



ICAO

*International Civil Aviation Organization***Eleventh Meeting of the Aeronautical Communication Services Implementation Coordination Group (ACSICG/11)***Bangkok, Thailand, 19 - 22 March 2024*

Agenda Item 9: Inter-regional AFS connection

AFTN/AMHS CONNECTION BETWEEN APAC REGION AND OTHER REGIONS

(Presented by the Secretariat)

SUMMARY

This paper updates the status of AFTN/AMHS connection between APAC region and other regions. It is a revision on WP/16 of ACSICG/10.

1. INTRODUCTION

1.1 In October 2021, IP/02 of CNS SG/25 informed the interregional AMHS connection issue to support future AIRM data, such as IWXXM between APAC and EUR/NAT.

1.2 In April 2022, WP/07 of ACSICG/9 provided status of discussion being done for potential interconnection of CRV and REDDIG II and CRV and New PENS. The latest update on MPLS/IP based inter-regional connection was discussed by [WP/05](#) of CRV OG/12 in January 2024.

1.3 In May 2023, WP/16 of ACSICG/10 summarised the status of AFTN/AMHS connection between APAC region and other regions.

1.4 This paper is reproduced from WP/16 of ACSICG/10 with reference to the information contained in ASIA/PAC ROUTING DIRECTORY and the COM Charts by EUROCONTROL AMC.

2. DISCUSSION

2.1 Since the AIRM data started to be exchanged within AFS, the pressure on the intra-regional and inter-regional AMHS links between COM centers has been growing.

2.2 Refer to the APAC Routine Directory for AFTN circuits, for the links between Europe and Asia, there are:

1) Bangkok ^{^i} - Rome	AMHS
2) Singapore [^] - London	AMHS
3) Fukuoka [^] - Moscow	AFTN
4) Beijing [^] - Khabarovsk	AFTN
5) Delhi - Tashkent	AFTN (not in operation)
6) Ulaanbaatar - Irkutsk	AFTN (or AMHS?)
7) Kabul - Tashkent	AFTN

2.3 For the links between Mideast and Asia/Pacific, there are:

- 1) Karachi - Kuwait AMHS (no display on AMC chart)
- 2) Karachi - Tehran AFTN
- 3) Karachi - Muscat AFTN
- 4) Mumbai^ - Muscat ~~AFTN~~AMHS
- 5) Singapore^ - Bahrain AFTN
- 6) Muscat – Solomon Islands AMHS

2.4 For the links between Africa and Asia/Pacific, there are:

- 1) Brisbane^ - Johannesburg AMHS
- 2) Mumbai^ - Nairobi AFTN

2.5 For the links between North America and Asia/Pacific, there are **12** connections to Salt Lake City of USA:

- | | |
|-----------------------------|---------|
| Salt Lake City^ - Brisbane^ | AMHS |
| -Christchurch | AMHS |
| -Chuuk | AMHS UA |
| -Fukuoka^ | AMHS |
| -Koro | AMHS UA |
| -Kosrae | AMHS UA |
| -Majuro | AMHS UA |
| -Manila | AMHS |
| -Nadi^ | AMHS |
| -Pago Pago | AMHS UA |
| -Pohnpei | AMHS UA |
| -Yap | AMHS UA |

2.6 There is no direct connection between South America and Asia/Pacific, the aeronautical messages are routed via USA.

2.7 During ACSICG/10, China requested ICAO Secretariat to coordinate the implementation of AMHS connection between Beijing and Kuwait, which is part of APAC ANP Vol. II, TABLE CNS II-2 REQUIRED ATN INFRASTRUCTURE ROUTING PLAN.

2.8 In November 2023, Singapore informed that Qatar was seeking to establish an AMHS link between Doha and Singapore which required a discussion between both parties with the support of Regional Officers from APAC and MID regional office.

2.9 Unfortunately, due to unexpected factor, the actions outlined in 2.7 and 2.8 have been suspended for some time.

2.7 A extract of AFTN/ATSMHS Inter-Regional Connections from ASIA/PAC ROUTING DIRECTORY is provided in **Attachment A** to this paper.

2.8 AMHS and AFTN connections over Google Map by EUROCONTROL AMC can be accessed at its website for registered users :

<https://ext.eurocontrol.int/amc/MapOnGoogleMapAction?chartId=10>

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information in this paper;

- b) inform ICAO APAC Regional Office on their implementation progress/plan of AMHS inter-regional connections; and
- c) discuss any relevant matter as appropriate.

ⁱ The ^ indicates the Station is a BBIS of APAC.

AFTN/ATSMHS INTER-REGIONAL CONNECTIONS - ASIA/PAC ROUTING DIRECTORY

Terminal 1 (^ - BBIS)	Terminal II	ATSMHS or AFTN	Over CRV (Y/N)
Bangkok^	Rome	AMHS	N
Beijing^	Khabarovsk	AFTN	N
Brisbane^	Johannesburg	AMHS	N
	USA	AMHS	Y
Delhi	Tashkent /UTTT?	AFTN(not operational)	
Fukuoka^	Moscow	AFTN	N
	USA	AMHS	Y
			N
Karachi	Kabul	AFTN	
	Kuwait	AMHS	
	Tehran (<i>Not listed in the ANP AFTN Planning Table</i>)	AFTN	N
	Muscat	AFTN	
Manila	USA	AMHS	
Mumbai^	Muscat/Seeb	AMHS(AFTN?)	N
	Nairobi	AFTN	N
Nadi^	USA	AMHS	Y
Salt Lake City^	Brisbane^	AMHS	Y
	Christchurch	AMHS	Y
	Chuuk	AMHS UA	N
	Fukuoka^	AMHS	Y
	Koro	AMHS UA	N
	Kosrae	AMHS UA	N
	Majuro	AMHS UA	N
	Manila	AMHS	Y
	Nadi^	AMHS	Y
	Pago Pago	AMHS UA	N
	Pohnpei	AMHS UA	N
	Yap	AMHS UA	N
Singapore^	Bahrain	AFTN	N
	London	AMHS	N
Ulaan Baatar	Irkutsk	AFTN	N
