan whenever required; and

e) provide regular progress reports to the CNS SG, ANSIG and MIDANPIRG concerning its work programme.

1.2 In order to meet the Terms of Reference, the MIDAMC Steering Group shall:

a) Develop the accreditation procedure for all users on the MIDAMC;

b) develop and maintain guidance materials for MIDAMC users;

c) discuss and identify solution for operational problems may be arising;

d) provide support/guidance to States for AMHS Implementation, and monitor the AMHS activities;

e) assist and encourage States to conduct trial on Implementation of the ATS extended services, and identify operational requirements;

f) identify the need for any enhancement for the MIDAMC and prepare functional and technical specifications, and define its financial implications;

g) follow-up on ICAO standards and recommendations on the ATS messaging management;

h) define future liabilities and new participating States and ANSPs; and

i) follow-up and review the work of similar groups in other ICAO Regions.

2. COMPOSITION

a) ICAO MID Regional Office;

b) Members appointed by the MIDANPIRG member States; and

c) other representatives, who could contribute to the activity of the Steering Group , could be invited to participate as observers, when required .

LIST OF PARTICIPANTS

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Mr. Ahmed Mohamed Ahmed Farghally	Communication Officer National Air Navigation Services Company Cairo - Egypt
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Mr. Omer Mohamed Ahmed El Galabi	Head of Communication Sudan Civil Aviation Authority SUDAN
UNITED ARAB EMIRATES Mr. Hamad Rashid Al Belushi	Head of ANSP Research and Dataset General Civil Aviation Authority (GCAA) Abu Dhabi - UNITED ARAB EMIRATES
TUNISIA Mr. Issam Bouzid	AFTN/AMHS – Operation Manager Tunisia/Civil Aviation and Airport Office TUNISIA
Mr. Mohamed Ali Ben Salem	Systems and Networks Engineer Tunisia/Civil Aviation and Airport Office TUNISIA

- END -