

**IV-CNS 1B-1**

**TABLE CNS 1B**

**AERONAUTICAL TELECOMMUNICATION NETWORK (ATN) / INTERNET PROTOCOL SUITE (IPS) ROUTER PLAN**

**EXPLANATION OF THE TABLE**

*Column*

- |   |   |
|---|---|
| 1 | Administration – the name of the Administration, State or Organization responsible for management of the router   |
| 2 | Location of Router  |
| 3 | Type of Router:<br><br>BBIS - Backbone Boundary Intermediate System<br>BIS - Boundary Intermediate System   |
| 4 | Type of Interconnection:<br><br>Inter - Regional - Connection provided with stations in other ICAO regions<br>Intra - Regional - Connection provided between BBIS stations<br>Sub - Regional - Connection provided between a BBIS station and a BIS station   |
| 5 | Interconnection, Connected to router of: name of the location of the correspondent router   |
| 6 | Link Speed - Speed requirements of the interconnecting link   |
| 7 | Link Protocol - Protocol requirements for the interconnecting link<br><br><u>“X.25” – Connectionless Network Protocol (CLNP) over X.25</u><br><br><u>“IP-SNDGF” – CLNP over Internet Protocol (IP) (SNDGF - Sub-Network Dependent Convergence Function)</u><br><br><u>“IPS” - Internet Protocol Suite</u> |
| 8 | Target Date of Implementation - date of implementation of the router<br><br>TBD - To be determined  |
| 9 | Remarks   |

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Afghanistan</b>	Kabul	BIS	Sub-Regional	Pakistan	64000bps	IPS	2015	Intra-domain
		BIS	Inter-Regional	Iran	9600 bps	IPS	2015	
<b>American Samoa</b>	Pago Pago			United States			2013	Intra-domain
<b>Australia</b>	Brisbane	BBIS	Intra-Regional	Fiji	64000 bps	CLNP/IP-SNDCF	2014	
		BIS	Sub-Regional	Indonesia	64000 bps	X.25/IP SNDCF	2015	
		BBIS	Intra-Regional	Japan	64000 bps	IP/SNDCF	TBD	Not implemented
				Nauru		IPS	2013	Intra-domain
		BIS	Sub-Regional	New Zealand	64000 bps	IPS	2013	Implemented
				Papua New Guinea	64000 bps	IPS	2013	Intra-domain/Implemented
		BBIS	Intra-Regional	Singapore	64000 bps	CLNP/IP-SNDCF	2015	
		BBIS	Inter-Regional	South Africa	64000 bps	TBD	TBD	Not implemented
				Solomon Islands		IPS	2012	Intra-domain
				Timor Leste		IPS	2013	Intra-domain
				Vanuatu		IPS	2010	Intra-domain
		BBIS	Inter-Regional	United States	64000 bps	IPS/SNDCF	2015	
<b>Bangladesh</b>	Dhaka	BIS	Sub-Regional	India	64000 bps	IPS	TBD	
		BIS	Sub-Regional	Thailand	9600 bps	X.25	2013	
<b>Bhutan</b>	Paro	BIS	Sub-Regional	India	9600 bps	IPS	TBD	

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Brunei Darussalam</b>	Brunei	BIS	Sub-Regional	Malaysia	64000 bps	IPS	2016	
		BIS	Sub-Regional	Singapore	9600 bps	X.25	2013	Circuit implemented
<b>Cambodia</b>	Phnom Penh	BIS	Sub-Regional	Thailand	9600 bps	X.25	2013	
<b>China</b>	Beijing	BIS	Sub-Regional	DPR Korea	9600 bps	X.25	2013	Router Implemented
		BBIS	Intra-Regional	Hong Kong, China	64000 bps	X.25	2015	Router Implemented
		BBIS	Intra-Regional	India	64000 bps	IPS	2013	
		BBIS	Intra-Regional	Japan	64000 bps	IPS/SNDCF	TBD	
		BBIS	Inter-Regional	Kuwait	64000 bps	X.25	2013	Router Implemented
		BIS	Sub-Regional	Macau, China	64000 bps	X.25	2012	Implemented
		BIS	Sub-Regional	Mongolia	9600 bps	X.25	2013	Router Implemented
		BIS	Sub-Regional	Myanmar	9600 bps	IPS	2015	Router Implemented
		BIS	Sub-Regional	Nepal	9600 bps	X.25	2013	Router Implemented
		BIS	Sub-Regional	Pakistan	64000 bps	X.25	2013	Router Implemented
		BIS	Sub-Regional	Republic of Korea	64000 bps	X.25	2011	Implemented
		BBIS	Inter-Regional	Russian Federation	64000 bps	X.25	2012	Router Implemented
	Taibei	BBIS	Intra-Regional	Thailand	64000 bps	X.25	2014	Router Implemented
		BIS	Sub-Regional	Vietnam	9600 bps	X.25	2013	
<b>Hong Kong, China</b>	Hong Kong	BIS	Sub-Regional	Hong Kong, China	64000 bps	X.25	TBD	
		BBIS	Intra-Regional	China	64000 bps	X.25	2015	
		BIS	Sub-Regional	Macau, China	64000 bps	X.25	2009	Implemented

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
		BIS	Sub-Regional	Philippines	64000 bps	X.25/IPS	2015	
		BBIS	Sub-Regional	Taipei	64000 bps	X.25	TBD	
		BBIS	Intra-Regional	Thailand	64000 bps	X.25	2014	Implemented
		BIS	Sub-Regional	Viet Nam	64000 bps	X.25	2015	
Macau, China	Macau	BIS	Sub-Regional	China	64000 bps	X.25	2012	Implemented
		BIS	Sub-Regional	Hong Kong, China	64000 bps	X.25	2009	Implemented
Cook Islands	Rarotonga			New Zealand	9600 bps	IPS	2013	Intra-domain
DPR Korea	Pyongyang	BIS	Sub-Regional	China	9600 bps	X.25	2013	
Fiji	Nadi	BBIS	Intra-Regional	Australia	64000 bps	CLNP/IP-SNDCF	2014	
				Kiribati	64000 bps	IPS	2014	Intra-domain
		BIS	Sub-Regional	New Caledonia			2013	Intra-domain
				Tuvalu		IPS	2011	Intra-domain
		BBIS	Inter-Regional	United States	9600 bps	X.25	2011	Circuit implemented
				Wallis Islands			2013	Intra-domain
French Polynesia	Papeete			New Zealand	9600 bps	IPS	2013	Intra-domain
India	Mumbai	BIS	Sub-Regional	Bangladesh	64000 bps	IPS	TBD	
		BIS	Sub-Regional	Bhutan	9600 bps	IPS	TBD	
		BBIS	Intra-Regional	China	64000 bps	IPS	2013	
		BIS	Inter-Regional	Kenya	9600 bps	TBD	TBD	
		BIS	Sub-Regional	Nepal	64000 bps	IPS	2014	
		BIS	Inter-Regional	Oman	9600 bps	IPS	2012	Interoperability trials in Q2/2012

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
		BIS	Sub-Regional	Pakistan	64000 bps	IPS	2013	Interoperability test completed in 2010. Trial operations in progress.
		BBIS	Intra-Regional	Singapore	64000 bps	X.25	2011	Circuit Implemented
		BIS	Sub-Regional	Sri Lanka	9600 bps	IPS	TBD	
		BBIS	Intra-Regional	Thailand	64000 bps	X. 25	2013	Trials Commence from Q2/2012
<b>Indonesia</b>	Jakarta	BIS	Sub-Regional	Australia	64000bps	IPS	2015	
		BIS	Sub-Regional	Singapore	19200 bps	IPS	2015	
<b>Japan</b>	Tokyo	BBIS	Intra-Regional	Australia	64000 bps	X.25/IP-SNDCF	TBD	Not implemented
		BBIS	Intra-Regional	China	64000 bps	X.25/IP-SNDCF	2017	Implement gradually from 2016 on-wards
		BBIS	Intra-Regional	Hong Kong, China	64000 bps	IP/SNDCF	TBD	Implement gradually from 2016 on-wards
		BBIS	Inter-Regional	Europe	64000 bps	X.25/IP-SNDCF	TBD	Implement gradually from 2016 on-wards
		BIS	Sub-Regional	Republic of Korea	64000 bps	X .25/IP-SNDCF	TBD	
		BBIS	Inter-Regional	Russia Federation	64000 bps	X.25/IP-SNDCF	TBD	Implement gradually from 2016 on-wards
		BBIS	Intra-Regional	Singapore	64000 bps	IPS-SNDCF	2016	Implement gradually from 2016 on-wards
		BIS	Sub-Regional	Taipei	64000 bps	X.25/IP-SNDCF	TBD	Implement gradually from 2016 on-wards

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
		BBIS	Inter-Regional	United States	64000 bps	X.25/IP-SNDCF	2015	Circuit implemented
<b>Kiribati</b>	Tarawa	BIS	Sub-Regional	Fiji	64000 bps	IPS	2014	Intra-domain
<b>Lao PDR</b>	Vientiane	BIS	Sub-Regional	Thailand	64000 bps	IPS	2013	VSAT
		BIS	Sub-Regional	Viet Nam	9600 bps	X.25	2013	
<b>Malaysia</b>	Kuala Lumpur	BIS	Sub-Regional	Brunei	64000 bps	IPS	2016	
		BIS	Sub-Regional	Singapore	64000 bps	IPS	2015	
		BIS	Sub-Regional	Thailand	64000 bps	IPS	2015	
<b>Maldives</b>	Male	BIS	Sub-Regional	Sri Lanka	64000 bps	X.25	2013	
<b>Marshall Islands</b>	Majuro		Internet	United States	64000 bps	IP	2006	Intra-domain
<b>Micronesia Federated State of</b>	Chuuk		Internet	United States	64000 bps	IP	2006	Intra-domain
	Kosrae		Internet	United States	64000 bps	IP	2006	Intra-domain
	Ponapei		Internet	United States	64000 bps	IP	2006	Intra-domain
	Yap		Internet	United States	64000 bps	IP	2006	Intra-domain
<b>Mongolia</b>	Ulaanbaatar	BIS	Sub-Regional	China	9600 bps	X.25	2013	
<b>Myanmar</b>	Yangon	BIS	Sub-Regional	China	9600 bps	IPS	2015	
		BIS	Sub-Regional	Thailand	9600 bps	IPS	2015	
<b>Nauru</b>	Nauru			Australia			2013	Intra-domain
<b>Nepal</b>	Kathmandu	BIS	Sub-Regional	China	9600bps	X.25	2013	
		BIS	Sub-Regional	India	64000 bps	IPS	2014	
<b>New Caledonia</b>	Noumea			Fiji			2013	Intra-domain

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>New Zealand</b>	Christchurch	BIS	Sub-Regional	Australia	64000 bps	IPS	2013	
				Cook Is.	24000 bps	IPS	2013	Intra-domain
				French Polynesia	9600 bps	IPS	2013	Intra-domain
				Samoa	2400 bps	IPS	2013	Intra-domain
				Tonga	85000 bps	IPS	2013	Intra-domain
		BIS	Inter-Regional	USA	64000 bps	IPS	2015	
<b>Pakistan</b>	Karachi	BIS	Sub-Regional	Afghanistan	64000 bps	IPS	2013	
		BIS	Sub-Regional	China	64000 bps	X.25	2013	
		BIS	Sub-Regional	India	64000 bps	IPS	2013	Interoperability test completed in 2010. Trial operations in progress.
		BIS	Inter-Regional	Oman	64000 bps	-	2013	
		BIS	Inter-Regional	Iran	64000 bps	-	2013	
		BIS	Inter-Regional	Kuwait	64000 bps	-	2013	
<b>Palau</b>	Koror		Internet	United States	64000 bps	IP	2006	Intra-domain
<b>Papua New Guinea</b>	Port Moresby			Australia	64000 bps	IPS	2013	Intra-domain
<b>Philippines</b>	Manila	BIS	Sub-Regional	Hong Kong, China	64000 bps	X.25/IPS	2015	Circuit Implemented
		BIS	Sub-Regional	Singapore	64000 bps	IPS	2016	
<b>Republic of Korea</b>	Seoul	BIS	Sub-Regional	China	64000 bps	X.25	2011	Implemented
		BIS	Sub-Regional	Japan	64000 bps	X.25	TBD	
<b>Samoa</b>	Faleolo			New Zealand	2400 bps	IPS	2013	Intra-domain

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Singapore</b>	Singapore	BBIS	Intra-Regional	Australia	64000 bps	CLNP/IP-SNDCF	2015	
		BBIS	Inter-Regional	Bahrain	64000 bps	IPS	2015	
		BIS	Sub-Regional	Brunei	9600bps	IPS	2016	
		BBIS	Intra-Regional	India	64000 bps	X.25	2011	Implemented
		BIS	Sub-Regional	Indonesia	19200bps	IPS	2015	
		BBIS	Intra-Regional	Japan	64000 bps	IPS/SNDCF	2016	
		BIS	Sub-Regional	Malaysia	64000 bps	IPS	2015	
		BIS	Sub-Regional	Philippines	64000 bps	IPS	2016	
		BIS	Sub-Regional	Sri Lanka	64000 bps	IPS	2015	
		BBIS	Intra-Regional	Thailand	64000 bps	X.25	2014	Implemented
		BBIS	Inter-Regional	United Kingdom	64000 bps	IPS	2012	Implemented
		BIS	Sub-Regional	Viet Nam	9600 bps	X.25	2015	
<b>Solomon Islands</b>	Honiara			Australia		IPS	2012	Intra-Domain
<b>Sri Lanka</b>	Colombo	BIS	Sub-Regional	India	9600 bps	IPS	TBD	
		BIS	Sub-Regional	Maldives	64000 bps	X.25	2013	
		BIS	Sub-Regional	Singapore	64000 bps	IPS	2015	
<b>Thailand</b>	Bangkok	BIS	Sub-Regional	Bangladesh	32000 bps	IPS	2014	VSAT
		BIS	Sub-Regional	Cambodia	32000bps	IPS	2013	VSAT
		BBIS	Intra-Regional	Beijing, China	64000 bps	X.25	2014	
		BBIS	Intra-Regional	Hong Kong, China	64000 bps	X.25	2014	Implemented

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
		BBIS	Intra-Regional	India	64000 bps	X.25	2014	
		BBIS	Inter-Regional	Italy	64000 bps	X.25	2014	
		BIS	Sub-Regional	Lao PDR.	32000 bps	IPS	2014	VSAT
		BIS	Sub-Regional	Malaysia	64000 bps	IPS	2015	
		BIS	Sub-Regional	Myanmar	32000 bps	IPS	2015	VSAT
		BBIS	Intra-Regional	Singapore	64000 bps	X.25	2014	Implemented
		BIS	Sub-Regional	Viet Nam	32000 bps	IPS	2015	VSAT
Timor Leste	Dili			Australia		IPS	2013	Intra-domain
Tonga	Tongatapu			New Zealand	9600 bps	IPS	2013	Intra-domain
Tuvalu	Funafuti			Fiji		IPS	2011	Intra-domain
United States	Salt Lake City	BBIS	Inter-Regional	Australia	64000 bps	IPS/SNDCF	2015	
				American Samoa			2013	Intra-domain
		BBIS	Inter-Regional	Fiji	9600 bps	X.25	2011	Circuit implemented
		BBIS	Inter-Regional	Japan	64000 bps	IPS/SNDCF	2015	Circuit implemented
			Internet	Marshall Islands	64000 bps	IP	2006	Intra-domain
			Internet	Micronesia, Federated State of	64000 bps	IP	2006	Intra-domain
		BIS	Inter-Regional	New Zealand	64000 bps	IPS	2015	Circuit Implemented
Vanuatu	Port Vila		Internet	Palau	64000 bps	IP	2006	Intra-domain
				Australia		IPS	2010	Intra-domain

<b>Administration</b>	<b>Location of Router</b>	<b>Type of Router</b>	<b>Type of Interconnection</b>	<b>Interconnection, Connected to router of:</b>	<b>Link Speed</b>	<b>Link Protocol</b>	<b>Target date of Implementation</b>	<b>Remarks</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>Viet Nam</b>	Ho Chin Minh/Hanoi	BIS	Sub-Regional	China	9600 bps	X.25	2013	
		BIS	Sub-Regional	Hong Kong, China	64000 bps	X.25	2015	
		BIS	Sub-Regional	Lao PDR.	9600 bps	X.25	2013	
		BIS	Sub-Regional	Singapore	9600 bps	X.25	2015	
		BIS	Sub-Regional	Thailand	9600 bps	X.25	2015	
<b>Wallis Islands</b>	Wallis			Fiji			2013	Intra-domain