



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 the status of implementation of AFTN circuits, evaluate circuit capacity and consider timescale for transition to ATN

**REVIEW STATUS OF IMPLEMENTATION OF
THE ASIA/PAC AFTN PLAN**

SUMMARY

This paper presents AFTN Plan for review by the meeting.

(Presented by the Secretariat)

1. Introduction

1.1 The AFTN Plan (Table CNS-1) is provided in a tabular form in Attachment 1 and the Chart CNS-1 in Attachment 2 to this paper for review by this meeting.

2. Discussion

2.1 The AFTN Plan was reviewed and updated regularly by the ATN Transition Task Force Meetings and the CNS/MET Sub-Group meetings to reflect the changes in status of AFTN circuit implementation based on operational requirement and circuit performance.

2.2 In accordance with Conclusion 13/11 of APANPIRG/13 meeting held in September 2002, a proposal APAC 02/7-COM was processed to replace the existing Table CNS-1A contained in Part IV of the ASIA/PAC FASID with an updated Table. Comments provided by States in response to the amendment proposal were incorporated while updating the Table. States were notified of the approval of the proposal in December 2002. Subsequently, the Table and Chart contained in the FASID Document were updated.

2.2.1 Due to the changes in the operational requirements the following AFTN circuits were specified in the AFTN Plan.

- Beijing /Yangon
- Christchurch/USA
- Christchurch/Tongatapu
- Guangzhou/Hanoi
- Guangzhou/Sanya

2.2.2 Signalling speed and communication protocol for several circuits have been upgraded to meet the operational requirements and target date of upgrading of circuits were also updated.

3. Action by the Meeting

3.1 The meeting is expected to:

- a) review the AFTN Plan (Table CNS1A-AFTN Plan); and
- b) update the entries, as required.

TABLE CNS 1A - AFTN PLAN*Explanation of the Table**Column*

1	The AFS station or facility of individual State, listed alphabetically. Each circuit appears twice in the Table.
2	<p>Category of circuit</p> <p>M - Main trunk circuit connecting Main AFTN communication centres. T - Tributary circuit connecting Main AFTN communication centre and AFTN stations to relay or retransmit AFTN traffic. S - AFTN circuit which is used to transmit and receive AFTN traffic to and from a Main or Tributary AFTN communication centre directly connected to it and does not relay AFTN traffic except for the purpose of serving national station(s).</p>
3 and 7	<p>Type of circuit provided:</p> <p>HF RTT High frequency radio teletype LTT landline teletypewriter LTT/a landline teletypewriter, analogue (eg. cable, microwave) LTT/d landline teletypewriter, digital (eg. cable, microwave) LDD/a landline data circuit, analogue (eg. cable, microwave) LDD/d landline data circuit, digital (eg. cable, microwave) SAT/n/a/d satellite link, the number indicates the number of hubs in the circuit: Also use/a for analogue or/d for digital appropriate to the tail circuit.</p>
4 and 8	Circuit signalling speed, current or planned.
5 and 9	<p>Circuit protocols, current or planned.</p> <p>COP-B Character oriented data link control procedure – System Category - B X. 25 X.25 protocol</p>
6 and 10	<p>Data transfer code (syntax), current or planned.</p> <p>ITA-2 International Telegraph Alphabet No. 2 (Baudot code) IA-5 International Alphabet No. 5 (7 - unit code)</p>
11	Target date of implementation
12	Remarks
Note 1:	Circuit is required for alternate routing and for national routing for international traffic.
Note 2:	Requirements exist for speech and data (S + DX) communication.

State/Station	Cat.	CURRENT				PLANNED				Target date of implementation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
AMERICAN SAMOA PAGO PAGO - S/NSTU United States/KSLC	S	LDD/d	2400 bps	X.25	IA-5						
AUSTRALIA BRISBANE - M/YBBB	T	LDD/d	2400 bps	X.25	IA-5						
Christchurch/NZCH	S	LDD/d	2400 bps	X.25	IA-5	LTT	75 baud	None	IA-5		Note 2 Internet as interim measur Note 1,2
Honiara/AGGG	S	SAT/d	9600 bps	X.25	IA-5						
Jakarta/WIII	S	LTT	50 baud	None	ITA-2						
Mauritius/FIMP	S	LDD/d	2400 bps	X.25	IA-5						
Nadi/NFFN	M	LDD/d	2400 bps	X.25	IA-5						
Nauru/ANAU	S	SAT/d	9600 bps	X.25	IA-5	SAT/d	2400 bps	X.25	IA-5		Note 2 Internet as interim measur Note 2
Port Moresby/AYPM	S	LTT	300 baud	None	ITA-2						Internet as interim measur
Port Vila/NVVV	S	LTT	300 baud	None	ITA-2						
Santiago/SCSC	M					LDD/d	2400 bps	X.25	IA-5	12/02	Current routing via USA
Singapore/WSSS	M	LDD/d	2400 bps	COPB	IA-5			X.25		12/02	
United States/KSLC	M	SAT/d	2400 bps	X.25	IA-5						
BANGLADESH DHAKA - S/VGZR	S	SAT/d	300 baud	None	IA-5						
Bangkok/VTBB	S	HF RTT	50 baud	None	ITA-2	LTT	2400 bps	None	IA-5	12/02	Routing to be via VTBB/VABE
Kolkata/VECC	S										
BHUTAN PARO - S/VQPR	S										
Mumbai/VABB	S					SAT/a	50 baud	None	ITA-2	12/02	Dial-up
BRUNEI DARUSSALAM BRUNEI - S/WBSB	S	LDD/d	2400 bps	X.25	IA-5						
Singapore/WSSS	S	LTT	75 baud	None	ITA-2	LDD/d	2400 bps	X.25	IA-5	12/02	Note 1,2
Kuala Lumpur/WMKK	S										
CAMBODIA PHNOM PENH - S/VDPP	S	SAT/d	300 baud	None	ITA-2						
Bangkok/VTBB	S										Note 2
CHINA BEIJING - M/ZBBB	S	LDD/d	9600 bps	X.25	IA-5						
Guangzhou/ZGGG	M	LTT	50 baud	None	ITA-2	LDD/a	300 baud	None	IA-5	05/03	
Karachi/OPKC	S	SAT/d	300 baud	None	IA-5						
Kathmandu/VNKT	M	SAT/d	2400 bps	None	IA-5						
Russian Fedration/UHHF	S	SAT/d	300 baud	None	IA-5						(Khabarovsk)
Pyongyang/ZKKK	S	SAT/d	9600 bps	X.25	IA-5						
Seoul/RKSS	M	LDD/d	9600 bps	X.25	IA-5						
Tokyo/RJAA	S	SAT/d	300 baud	None	IA-5						
Ulaan Baatar/ZMUE	S										Note 2
Yangon/VYYY	S					SAT/d	300 baud	None	IA-5	12/02	

[illegible]

State/Station	Cat.	CURRENT				PLANNED				Target date of implementation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
United States/KSLC Wallis Is./NLWW	M S	SAT/d	2400 bps	X.25	IA-5	LDD/a	2400 bps	None	IA-5	when traffic justifies	Note 2 Current routing via Noumea
FRENCH POLYNESIA (FRANCE) PAPEETE/NTAA Christchurch/NZCH	S	LDD/d	2400 bps	X.24	IA-5						
INDIA MUMBAI - M/VABB											
Bangkok/VTBB	M	SAT/a	2400 bps	X.25	IA-5						
Kolkata/VECC	S	LDD/d	9600 bps	X.25	IA-5						
Colombo/VCCC	M	SAT/a	50 baud	None	ITA-2	LDD/d	2400 bps	X.25	IA-5	12/02	
Karachi/OPKC	M	SAT/a	200 baud	None	ITA-2						Note 2
Kathmandu/VNKT	S	SAT/a	50 baud	None	ITA-2						Note 2
Muscat Seeb/OOMS	M	SAT/a	300 baud	None	ITA-2						
Nairobi/HKNC	M	SAT/a	50 baud	None	ITA-2						
Paro/VQPR	S					SAT/a	50 baud	None	ITA-2	12/02	Dial-up
KOLKATA - S/VECC											
Dhaka/VGZR	S	RTT	50 baud	None	ITA-2	LTT	2400 bps	None	ITA-2	12/02	Routing to be via VTBB/VABE
Mumbai/VABB	S	LDD/d	9600 bps	X.25	IA-5						
DELHI - S/VIDD											
Tashkent/UTTT	S	SAT/a	50 baud	None	ITA-2						
CHENNAI - S/VOMM											
Kuala Lumpur/WMKK	S	LTT	50 baud	None	ITA-2	LDD/d	2400 bps	X.25	IA-5	12/02	Note 1, 2
INDONESIA JAKARTA - S/WIII											
Brisbane/YBBE	S	SAT/d	9600 bps	X.25	IA-5						Note1,2 Note 2
Singapore/WSSS	S	SAT/d	2400 bps	X.25	IA-5						
JAPAN TOKYO - M/RJAA											
Beijing/ZBBB	M	LDD/d	9600 bps	X.25	IA-5						
Hong Kong/VHHH	M	LDD/a	9600 bps	X.25	IA-5						
Russian Federation/UHHH	M	LTT	2400 bps	None	IA-5						(Khabarovsk) (Moscow)
Russian Federation/UUUL	M	LTT	200 baud	None	IA-5	LDD	2400 bps	None	IA-5	12/03	
Naha/ROAH	S	LDD/d	9600 bps	X.25	IA-5						
Seoul/RKSS	S	LDD/d	9600 bps	X.25	IA-5						
Singapore/WSSS	M	LDD/a	1200 bps	COP-B	IA-5	LDD/d	9600 bps	X.25	IA-5	12/02	Note 2
United States/KSLC	M	LDD/d	9600 bps	X.25	IA-5						
NAHA - S/ROAH											
Taipei/RCTP	S	LDD/d	4800 bps	X.25	IA-5						
Tokyo/RJAA	S	LDD/d	9600 bps	X.25	IA-5						

State/Station	Cat.	CURRENT				PLANNED				Target date of implementation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
KIRIBATI TARAWA - S/NGTT Nadi/NFFN	S	LDD/d	2400 bps	None	IA-5						
LAO PDR VIENTIANE - S/VLVT Bangkok/VTBB Hanoi/VVNB	S S	SAT/d SAT/d	300 baud 9600 bps	COP-B None	IA-5 IA-5						Note 2
MALAYSIA KUALA LUMPUR-S/WMKK Bangkok/VTBB Brunei/WBSB Chennai/VOMM Singapore/WSSS	S S S S	SAT/d LTT LTT SAT/d	2400 bps 75 baud 50 baud 1200 bps	X.25 None None X.25	IA-5 ITA-2 ITA-2 IA-5	LDD/d LDD/d	2400 bps 2400 bps	X.25 X.25	IA-5 IA-5	12/02 12/02	Note 1, 2 Note 1, 2 Note 1, 2 Note 2
MALDIVES MALE - S/VRMM Colombo/VCCC	S	LTT	50 baud	None	ITA-2	SAT/d	2400 bps	X.25	IA-5	12/02	Note 2
MARSHALL ISLAND MAJURO - S/PKMJ United States/KSLC	S	SAT/d	1200 bps	X.25	IA-5						
MICRONESIA FEDERATED STATE OF CHUUK - S/PTKK United States/KSLC	S	SAT/a	1200 bps	X.25	IA-5						
KOSRAE - S/PTSA United States/KSLC	S	SAT/a	1200 bps	X.25	IA-5						
PONAPEI - S/PTPN United States/KSLC	S	SAT/a	1200 bps	X.25	IA-5						
YAP - S/PTYA United States/KSLC	S	SAT/a	1200 bps	X.25	IA-5						
MONGOLIA ULAANBAATAR-S/ZMUB Beijing/ZBBB Russian Federation/UII	S S	SAT/d LTT	300 baud 50 baud	None None	IA-5 ITA-2						Note 2 (Irkutsk)
MYANMAR YANGON - S/VYYY Bangkok/VTBB Beijing/ZBBB	S S	SAT/d	300 baud	COP-B	IA-5	SAT/d	300 baud	None	IA-5	12/02	Note 2 Note 1,2

State/Station	Cat.	CURRENT				PLANNED				Target date of implemen- tation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
NAURU NAURU - S/ANAU Brisbane/YBBE	S					SAT/d	2400 bps	X.25	IA-5		Internet as interium measure
NEPAL KATHMANDU - S/VNKT Beijing/ZBBB Mumbai/VABB	S S	SAT/d SAT/a	300 baud 50 baud	None None	IA-5 ITA-2						
NEW CALEDONIA (FRANCE) NOUMEA - S/NWWW Nadi/NFFN	S	LDD/d	2400 bps	X.25	IA-5						Note 2
NEW ZEALAND CHRISTCHURCH-T/NZCH Brisbane/YBBE Nadi/NFFN Niue/NIUE Papeete/NTAA Rarotonga/NCRC Tongatapu/NFTF USA/KSLC	T S S S S S S	LDD/d LDD/d	2400 bps 2400 bps	X.25 X.25	IA-5 IA-5						Note 2 Note 1, 2 Currently by FAX
NIUE IS NIUE - S/NIUE Christchurch/NZCH	S					LDD/d LDD/d	2400 bps 9600 bps	None X.25	IA-5 IA-5	02/03 02/03	
PAKISTAN KARACHI - M/OPKC Beijing/ZBBB Mumbai/VABB Kabul/OAKB Kuwait/OKBK	M M S M	LTT SAT/a SAT/d SAT/a	50 baud 200 baud 300 baud 50 baud	None None None None	ITA-2 ITA-2 IA-5 ITA-2	LDD/a	300 baud	None	IA-5	05/03	Note 2 Note 2
PALAU KOROR - S/PTR0 United States/KSLC	S	SAT/d	1200 bps	X.25	IA-5						
PAPUA NEW GUINEA PORT MORESBY-S/ayPM Brisbane/YBBE	S	SAT/d	9600 bps	X.25	IA-5						Note 2
PHILIPPINES MANILA - S/RPLL Hong Kong/VHHH Singapore/WSSS Taibel/RCTP	S S S S	LDD/d LDD/d LTT	300 baud 300 baud 75 baud	None None None	ITA-2 ITA-2 ITA-2	LDD/d	300 baud	None	ITA-2	12/02	Note 2 Note 1, 2 Note 1, 2

State/Station	Cat.	CURRENT				PLANNED				Target date of implemen- tation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
REPUBLIC OF KOREA											
SEOUL - S/RKSS											
Beijing/ZBBB	S	SAT/d	9600 bps	X.25	IA-5						
Tokyo/RJAA	S	LDD/d	9600 bps	X.25	IA-5						Note 2
SAMOA											
APIA - S/NSFA											
USA/KSLC	S	LDD/d	2400	X.25	IA-5						
SINGAPORE											
SINGAPORE-M/WSSS											
Bahrain/OBBI	M	LTT	200 baud	None	ITA-2	SAT/a	2400 bps	X.25	IA-5	12/02	
Bangkok/VTBB	M	LDD/d	1200 bps	X.25	IA-5						Note 2
Brisbane/YBBE	M	LDD/d	2400 bps	COPB	IA-5			X.25		12/02	
Brunei/WBSB	S	LDD/d	2400 bps	X.25	IA-5						
Colombo/VCCC	M	LTT	75 baud	None	ITA-2	LDD/d	2400 bps	X.25	IA-5	12/02	
Ho-Chi-Minh/VVTS	S	SAT/a	300 baud	None	IA-5						
Jakarta/WIII	S	SAT/d	2400 bps	X.25	IA-5						Note 2
Kuala Lumpur/WMKK	S	SAT/d	1200 bps	X.25	IA-5						Note 1,2
London/EGGG	M	LDD/d	1200 bps	X.25	IA-5						
Manila/RPLL	S	LDD/d	300 baud	None	ITA-2				IA-5		
Tokyo/RJAA	M	LDD/a	1200 bps	COP-B	IA-5	LDD/d	9600 bps	X.25	IA-5	12/02	
SOLOMON IS.											
HONIARA - S/AGGG											
Brisbane/YBBE	S					LTT	75 baud	None	IA-5	12/02	Internet as intermedium measur
SRI LANKA											
COLOMBO - M/VCCC											
Mumbai/VABB	M	SAT/a	50 baud	None	ITA-2	LDD/d	64 kbps	X.25	IA-5	12/02	
Male/VRMM	S	LTT	50 baud	None	ITA-2	SAT/d	2400 bps	X.25	IA-5	12/02	Note2
Singapore/WSSS	M	LTT	75 baud	None	ITA-2	LDD/d	2400 bps	X.25	IA-5	12/02	
THAILAND											
BANGKOK - M/VTBB											
Mumbai/VABB	M	SAT/a	2400 bps	X.25	IA-5						
Dhaka/VGZR	S	SAT/d	300 baud	None	IA-5						
Ho-Chi-Minh/VVTS	S	SAT/d	2400 bps	None	IA-5						
Hong Kong/VHHH	M	LDD/d	2400 bps	X.25	IA-5						
Kuala Lumpur/WMKK	S	SAT/d	2400 bps	X.25	IA-5						Note 1, 2
Phnom Penh/VDPP	S	SAT/d	300 baud	None	ITA-2						Note 2
Rome/LIII	M	SAT/d	2400 bps	X.25	IA-5						
Singapore/WSSS	M	LDD/d	1200 bps	X.25	IA-5						Note 2
Vientiane/VLVT	S	SAT/d	300 baud	COP-B	IA-5						
Yangon/VYYY	S	SAT/d	300 baud	COP-B	IA-5						Note 2
TONGA											
TONGATAPU - S/NFTF	S										
Cristchurch/NZCH						LDD/d	2400 bps	None	IA-5	02/03	

State/Station	Cat.	CURRENT				PLANNED				Target date of implemen- tation	Remarks
		Type	Signalling Speed	Protocol	Code	Type	Signalling Speed	Protocol	Code		
1	2	3	4	5	6	7	8	9	10	11	12
TUVALU FUNAFUTI - S/NGFU Nadi/NFFN	S					LDD/d	2400 bps	None	IA-5		Dial-up
UNITED STATES USA-M/KSLC Apia/NSFA Brisbane/YBBE Christchurch Chuuk/PTKK Koror/PTRO Kosrae/PTSA Majuro/PKMJ Nadi/NFFN Pago Pago/NSTU Ponapei/PTPN Tokyo/RJAA Yap/PTYA	S M S S S S S M S S M S	LDD/d SAT/d	2400 bps 2400 bps	X.25 X.25	IA-5 IA-5	LDD/d	9600 bps	X.25	IA-5	02/03	
VANUATU PORT VILA - S/NVVV Brisbane/YBBE	S	LTT	300 baud	None	ITA-2						Internet as interim measure
VIET NAM HANOI-S/VVNB Vientiane/VLVT Ho-Chi-Minh/VVTS Guangzhou/ZGGC	S S S	SAT/d SAT/d	9600 bps 9600 bps	None None	IA-5 IA-5	SAT/d	2400 bps	None	IA-5	06/03	
HO-CHI-MINH - S/VVTS Bangkok/VTBB Hanoi/VVNB Hong Kong/VHHH Singapore/WSSS	S S S S	SAT/d SAT/d SAT/d SAT/a	2400 bps 9600 bps 2400 bps 300 baud	None None None None	IA-5 IA-5 IA-5 IA-5						
WALLIS IS. (FRANCE) WALLIS - S/NLWW Nadi/NFFN	S					LDD/A	2400 bps	None	IA-5		Current routing via Noumea



20 December 2002

Legend

- MCC - Main Com. Center
- TCC - Tributary Com. Center
- AFTN Station
- AFTN Trunk Circuit
- AFTN Circuit
- - - Non_implemented Circuit