



International Civil Aviation Organization

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

Phuket, Thailand, 9 – 13 June 2003

Agenda Item 8: Review status of implementation of AFTN circuits, evaluated circuit capacity and consider timescale for transition to ATN

**STATUS REPORT OF COLOMBO'S INTERNATIONAL
AFTN CIRCUIT AND PROPOSED AMENDMENT TO
AFTN ROUTING DIRECTORY**

SUMMARY

This Working Paper presents the current status of International AFTN Circuits Colombo-Mumbai, Colombo-Singapore and Colombo-Male and proposes an Amendment to AFTN Routing Directory.

(Presented by Sri Lanka)

1. Background

1.1 3rd Asia-Pac RAN meeting held in Bangkok, Thailand during 24th – 28th October 1994, identified the need to upgrade the following circuits since AFTN circuits Beijing/Tokyo and Seoul/Tokyo had just completed their upgrading.

- Mumbai/Colombo
- Mumbai/Karachchi
- Mumbai/Muscat
- Colombo/Singapore
- Sydney/Christchurch
- Sydney/Mauritius
- Guanzhou/Hong kong
- Sydney/Nadi
- Singapore/Kula Lumpur
- Djakarta/Singapore

1.2 Since Colombo at that time had not complied with the requirement of upgrading the said AFTN circuits to 300 baud, and due to resultant significant delay in clearing messages, certain station indicators that had been relaying via Colombo were withdrawn and re-routed through Bangkok.

1.3 As a result, the long existed level of circuit congestion has been drastically pruned in order to ensure data integrity to minimize transit delays and thereby adequately meeting the recommended transitional time criteria.

2. Present Status of AFTN Circuits:

2.1 Colombo embarked on the task of upgrading the circuits with Mumbai and Singapore commencing from 1999 which required replacement of the then AFTN Message Switch which had technical limitations such as lower data rates and inability to implement protocols.

2.2 Thereafter, International Private Leased Circuits (IPLC) were established between Colombo/Mumbai and Colombo/Singapore on 64 kbps through respective International Telecom service providers and in co-ordination with Civil Aviation Authorities of India and Singapore. Due to restrictions imposed by some of the Telecom Service Providers involved, data rate of 64 kbps was selected.

2.3 Effective data rate of Colombo/Singapore circuit became 9.6 kbps, due to the fact that, IPLC established between Colombo and Telecom Service Provider of Singapore operates at 64 kbps while the data link between AFTN centre (Singapore) and their Telecom Service Provider operates at 9.6 kbps. Such an arrangement was necessary to comply with the available data speeds of the existing AFTN Switch of Singapore.

2.4 Upgraded AFTN circuits of Colombo/Mumbai and Colombo/Singapore operating on X.25 protocol have been established with effect from 19th March 2003 and 12th May 2003 respectively.

These circuits are operating satisfactorily since then.

2.5 Arrangements are being made to decommission the existing 50 baud AFTN Circuit between Colombo/Mumbai in the immediate future.

2.6 Though the requirement exists to upgrade Colombo/Male AFTN (50 bd) Circuit, up to 9.6 kbps, target date has been postponed to December 2003 due to unavoidable circumstances.

3. Action by the Meeting:

3.1 On account of the above facts, Colombo proposes to reconsider reversion of station indicators back to Colombo for relay purpose from Singapore and Mumbai as in the past, since Colombo has now laid the necessary infrastructure for this purpose by reaching the compatibility with the stations in the network.
