



International Civil Aviation Organization

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

Phuket, Thailand, 9-13 June, 2003

Agenda Item 9: Review ATN implementation activities/issues

ATN TRIALS AND IMPLEMENTATION PLAN

SUMMARY

This paper provides an update on Fiji's preparations for ATN trials and implementation.

(Presented by Fiji)

1. Introduction

1.1 Fiji re-entered the ATN scene in 2001, by which time the ATN Taskforce had nominated the seven backbone sites for the Asia/Pacific region. One of the criteria used for selection was that a State must be a major AFTN Switching Centre.

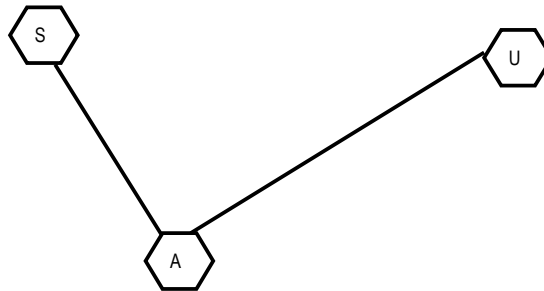
1.2 Fiji submitted the following proposals during the 3rd ATNTTF meeting in Singapore in 2001.

- To be the other gateway to the NAM region
- Member of Working Group B

1.3 Fiji was immediately accepted as a member of the Ad Hoc Working group whilst our proposal to be the other backbone site was referred to Working Group B for consideration.

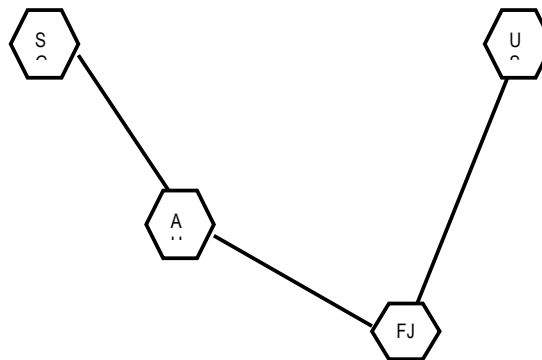
2. ATN Backbone Sites

2.1 A simplified version of the ATN Regional Backbone approved to date by ICAO looks like this.



2.2 Fiji's desire to be a backbone site is well known and was first raised during the 3rd ATN Transition Taskforce meeting in Singapore in 2001. Fiji's proposal was discussed and accepted by the Ad Hoc Working Group B during its meeting in Thailand in August of 2001.

2.3 To provide diversity for backbone connectivity within the Asia/Pacific region and neighboring regions, Fiji's geographical location and current status as a major AFTN switching center in the region makes it the ideal choice as the other backbone site in the region. The proposed ATN Regional Backbone will look like the one below.



3. Trials and Implementation Plan

3.1 AMHS will be one of the first Ground-to-Ground applications to be implemented. To participate in ATN trials, we have a trial and implementation plan and it will require existing AFTN circuits and systems to be upgraded. An update on our preparations is provided below.

International Trunk Circuits Upgrade

3.2 Our two main international trunk circuits are between Fiji and the USA and Fiji and Australia (via New Zealand). The Fiji-US link has been upgraded to 64K while discussions on a 64K link between Fiji and Australia have commenced.

Fiji-USA 64K Link

3.3 Fiji and the USA commissioned the new 64k link in December 2002. Details of our service requirements are tabulated below.

Allocation	Service
8 kbps	Management overhead
3 kbps	Framing overhead
1.2 kbps	FAA Emergency Management Access Channel
2.4 kbps	X.25 AFTN data channel (existing)
8 kbps	Air traffic, compressed voice channel (existing-modified)
8 kbps	Weather compressed voice channel (between Fiji and Honolulu)
4.8 kbps	Weather data channel (between Fiji and Silver Spring, Maryland)
<u>Future Services</u>	
9.6 kbps	ATN data channel
8 kbps	Air traffic compressed voice channel (contingency voice channel)
11 kbps	Remaining bandwidth

Proposed Fiji-Australia Link Upgrade

3.4 Preliminary talks have begun with Australia about having a direct link between Nadi and Brisbane. This link will provide full diversification of the existing AFTN/Voice services between Nadi and Brisbane and also assist in future plans for ATN trials with Australia.

3.5 In addition, consideration is also being given to accommodate the proposed voice circuit between PNG and Oakland in the new link.

Regional Circuits Upgrade

3.6 As part of our preparations towards the implementation of ATN in the region, Fiji and New Caledonia successfully completed testing using the X.25 protocol in April 2003, and is now in operation. Upgrading of other circuits to Tuvalu and Kiribati have yet to be determined.

Systems Upgrade

3.7 With AMHS being one of the first Ground-to-Ground applications to be implemented, Fiji is looking at a phased implementation. We are looking at introducing the AMHS/AFTN gateway initially before we implement the full AMHS System.

3.8 In preparation for conducting ATN trials, we have been having on-going discussions with major AMHS suppliers including our existing AMSS supplier. Amongst those that we are having discussions with are two suppliers that are actively involved in ATN trials in the region. We hope to finalize our discussion with the successful supplier (s) by late June or July of this year.

Planned ATN Trials and Implementation Dates

3.9 We hope to conduct ATN trials within Fiji by the 3rd or 4th quarter of 2003. A proposal raised during the CNS/ATM IC/SG/9 meeting in Bangkok in March 2002 was that all future ATN trials between States should be co-coordinated through the ATN Transition Taskforce.

3.10 Fiji and the USA plan to start ATN trials by the 2nd quarter of 2004. Trials with other adjacent States such as Australia will be determined as we hold further discussions on the proposed Nadi-Brisbane direct link.

4. Action by the Meeting

4.1 The meeting invited to:

1. To note the acceptance by the Ad Hoc WG B of Fiji's proposal to be a backbone site at it's meeting in Bangkok in August 2001.
2. Support Fiji's proposal to be the other backbone site in view of our commitment to implement ATN in the Asia/Pacific region.