



International Civil Aviation Organization

**Fifth Meeting of Aeronautical Telecommunication Network (ATN)
Transition Task Force**

Phuket, Thailand, 9 – 13 June 2003

Agenda Item 9: Review ATN implementation activities /issues

AMHS Implementation Issues

(Presented by FAA and JCAB)

SUMMARY

This paper presents the AMHS implementation issues related with AMHS service backup.

1. Introduction

The FAA and JCAB have agreed to commence AMHS service between the USA and Japan in March 2004. Within a period of six months from the commencement of AMHS service, the existing “AFTN Circuit” for AFTN connection will be disconnected, but “AFTN Service” will be remained for AMHS backup by “AFTN alternate routing” and it cannot be decommissioned till “AMHS alternate routing” becomes available.

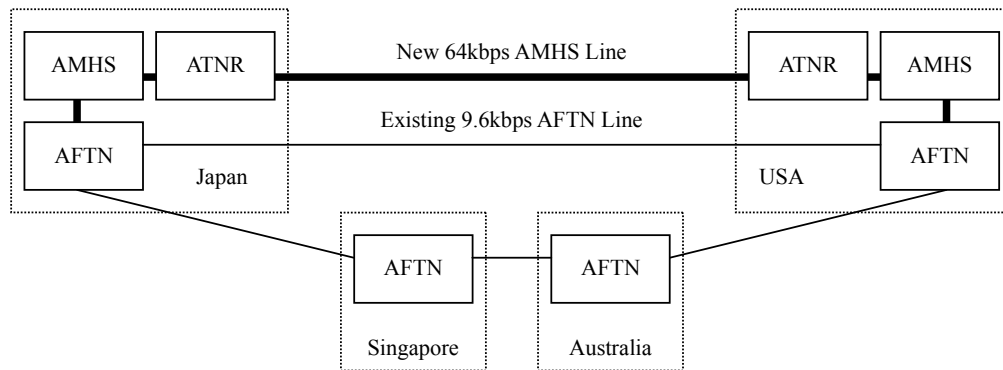
2. Discussion

2.1 Transition Plan from AFTN to AMHS

The following are the transition plans from AFTN to AMHS for the USA and Japan; however these plans are applicable for the other States.

1) 1st Stage

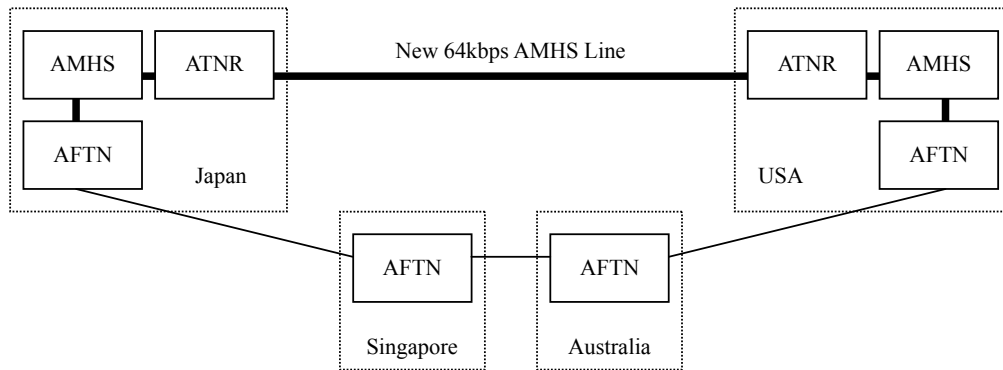
- This stage is just after the “Initiation of the AMHS service between JCAB and FAA to replace current AFTN service”.
- In case of recoverable and short stoppage of AMHS service, the existing alternate routing via AFTN stations of other States will be used.
- In case of serious and long stoppage of AMHS service, the current direct AFTN service will be restored using the existing 9.6kbps AFTN Line.
- The existing 9.6kbps AFTN Line will be disconnected within six months after the “Initiation of the AMHS service between JCAB and FAA to replace current AFTN service”.



NOTE: The domestic service can be either AFTN or AMHS, or both. (Gateway function is necessary for domestic AFTN Service.)

2) 2nd Stage

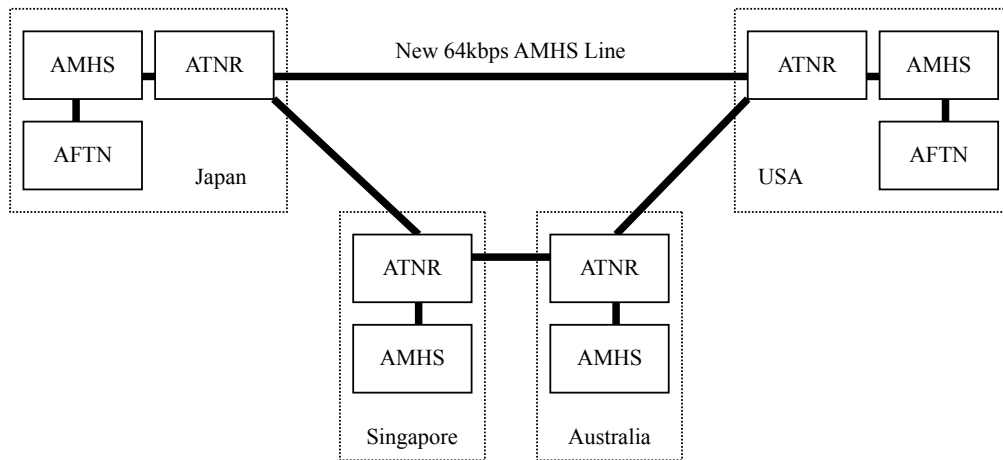
- This stage is just after the “Disconnection of the 9.6 kbps AFTN circuit between the USA and Japan”.
- The 9.6kbps AFTN Line is disconnected within six months after the “Initiation of the AMHS service between JCAB and FAA to replace current AFTN service”.
- In case of any stoppage of AMHS service, the existing alternate routing via AFTN stations of other States will be used.



NOTE: The domestic service can be either AFTN or AMHS, or both. (Gateway function is necessary for domestic AFTN Service.)

3) 3rd Stage

- This relates with “Decommissioning of AFTN service between USA and Japan”.
- When AMHS connections become more than three states, with AMHS system(s), the “AFTN service between USA and Japan” can be decommissioned.
- In case of any stoppage of AMHS service between USA and Japan, the new AMHS alternate routing via AMHS system(s) of other State(s) will be used.
- There may be AFTN services available from other States.

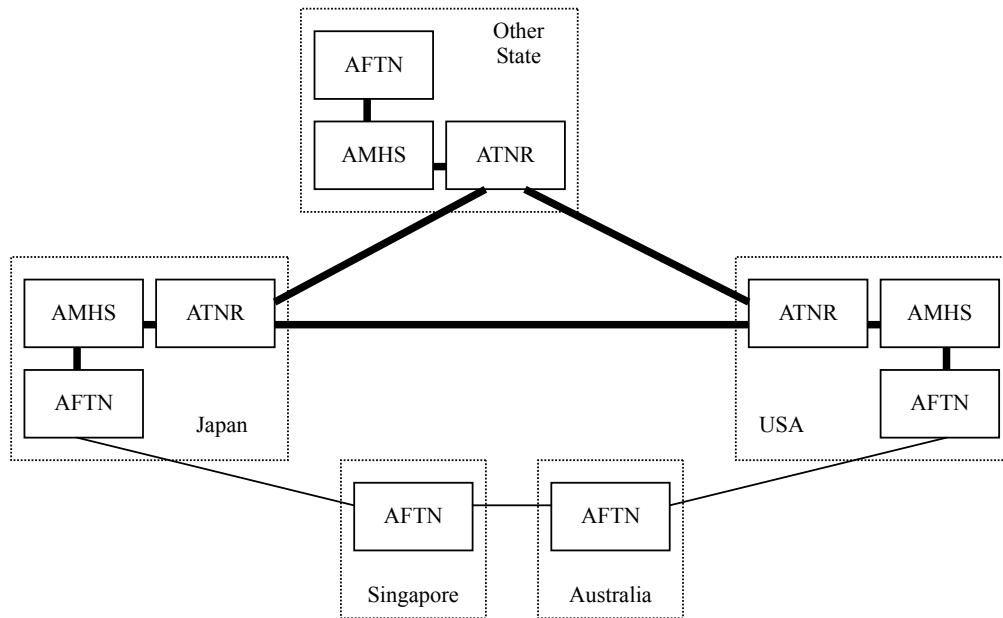


NOTE: “Singapore” and “Australia” are those of the candidates.

NOTE: The domestic service can be either AFTN or AMHS, or both. (Gateway function is necessary for domestic AFTN Service.)

4) 3rd Stage (alternative)

- Any other State can be a candidate for tri-states connection.

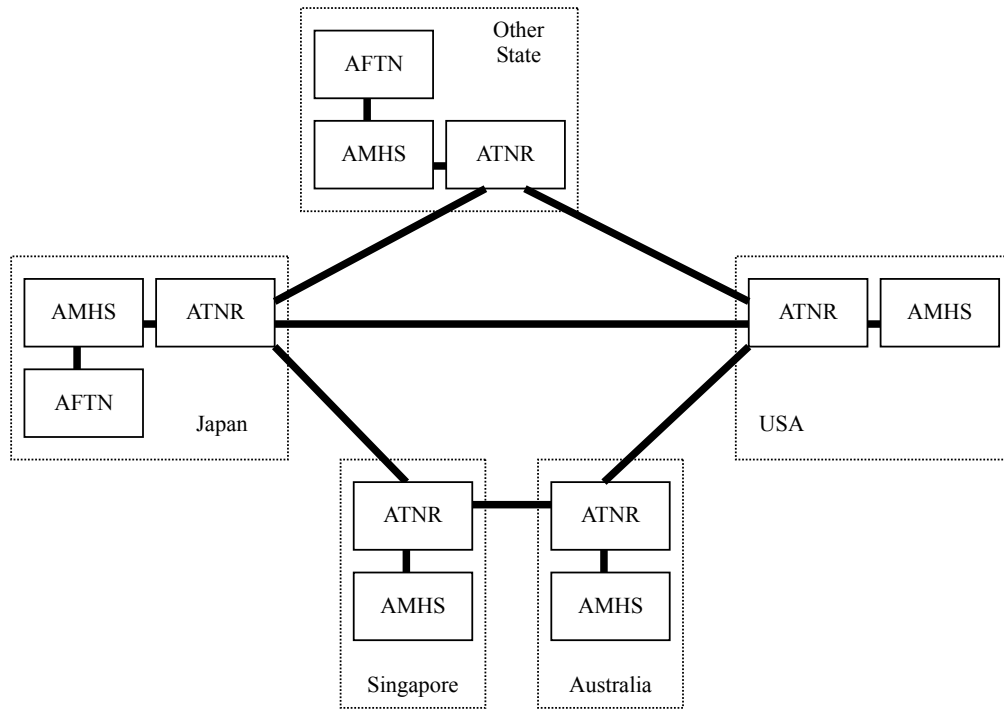


NOTE: “Singapore” and “Australia” are examples.

NOTE: The domestic service can be either AFTN or AMHS, or both. (Gateway function is necessary for domestic AFTN Service.)

5) In the future

- It is expected that the USA and Japan will decommission selective international AFTN services.
- In some cases, AFTN/AMHS Gateway will be necessary (for example) in Japan for the remaining AFTN station(s) in other State(s).
- When all domestic and international AFTN services are changed to AMHS services there will be no need for AFTN.



NOTE: The domestic service can be either AFTN or AMHS, or both. (Gateway function is necessary for domestic AFTN Service, where applicable, even if no international AFTN services exist.)

2.2 AMHS Implementation Issues

As shown above, especially for the transition from “2nd Stage” to “3rd Stage”, there will be disadvantages by maintaining AFTN services, if there is no alternative AMHS routing capability due to the delay in implementation of AMHS by other States in the Asia-Pacific region.

3. Action by the Meeting

The meeting is invited to recommend that all States and/or organizations, especially those who are nominated as BBIS sites in the Region;

- to implement systems according to the schedule in Table CNS-1B (ATN Router) and CNS-1C (AMHS); and/or
- to revise the implementation schedule in Table CNS-1B (ATN Router) and CNS-1C (AMHS) more accurately based on realistic and concrete planning.