

STANDARD OPERATING PROCEDURE (SOP) FOR UPDATING AMC AFTN/AMHS ROUTING TABLE IN ASIA/PACIFIC REGION

1. INTRODUCTION

This procedure makes reference to the EUROCONTROL AMC Procedure. At present, AEROTHAI operates as the regional contact point for the AMC operation in the Asia/Pacific (APAC) Region for all ICAO members who operate as Cooperating COM Centre (CCC) Operators or External COM Centre Operators in the APAC Region.

2. Objective of Asia/Pacific AMC Procedure

This procedure is for all ICAO APAC members who operate as CCC Operators / External COM Centre Operators and AEROTHAI as APAC AMC regional contact point to update the AFTN/AMHS Routing Table on the AMC Website.

3. AMC Operational Procedures

3.1 General

This procedure uses the AIRAC cycle as the time reference. The AIRAC cycle is separated into five phases. The interactions between AMC Operator tasks and CCC Operator / External COM Centre Operator tasks are based on the use of triggers and messages in the AMC Bulletin Board.

A general view of the procedure highlighted in all AIRAC cycle phases is provided in the Figure below. The milestones are presented at the end of activities in the procedure.

Current AIRAC Cycle View						
Day in Cycle	Calendar Dates	Data Entry	Data Validation and Table Generation	ACK Phase	ACK Processing	Data Retrieval and Implementation (by CCC)
		by CCC Ext COM / AMC	by AMC	by CCC	by AMC	Data Publication (by AMC)
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						

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Appendix B to the Report

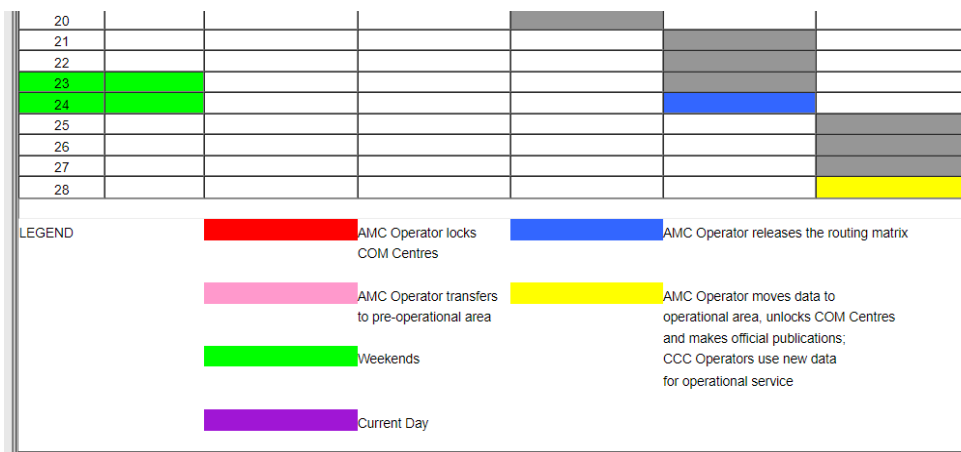


Figure 1: The AMC phases *Cr: OneSky Online Webiste*

Normally, CCC Operators and External COM Operators have a similar role. There are however two significant differences as far as operating procedures are concerned:

- External COM Operators have limited accesses to functions. Typically, in the beginning External COM Operators can participate in network inventory, address management and user capabilities management. However, the access may evolve in the future by the AMC. For example, the AMC Operator may use "Assign Functions to User Types" to assign function to specific group of users.
- Due to the limited access, External COM Operators are not involved in Acknowledge (ACK) phase as described in Figure 1.

3.2 AMC Phases Description following AIRAC Cycle

There are 5 AMC phases in an AIRAC cycle (28 Days cycle) as follows:

Phase	Periods	Task	
		CCC Operators / External COM Operators	AMC Operator (EUROCONTROL)
1. Data Entry	Day 1-7	Data entry in the background area for network inventory, network planning, intra-MD address, user capabilities, and statistics.	Data entry in the background area for MD Register and on behalf of Participating COM Centres, data entry for network inventory, network planning, intra-MD address, user capabilities, statistics.
2. Data Validation and Processing	Day 8-14	Coordination with AMC Operator	Lock COM Centres. Create/modify routing tables. Process statistic data. Propose new data to the CCC/External COM Operators by moving background data into the pre-operational area.
3. Acknowledgement	Day 15-20	Check new data in the pre-operational area and acknowledge (ACK)/no acknowledge (NACK)	None
4. Acknowledgement Processing	Day 21-24	Coordination with AMC Operator	Check all ACKs. If there are NACKs, then coordinate with those COM Centres. Release the routing matrix.

CNS SG/29
Appendix B to the Report

5. Data Retrieval and Implementation	Day 25-28	Retrieve new data in the preoperational area, implement address and routing data at midnight (00.00) UTC in the systems.	Inform the Participating COM Centres about the acknowledged data. Move pre-operational data to operational area on day 28 at 1100 UTC. Unlock the COM centres. Inform the ICAO about address modifications.
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4. Routing Directory update

4.1 Routing Change Procedure

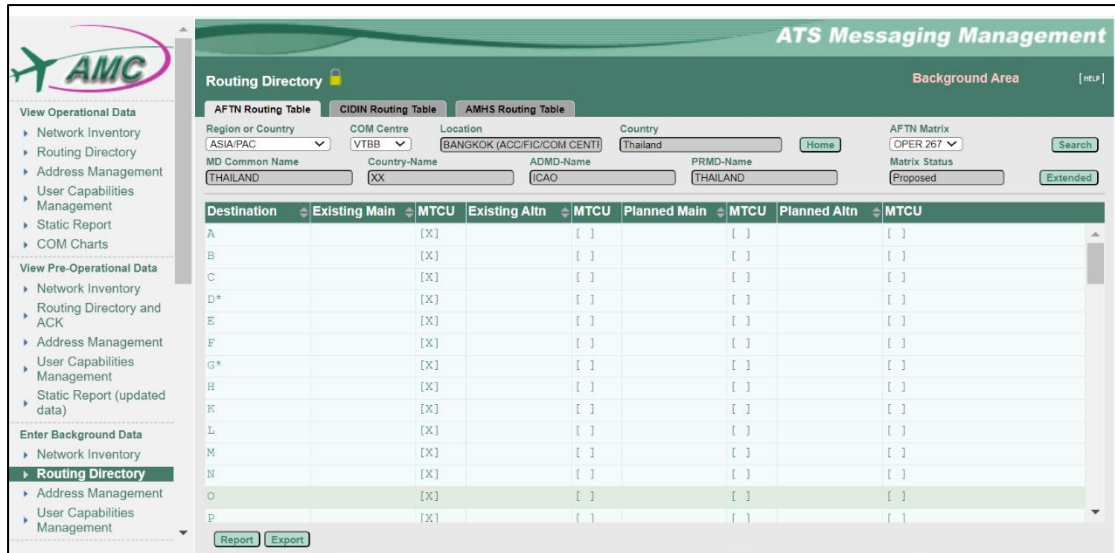
When any parties would like to change AFTN/AMHS routing that effect to other parties, they should be

- Check the whole picture of routing network concerned (COM Chart); the routing, the states
- Coordinate with all concerned parties to discuss the necessary actions. It is recommended to keep ICAO in copy (snibhani@icao.int)
- Make a consensus decision among parties with the checklist form (**Attachment A**)
- Update AMC Form if necessary (**Attachment B**)
- Download the report AFTN/AMHS table from Enter Background Data Area in AMC to get Background_RoutingDirectory_AFTN/AMHS Table
- Update the Excel AFTN/AMHS Table
- Send all documents to APAC AMC regional contact point for updating AMC Routing Tabel by email (Jittima.as@aerorhai.co.th) and also copy to APAC ICAO
- **The documents required:**
 - **The Check list Form**
 - **The AMC Form**
 - **The updated AFTN/AMHS Table (can be downloaded from AMC portal)**
- APAC AMC regional contact point will update the information following the AIRAC cycle described in Figure 1.
- APAC AMC regional contact point will send the updated information (Routing Table report) to confirm with the owner.
- APAC AMC regional contact point will confirm with AMC Operator in the ACK Phase
- The Routing Table will be updated in the next AMC AIRAC cycle
- In case the involved parties are CCC Operators / External COM Operators who can update the AMC themselves, please update the routing table following the AIRAC cycle and email the information updated to APAC AMC regional contact point and APAC ICAO.

4.2 Routing update in AMC for CCC Operators / External COM Operators (In accordance with AMC User Manual)

In the Data Entry phase, use “Enter Background Data Menu --> Routing Directory” menu. There are 3 tables menu bar to input data: AFTN Routing Table, CIDIN Routing Table and AMHS Routing Table.

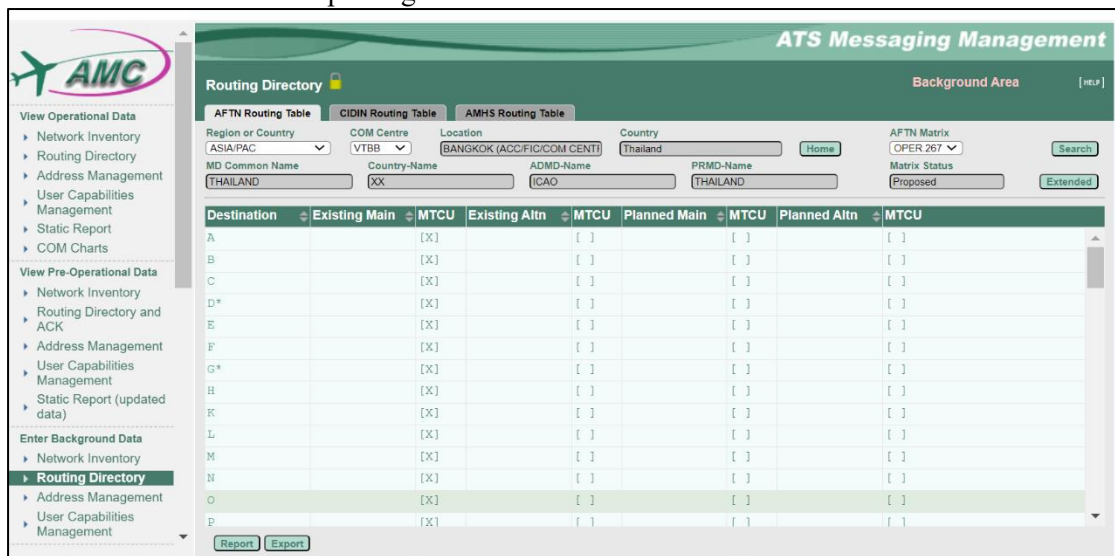
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Appendix B to the Report



To update the tables, a CCC Operators or External COM Operators account is required. Typically, APAC States will focus on AFTN and AMHS Routing Tables

4.2.1 AFTN Routing Table updating

- In the Menu: Regional or country, Choose ASIA/PAC
- In the Menu: COM Centre, Choose your own COM Centre
- Destination column, choose the destination to update. Then the pop-up window will show for updating



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Appendix B to the Report

Destination

1. Present Routing (Existing)
 - Existing Main COM Centre for the Main route
 - Existing Alternate COM Centre for the Alternate route
 - Choose MTCU in case of using gateway for exchanging
 - Choose Coord. in case of necessary for coordination with concerned COM Centres
2. Planned Routing (If there is...)
 - Planned main COM Centre for the main route
 - Planned Alternate COM Centre for the Alternate route
 - Choose MTCU in case of using gateway for exchanging
 - Choose Coord. in case of necessary for coordination with concerned COM Centres
 - Choose Event type: Add, Change, Remove
 - Planned date and other description

4.2.2 AMHS Routing Table updating

- In the Menu: Regional or country, choose ASIA/PAC
- In the Menu: COM Centre, Choose COM Centre
- Destination column choose the PRMD to update, The pop-up window will show for updating

C	ADMD	PRMD	O	COM	M	COM	M	COM	M	COM	M	Comments
XX	ICAO	AG		WSSS	[]	(WMKK)	[]	[]	[]	[]	[]	AFAC (AG)
XX	ICAO	AN		WSSS	[]	(WMKK)	[]	[]	[]	[]	[]	AFAC (AN)
XX	ICAO	ANGOLA		WSSS	[]	(VABB)	[]	[]	[]	[]	[]	AFI (FN)
XX	ICAO	ANSA BH		LIII	[]	(WSSS)	[]	[]	[]	[]	[]	EUR/NAT (LQ)
XX	ICAO	AUSTRALIA		WSSS	[]	(WMKK)	[]	[]	[]	[]	[]	AFAC (Y)
XX	ICAO	AUSTRIA		LIII	[]	(WSSS)	[]	[]	[]	[]	[]	EUR/NAT (LO)
XX	ICAO	AY		WSSS	[]	(WMKK)	[]	[]	[]	[]	[]	AFAC (AY)
XX	ICAO	BANGLADESH		VGHS	[]	(VABB)	[]	[]	[]	[]	[]	AFAC (VG)
XX	ICAO	BELGIUM		LIII	[]	(WSSS)	[]	[]	[]	[]	[]	EUR/NAT (EB)
XX	ICAO	BHUTAN		VQFR	[]	(VABB)	[]	[]	[]	[]	[]	AFAC (VQ)
XX	ICAO	BKFR		VHHH	[]	(WSSS)	[]	[]	[]	[]	[]	EUR/NAT (BK)
XX	ICAO	BOLIVIA		VHHH	[]	(WSSS)	[]	[]	[]	[]	[]	SAM (SL)

CNS SG/29
Appendix B to the Report

Destination

1. Present Routing (Existing)
 - Existing Main COM Centre for the Main route
 - Existing Alternate COM Centre for the Alternate route
 - Choose MTCU in case of using gateway for exchanging
 - Choose Coord. in case of necessary for coordination with concerned COM Centres
2. Planned Routing (If there is...)
 - Planned main COM Centre for the main route
 - Planned Alternate COM Centre for the Alternate route
 - Choose MTCU in case of using gateway for exchanging
 - Choose Coord. in case of necessary for coordination with concerned COM Centres
 - Comment

P.S. See more information from "Help" Function in AMC Website

Attachment A: Routing Table updated Check List Document

Activities List	
1.	The Updated Main Routing List
2.	The Updated Alternate Routing List
3.	The parties concerned for changing Routing List
4.	Activities Check List
●	Coordinate with all concerned <input type="checkbox"/>
●	Fill in AMC Form <input type="checkbox"/>
●	Download the report AFTN/AMHS table <input type="checkbox"/>
●	Update AMC and inform the APAC AMC regional contact point and ICAOor.... <input type="checkbox"/>
●	Send the updated routing table and Routing Table updated Check List Document to APAC AMC regional contact point <input type="checkbox"/>

Sender

State

Date / /

AMC Network Inventory

Part 1 : Persons & Contacts & COM Centre

Persons & Contacts

1	Country	<i>VTBB</i>
2	COM Centre Location	<i>Bangkok COM Centre</i>
3	First name	
4	Surname	
5	Local title	<i>Mr. / Miss / Mrs.</i>
6	Personal Role	<i>Ex.: External COM Centre</i>
7	Phone	
8	Fax	
9	E-mail	
10	Telex	
11	AFTN	
12	SITA	
13	COM Postal Address	
14	Remark (others)	

COM Centre Applications

- AFTN/AMHS Gateway
- ATS Message Server
- CONV AFTN
- OPMET
- SITA
- Gateway to SITA

Part 2 : AFTN Capabilities

Please select one of the following options below:

1. Ax – VCG Mapping Capability
 - Automatic
 - Manual
2. Ax – VCG Mapping Actual Used
 - Automatic
 - Manual
3. Ad – Ax Mapping Capability
 - Automatic
 - Manual
4. Ad – Ax Mapping Actual Used
 - Automatic
 - Manual
5. Long Message Processing
 - Yes
 - No

Part 3 : AMHS Capabilities

ATS Message Server

1. MTA Name:
2. Maximum Content Length:
3. Extended Encoded Information type in Support of:
Please select on the following options
 - IA5
 - FTBP
 - General Text Body Part (ISO646)
 - General Text Body Part (ISO8859-1)
4. Message Lifetime (Minutes)
 - Urgent:
 - Non Urgent:
 - Normal:
 - Report:

AFTN/AMHS Gateway

- Currently Authorized Message Length :
.....
 - Maximum Number of Address :
.....
 - Converted General – Text Body Part
Please select on of the following options
 - ISO646
 - ISO8859-1
5. Protocol Capabilities
 - Protocol
 - P – SEL
 - S – SEL
 - T – SEL
 - Network Address (NSAP or IP) :
.....
 6. Operational Status:
 - Operate
 - Non-operate

Part 4 : Connections

Existing Connections (Only International Connections)

1. Remote COM :
2. Protocol :
 - AMHS/TPO-X.25
 - AFTN X.25
 - AMHS
 - AMHS/TCP-IP
 - CIDIN PVC
 - CIDIN SVC
 - CONV. AFTN
 - WMO
3. Network Address :
.....
4. Link type :*CRV*.....
5. Capacity : *bandwidth available on the link*.....
6. Supplier :
7. Circuit Type:
 - L-Landline
 - M-Multiplexer
 - N-Network
 - R-Radio
 - S-Satellite
8. Active / Not Active
9. Remark :

***1 sheet for 1 connection**

Part 4 : Connections

Planned Connections (Only International Connections)

1. Remote COM
2. Protocol :
 - AMHS/TPO-X.25
 - AFTN X.25
 - AMHS
 - AMHS/TCP-IP
 - CIDIN PVC
 - CIDIN SVC
 - CONV. AFTN
 - WMO
3. Network Address :
.....
4. Link type :*CRV*.....
5. Capacity : *bandwidth available on the link*.....
6. Supplier :
7. Circuit Type:
 - L-Landline
 - M-Multiplexer
 - N-Network
 - R-Radio
 - S-Satellite
8. Active / Not Active
9. Remark :
.....

***1 sheet for 1 connection**