



International Civil Aviation Organization

**AMHS/SWIM SEMINAR AND THE SEVENTH MEETING OF
AERONAUTICAL TELECOMMUNICATION NETWORK
(ATN) IMPLEMENTATION CO-ORDINATION GROUP OF
APANPIRG (ATNICG/7)**



Chiang Mai, Thailand, 5 – 9 March 2012

Agenda Item 3: Review States' ATN/AMHS Implementation Status, Transition and Operational Issues

ATN/AMHS IMPLEMENTATION STATUS

(Presented by New Zealand)

SUMMARY

This information paper gives details of the ATN/AMHS Implementation status of New Zealand.

1. INTRODUCTION

1.1 New Zealand is in the process of replacing its AFTN system with an AMHS system. A contract for the procurement of an AMHS capable system was signed with Comsoft in June 2011.

1.2 Site Acceptance Tests were conducted from 5-9 December 2011. System Stability Tests were held in January 2012, in parallel with internal operational training so that the system could be tested with some operator loading.

1.3 The New Zealand AMHS system consists of three clusters:

- An Operational system based in Christchurch.
- A Development, Test and Training (DT&T) system based in Christchurch.
- A Backup system based in Auckland.

Both the DT&T and the Backup system are capable of being used as Disaster Recovery systems, with operational data being replicated to these systems in real time. Switchover of operations from the normally Operational System to a Disaster Recovery system takes less than 15 minutes.

1.4 Initial operational commissioning of the system in AFTN mode is scheduled for March 2012.

1.5 Initially only a small number of User Agents (UAs) will be commissioned in AMHS mode for testing and training purposes.

Operational deployment of UAs (firstly in AFTN mode and then in AMHS mode) will occur in a phased manner with final completion expected in 2013.

1.6 New Zealand would like to schedule the transition of its international connections to Australia and the USA, from AFTN X.25 connections to IP-based AMHS connections, for completion by the end of 2012. This will depend on bilateral agreements being reached, following planning discussions with these States.

1.7 The IP-based AFTN user terminal in Tonga (which uses a VSAT link) is expected to be replaced with a UA in 2012.

Deployment of UAs to Samoa, the Cook Islands and Niue will depend on the availability of suitable IP-based links to these States.

1.8 The existing connection to French Polynesia will remain as an AFTN link, until such time as French Polynesia decides to replace its AFTN system with an AMHS system.

ATTACHMENT 1A

ATN/AMHS IMPLEMENTATION – PLANNED SCHEDULE

- Contract signed – 21 June 2011.
- CDR (Design Review) – July 2011.
- FAT (Factory Acceptance Testing) – 12-16 September 2011.
- Installation at Site – October 2011.
- Vendor supplied on Site training – October/November 2011.
- SAT (Site Acceptance Testing) – 5-9 December 2011.
- System Stability Testing – 19-26 January 2012.
- Training:
 - Pre-FAT: August/September 2011.
 - On-Site vendor supplied training: October/November 2011.
 - Internal technical and operational training January/February 2012.
- Initial Operational Commissioning (AFTN Mode) – 13 March 2012.
- Circuit Test schedule (AMHS Links to Australia and USA)
Bilateral agreement signed with the reciprocal – TBD.
- Transition AFTN/AMHS – TBD by bilateral negotiation/agreement.
- Setting up of AMHS UAs:
 - A small number of UAs were deployed for testing and training in January 2012.
 - Phased deployment of the remaining UAs in 2012/13.
- AMHS transition – To be completed by the end of 2013.

ATTACHMENT 2

ATN/AMHS IMPLEMENTATION STATUS

Name of the State: New Zealand

Name of the ATN/AMHS Station: Christchurch

Physical Implementation status:

- 1) Date of completion of physical implementation (if implementation completed): TBD

Status of operational connectivity:

Reciprocal End Station	Media available on	MoU signed on	Testing completed on			Commissioning of operation on
			Physical Connection	Router Connection Test	MTA Interoperability Test	
Brisbane, Australia	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*
Salt Lake, USA	TBD*	TBD*	TBD*	TBD*	TBD*	TBD*

* TBD: To Be Determined by bilateral agreement with the State concerned.

Note:

New Zealand would like to have IP-based AMHS links operational to both Australia and the USA by the end of 2012, but this will depend on schedules being agreed on with these States.

2) Tentative date of completion of physical implementation:

Initial Operational Commissioning in AFTN mode – March 2012

Physical implementation of AMHS connectivity (MTA-MTA) with Australia and the USA is only anticipated by the end of 2012.

Procurement Status	Date/Tentative Date
Signing of contract	June 2011
Completion of Factory Acceptance Test	Sep 2011
Physical installation of system	Oct 2011
Site acceptance testing	Dec 2011
Training (vendor supplied on-site)	Oct/Nov 2011
Training (internal technical and operational courses)	Jan/Feb 2012
Availability of media (for the first circuit)	Nov 2011*
Completion of testing (for the first circuit)	Dec 2011*
Commissioning of operation (for the first circuit)	Mar 2012*

* AFTN connections initially, other than one or two UAs.

3) Sub-net level protocol

If your State is using IP for

- 1) AFTN connectivity (some circuits IP-based and others X.25)
- 2) AMHS connectivity
 - a. MTA/MTA
 - b. MTA/UA
