



International Civil Aviation Organization

**THE FIFTH MEETING OF AERONAUTICAL
TELECOMMUNICATION NETWORK (ATN)
IMPLEMENTATION CO-ORDINATION GROUP
OF APANPIRG (ATNICG/5)**



Kuala Lumpur, Malaysia, 31 May – 4 June 2010

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- Agenda Item 8 :** **AMC:**
- AMC Standard Operating Procedure (SOP)
 - AMHS Address Management

UPDATE ON THE ASIA/PACIFIC INTERIM AMHS DATABASE AND AMC

(Presented by Thailand)

SUMMARY

This working paper presents the status update on the Asia/Pacific Interim AMHS Database and AMC operated by AEROTHAI. It also emphasizes the information requested for the AMC operation by AEROTHAI.

1. Introduction

1.1 AEROTHAI has set up a working group within the Aeronautical Network Management Centre (ANMC) to handle the AMHS register information management since 2007. From our recent restructuring in 2010, the ANMC was changed to be Aeronautical Information Management Centre (AIMC) The working group is also the working entity for the operation of the Asia/Pacific Interim AMHS database.

1.2 Regarding coordination with AMC of Eurocontrol, the working group has applied to AMC as the External COM Center and coordinated information from the AMHS Interim database with that of the AMC database.

2. Status Update: Current Operation

2.1 All received information will be inserted in the AEROTHAI AMHS Interim database (www.amhsdb.aerothai.co.th) following by data received from each country through ICAO approval. At the present, AEROTHAI received the information from Cambodia, India, Hong Kong, Macau, Malaysia, Mongolia, Myanmar, Nepal, New Zealand, Pakistan, Singapore, Sri Lanka, Thailand and United States.

2.2 Regarding the action toward the EUROCONTROL AMC Database, after progression following by the previously mentioned procedure, AEROTHAI will input all information received in the AMC Database according to the AMC operation procedure (following AIRAC Cycle). Furthermore, AEROTHAI proposed that contracting states within Asia/Pacific region can submit the information at any given date on the AIRAC Cycle, then AEROTHAI personal will inform the states which AIRAC Cycle the data will be updated.

3. Status Update: Current Operation

3.1 Regarding the information needed for AMC Database, AEROTHAI recommended that the states consider information in the following 3 parts and submit their information accordingly.

3.2 Network inventory: which requires information for 5 functions.

Function 1 : Persons & Contacts

The purpose of this function is to provide the data related to a person or contact associated to the considered COM Centre.

This information will be shown in statistics report-Network inventory (Operational Area Download) as

VTBB - BANGKOK (ACC/FIC/COM CENTRE) - Thailand			
General Information			
Management			
Firstname	Jitima	Telex	
Surname	Asawachaiporn	Email	tima14@aerothai.co.th
Phone1	6622859082	AFTN	
Phone2		CIDIN/AFTN	
Phone3		CIDIN/OPMET	
Fax	6622878538	Sita	
System Administrator			
Firstname	Somnuk	Telex	
Surname	Rongthong	Email	somnuk@aerothai.co.th
Phone1	6622859904	AFTN	VTBBYFYX
Phone2		CIDIN/AFTN	
Phone3		CIDIN/OPMET	
Fax	6622850240	Sita	

Function 2 : COM Centres

The purpose of this function is to provide general information about the COM Centre.

Applications	
Code	Description
AFTN/AMHS GW	AFTN/AMHS Gateway
ATS MSGSRV	ATS Message Server
Administrative Status: EXTERNAL	
Postal Address	
Aeronautical Radio of Thailand	
102 Ngamduplee RAMA 4 Road,	
Tungmahamek Santhom	
Bangkok 10120	
THAILAND	

Information table request for Persons & Contacts and COM Centres

Network Inventory - Persons & Contact / COM Centre							
Country	First Name	Surname	Local Title	Personal Roles	Phone Number	FAX Number	E-mail Address

Remark (Excerpt from AMC User Manual) :

1. Local Title contains the title/function of the person or contact, as defined in his/her organization.
2. Personal Role contains the personal role of the person or contact, according to a pre defined categorization of generic roles

Function 3 : AFTN/CIDIN Capabilities

The purpose of this function is to describe the AFTN and CIDIN Capabilities (Only AFTN Capabilities are required in Asia/Pacific Region)

AFTN/CIDIN Capabilities			
Ax - VCG mapping capability	Ad - Ax mapping capability	CIDIN app. windowing capability	Long message processing
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Ax - VCG mapping actual used	Ad - Ax mapping actual used	CIDIN app. win. actual value	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
CIDIN Entry/Exit Addresses			
Code	Address		
<input type="text"/>	<input type="text"/>		

Remark (Excerpt from AMC User Manual) :

1. Ax - VCG Mapping Capability: possible values are 'Manual' and 'Automatic'
2. Ax - VCG Mapping Actual Used: possible values are 'Manual' and 'Automatic'
3. Ad - Ax Mapping Capability: possible values are 'Manual' and 'Automatic'
4. Ad - Ax Mapping Actual Used: possible values are 'Manual' and 'Automatic'

Function 4 : AMHS Capabilities

The purpose of this function is to show capabilities of the ATS Message Server, capabilities of the AFTN/AMHS Gateway and one table of Protocol Capabilities. The frames are enabled only if the 'ATS Message Server' and 'AFTN/AMHS Gateway' applications are ticked as 'active' in the Com Centre sub-function.

AMHS Capabilities					
MTA Name	<input type="text" value="thmta"/>	<input checked="" type="checkbox"/> ATS Message Server			
Maximum content length	<input type="text"/>				
Extended encoded information types in support of:		Messages lifetime(minutes):			
<input checked="" type="checkbox"/> IA5	Urgent	<input type="text"/>	Non Urgent	<input type="text"/>	
<input type="checkbox"/> FTBP	Normal	<input type="text"/>	Report	<input type="text"/>	
<input type="checkbox"/> General Text body Part(ISO 646)					
<input type="checkbox"/> General Text body Part(ISO 8859-1)					
<input checked="" type="checkbox"/> AFTN/AMHS Gateway					
Currently authorized message length	<input type="text"/>				
Maximum number of addresses	<input type="text"/>				
Converted general-text body parts					
<input type="checkbox"/> ISO 646				<input type="checkbox"/> ISO 8859-1	
Operational Status	<input type="text" value="NON OP"/>				
Protocol capabilities					
COM Type	<input type="checkbox"/> P-SEL	<input type="checkbox"/> S-SEL	<input type="checkbox"/> T-SEL	Network Address(NSAP or IP)	<input type="checkbox"/> Active

Remark (Excerpt from AMC User Manual) :

1. *ATS Message Server: a check box, which is automatically ticked when the 'ATS Message Server' application is selected in the "Com Centre" sub-function. If this check box is not ticked the whole frame is disabled.*
2. *MTA Name: includes the mta-name parameter defined in the configuration of the ATS Message Server. It is a IA5 string, made of 32 characters maximum, and it is mandatory when ATS Message Server is ticked.*
3. *Extended Encoded Information Types: a set of four check boxes, each of them reflecting whether or not the MTA is capable of supporting the specified P1 Encoded Information Types (EITs): IA5, EITs for FTBP, General-Text Body Part (ISO 646) and General-Text Body Part (ISO 8859-1). Among these, IA5 and General-Text Body Part (ISO 646) are mandatory requirements for an ATS Message Server compliant with the "EUR Profile for ATS Message Handling Service".*
4. *Maximum Content Length: an integer, showing the maximum size of messages that the MTA is capable to handle, if there is any limit. A minimum value of 2000000 is necessary for an ATS Message Server to be compliant with the "EUR Profile for ATS Message Handling Service".*
5. *Messages Lifetime: a set of four fields, indicating in minutes the time during which a message or report is stored for transmission retry, until it is rejected by the MTA and a non-delivery report is generated. Three fields for each message priority level, and one field for reports. The maximum value is 5760 (corresponds to four days).*
6. *AFTN/AMHS Gateway: a check box, which is automatically ticked when the 'AFTN/AMHS Gateway' application is selected in the "Com Centre" sub-function. If this check box is not ticked the whole frame is disabled.*
7. *Currently Authorized Message Length: an integer, showing the maximum size of messages that the MTCU will accept for conversion. A minimum value of 65536 is necessary for an ATS Message Server to be compliant with the "EUR Profile for ATS Message Handling Service".*

3.2.1 The information in all 5 functions is required following the AMC manual. However, at the present, the information requested from AEROTHAI only provides partial coverage of the previously mentioned AMC requirement. AEROTHAI would request all states to provide information as stated in the AMC manual mentioned above.

3.3 Address Management: which requires information for 1 function.

Function 1 : Intra-MD Addressing

The purpose of this information is for AMHS implementation. It is used to manage the CAAS Table of the AMHS MD, if this is the selected addressing scheme, and/or to manage individual AMHS User Addresses. Such individual addresses may be defined either as an implementation of an 'other' addressing scheme, or for specific purposes in addition to XF or CAAS addresses.

Remark : the default addressing scheme of Asia/Pacific state is shown in AMC Database as the XF Address scheme (as shown in Doc 9705). If Any state decided to change his address scheme, please fill in “appendix F pro forma” and send to Focal point of contact (tima14@aerothai.co.th) that will pass through AMC Operator for changing information.

Address Management Background Area [HELP]

Intra MD Addressing

MD Common Name: EUROCONTROL-CFMU [HOME]

Country-Name: XX ADMD-Name: ICAO PRMD-Name: EUROCONTROL-CFMU

Addressing Scheme: CAAS XF Other [SEARCH]

CAAS Table

Organization	Organizational Unit	Doc 7910 Status	Offic. Register Status
CFMUB	LFPY	Official	Registered
CFMUH	EBBD	Official	Registered

User Address Table

AFTN Addr Indicator	O/R Address
EBBDZXXX	/C=XX /A=ICAO /P=EUROCONTROL-CFMU /O=EBBD /OU1=ORGUNIT1DATA /OU2=ORGUNIT2DATA /S=BROWN /G=JAMES /I=J. /Q=JR.

CREATE CAAS ENTRY CREATE USER ADDRESS REPORT
IMPORT CAAS TABLE IMPORT USER ADDRESSES
EXPORT CAAS TABLES EXPORT USER ADDRESSES

Remark : 1. CAAS Table elements (Excerpt from AMC User Manual)

Organizational-Unit: includes each Location Indicator in the AMHS MD, to be used as the organizational-unit-name value in each AMHS address of the domain. The Organizational-Unit column must be populated with the Location Indicator values found in ICAO Document 7910 for the State/Organization. Alternatively, it may be populated with one or several 4 letter combinations including wild cards (asterisks) matching together all Location Indicators defined for the State/Organization. The

latter option is particularly recommended for AMHS MDs having selected the CAAS addressing scheme, with one single Organization value for the whole AMHS MD.

Organization: includes the value of the organization-name address attribute to be associated with a given location indicator whose value is found in the corresponding organizational-unit-name address attribute;

Doc 7910 Status: this field aims at reflecting the status of the Organizational-Unit field value of a CAAS table record with regard to Document 7910 (the official list of ANP Locations), and to the list of Unofficial ANP locations stored in the AMC database. The field is generated automatically by the application upon data entry by the CCC Operator or AMC Operator. It can take the following values:

- official: the record is consistent with the Official list of ANP Locations, as the Organizational-Unit value exists in Document 7910;
- unofficial: the record is consistent with an AMC Unofficial ANP Location, as the Organizational-Unit value exists in the list of such locations;

Offic. Register Status: this field aims at reflecting the status of a database CAAS table record with regard to the Official ICAO AMHS Register, or, to be more accurate, with regard to the latest Official Global CAAS Table imported into the AMC as part of the Official ICAO AMHS Register by the AMC Operator. The field is generated automatically by the application upon data entry by the CCC Operator or AMC Operator. It can take the following values:

- registered: the database record is identical to a record in the Global CAAS Table belonging to the latest imported Official ICAO AMHS Register file;
- not-registered: the database record is not consistent with the latest imported Official ICAO AMHS Register file, due to one or several of the following causes:
 - o the Organizational-Unit value in the database record does not exist in the Official Global CAAS Table, or
 - o the Organization value in the database record is different from its equivalent in the record of the Official Global CAAS Table with the same Organizational-Unit value (or same OU and GDI values in case of a non-unique OU value).

2. User Address Table elements

AFTN Addr Indicator: contains the AFTN address indicator (8 characters) in the AMHS MD to be mapped individually to an AMHS O/R address

O/R Address: contains the "computed" value of the O/R address mapping to the AFTN addressee indicator, by concatenation of all attributes forming the O/R address as found in the user address pop-up window. The concatenation syntax is, for each valued attribute, the character "/" (slash), the attribute abbreviation (C, A, P, O, OU1, OU2, OU3, OU4, CN, S, G, I, Q, DDA.TYPE1, DDA.VALUE1, DDA.TYPE2, DDA.VALUE2, DDA.TYPE3, DDA.VALUE3, DDA.TYPE4, DDA.VALUE4), the character "=" (equal) and the attribute value. An example is: "/C=[an ISO3166 country-code] /A=NATIONALATSO /O=ATCC1 /S=SMITH /G=JOHN".

3.3.1 The Intra-MD register stores information of other AMHS MTAs within the management domain of contracting states. For example, if there are multiple AMHS MTA implemented within a state for different organization, e.g. ANSP, Military, etc., then the Intra-MD register will store the information of the Military's AMHS MTA.

3.4. Asia/Pacific AMHS MTA Table

3.4.1 The following table outlines information requested by AEROTHAI to complete the AMC operation.

Connecting State	MTA ID	User Agent ID	Addressing Scheme (CAA/SNTP)	Country-name	Administrative domain name	Private domain name	Organization name	Organization unit name-1	User Agent (Direct User only)	Description of User	MTA Name	NSAP address	T-act Value	P-act Value	S-act Value	Capability
				(C)	(A)	(P)	(O)	(OU)	(CN)							

3.5 To help the states in providing information to AEROTHAI, we proposed that the states fill out the excel file that have all requested information in the tabs.

4. Action by the meeting

4.1 The meeting is invited to:

- a) note the AMC information update status by AEROTHAI: and
- b) discuss the information requested for AMC operation in the future proposed by AEROTHAI.

Network Inventory - Persons & Contact / COM Centre (In column A and E : You can pick up from drop-down list)

Country	First Name	Surname	Local Title	Personal Roles	Phone Number	FAX Number	E-mail Address	COM Centre Postal Address	AFTN Address (Option)

Example

System Administrator			
Firstname	Somnuk	Telex	
Surname	Rongthong	Email	somnuk@aerorhai.co.th
Phone1	6622859904	AFTN	VTBBYFYX
Phone2		CIDIN/AFTN	
Phone3		CIDIN/OPMET	
Fax	6622850240	Sita	

Applications	
Code	Description
AFTN/AMHS GW	AFTN/AMHS Gateway
ATS MSGSRV	ATS Message Server

Administrative Status: EXTERNAL

Postal Address
Aeronautical Radio of Thailand
102 Ngamduplee RAMA 4 Road,
Tungmahamek Santhom
Bangkok 10120
THAILAND

AFTN Capacities

(In each column, you can pick up from drop-down list)

Ax - VCG mapping capability	Ad - Ax mapping capability	Ax - VCG mapping actual used	Ad - Ax mapping actual used

VCG = Virtual Circuit Groups

AMHS Capabilities (In column C, H and I : You can pick up from drop-down list)

MTA Name	Maximum Content Length	Extended Encoded Information Types	Messages Lifetime (Minutes)				ATS Message Server	AFTN/AMHS Gateway	Currently Authorized Message Length	Maximum Number of Address	Converted General-Text Body Parts	Operation Status
			Urgent	Non Urgent	Normal	Report						

Remarks :

IA5 and General-Text Body Part (ISO 646) are mandatory requirements for an ATS Message Server compliant with the "EUR Profile for ATS Message Handling Service".

Maximum Content Length : A minimum value of 2000000 is necessary for an ATS Message Server to be compliant with the "EUR Profile for ATS Message Handling Service"

Messages Lifetime (Minutes) : Three fields for each message priority level, and one field for reports. The maximum value is 5760 (corresponds to four days).

Currently Authorized Message Length : A minimum value of 65536 is necessary for an ATS Message Server to be compliant with the "EUR Profile for ATS Message Handling Service".

Operation Status : 'OP' for operational, 'NON-OP' for not operational, and 'UNKNOWN'

