



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**TWENTY SIXTH MEETING OF THE ASIA/PACIFIC AIR NAVIGATION
PLANNING AND IMPLEMENTATION REGIONAL GROUP
(APANPIRG/26)**

Bangkok, Thailand, 7 – 10 September 2015

Agenda Item 4: Regional Air Navigation Deficiencies
STATUS OF AIR NAVIGATION DEFICIENCIES IN THE ASIA/PAC REGION

(Presented by the Secretariat)

SUMMARY

One of the main objectives of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) is to identify and address specific deficiencies in the air navigation field. This Paper presents a list of Air Navigation Deficiencies identified by the 25th Meeting of APANPIRG (APANPIRG/25, September 2014) in the ATM, AOP, CNS and MET fields and updated based on information provided by States during the Sub-Group/Working Group Meetings for review and action by APANPIRG/26. The list is based on the uniform methodology for the identification, assessment and reporting of such deficiencies as described in Part V of the *APANPIRG Procedural Handbook*.

This paper presents the List of Deficiencies,

This paper relates to – Strategic Objectives:

A: **Safety** – Enhance global civil aviation safety

B: **Air Navigation Capacity and Efficiency** — Increase the capacity and improve the efficiency of the global aviation system

E: **Environmental Protection** — minimize the adverse environment effects of civil aviation activities.

Action by APANPIRG/26 is at Para 3.

1. INTRODUCTION

1.1 Under the Terms of Reference, the APANPIRG has been regularly reviewing the status of implementation of the Asia Pacific Air Navigation Plan through its subgroups to identify and address the air navigation deficiencies according to the uniform methodology approved by the ICAO Council. In meeting this objective, APANPIRG facilitates the development and implementation of action plans by States to resolve identified deficiencies, where necessary.

1.2 The online deficiency database is available through the ICAO APAC website www.icao.int/apac via secure access provided by the Regional Office to States and International Organizations concerned.

2. DISCUSSION

2.1 The lists of deficiencies in the various air navigation fields, as developed by APANPIRG/25 and updated by the respective Sub-groups and the Secretariat, are presented in Attachments A to D.

2.2 Deficiencies in the ATM/AIS/SAR fields

2.2.1 The third meeting of the ATM Sub-group (ATMSG/3, August 2015) reviewed and updated the List of ATM Deficiencies based on information provided by concerned States.

2.2.2 The updated List of Air Navigation Deficiencies in the ATM/AIS/SAR field is given in **Appendix A** to this paper.

2.3 Deficiencies in the AOP field

2.3.1 The third meeting of AOP Working Group (AOPWG/3) of June 2015 reviewed and updated the List of AOP Deficiencies based on the information provided by the concerned States.

2.3.2 The updated List of Air Navigation Deficiencies in the AOP field is given in **Appendix B** to this paper.

2.4 Deficiencies in the CNS field

2.4.1 The 19th Meeting of the CNS/SG of July 2015 reviewed and updated the list of Air Navigation Deficiencies in the CNS field.

2.4.2 The updated List of Air Navigation Deficiencies in the CNS field is given in **Appendix C** to this paper.

2.5 Deficiencies in the MET fields

2.5.1 The 19th Meeting of MET SG of August 2015 reviewed and updated the list of Air Navigation Deficiencies in the MET Field.

2.5.2 The updated List of Air Navigation Deficiencies in the MET field is in **Appendix D** to this paper.

2.6 The Meeting is invited to adopt the following draft Conclusion:

Conclusion 26/xx – Update of ATM/AIS/SAR, AOP, CNS and MET Deficiency List

That, the list of air navigation deficiencies reported and identified in ATM/AIS/SAR, AOP, CNS and MET Deficiency List be updated as detailed in **Appendices A to D** to the Report on Agenda Item 4.

3. ACTION BY THE MEETING

3.1 The Meeting is invited to:

- a) note the current status of the deficiencies in the air navigation field as presented in Appendices A to D and update them based on additional information provided at the Meeting;
- b) decide on the further action required for the elimination of the identified deficiencies; and
- c) urge States to establish action plans with fixed target dates for resolution of safety related deficiencies and inform the ICAO Regional Office on action taken.

WP07 Appendix T

ATM/AIM/SAR Deficiencies List (Updated 14 August 2015)

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
<u>WGS-84</u>								
Requirements of Paragraph 3.7.1 of Annex 15	Afghanistan	WGS-84 - Not implemented	24/6/2014			Afghanistan	TBD	A
	Bangladesh	WGS-84 - Not implemented	24/6/2014			Bangladesh	TBD	A
	Bhutan	WGS-84 - Not implemented	2/7/1999	Data conversion completed, but not published		Bhutan	TBD	A
	Brunei Darussalam	WGS-84 - Not implemented	24/6/2014			Brunei Darussalam	TBD	A
	Cook Islands	WGS-84 - Not implemented	24/6/2014			Cook Islands	TBD	A
	Kiribati	WGS-84 - Not implemented				Kiribati	TBD	A
	Lao PDR	WGS-84 - Not implemented	24/6/2014			Lao PDR	TBD	A
	Maldives	WGS-84 - Not implemented	24/6/2014			Maldives	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
		implemented						
	Marshall Islands	WGS-84 - Not implemented	24/6/2014			Marshall Islands	TBD	A
	Micronesia	WGS-84 - Not implemented	24/6/2014			Micronesia	TBD	A
	Nauru	WGS-84 - Not implemented		Conferring with consultant		Nauru	TBD	A
	Pakistan	WGS-84 - Not implemented	24/6/2014			Pakistan	TBD	A
	Palau	WGS-84 - Not implemented	24/6/2014			Palau	TBD	A
	Philippines	WGS-84 - Not implemented	24/6/2014			Philippines	TBD	A
	Samoa	WGS-84 - Not implemented	24/6/2014			Samoa	TBD	A
	Thailand	WGS-84 - Not implemented	24/6/2014			Thailand	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Vanuatu	WGS-84 - Implemented at main airports	2/7/1999			Vanuatu	1999	A
<u>Airspace Classification</u>								
Requirements of Paragraph 2.6 of Annex 11	China	Airspace Classification - Not implemented	7/7/99		Difference to Annex 11 is published in AIP, China.	China	APANPIRG/19 updated, implementation planned by end 2010.	A
	Kiribati	Airspace Classification - Not implemented	7/7/99			Kiribati	TBD	A
	Nauru	Airspace Classification - Not implemented	7/7/99			Nauru	TBD	A
	Papua New Guinea	Airspace Classification - Not implemented	7/7/99			Papua New Guinea	Project in place	A
	Solomon Islands	Airspace Classification - Not implemented	7/7/99			Solomon Islands	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
<u>AIP Format</u>								
Requirements of Chapter 4 of Annex 15	Cook Islands	AIP Format - Not implemented	7/7/99			Cook Islands	ATM/AIS/SAR/G/1 6 (June 2006) updated - AIP COOK ISLANDS in new format in progress with assistance of New Zealand	A
	Kiribati	AIP Format - Not implemented	7/7/99			Kiribati	ATM/AIS/SAR/SG/ 18 (June 2009) was advised AIP in draft stage	A
	Nauru	AIP Format - Not implemented	7/7/99			Nauru	ATM/AIS/SAR/SG/ 18 (June 2008) was advised work soon to start	A
	Papua New Guinea	AIP Format - Not implemented	7/7/99			Papua New Guinea	TBA	A
<u>AIS Quality Management System</u>								
Requirements of Paragraph 3.2.1 of Annex 15 Quality	Afghanistan	AIS Quality Management System - Not implemented	24/6/2014			Afghanistan	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
Management System - Not implemented	Bangladesh	AIS Quality Management System - Not implemented	24/6/2014			Bangladesh	TBD	A
	Bhutan	AIS Quality Management System - Not implemented	24/6/2014			Bhutan	TBD	A
	Brunei Darussalam	AIS Quality Management System - Not implemented	24/6/2014			Brunei Darussalam	TBD	A
	Cambodia	AIS Quality Management System - Not implemented	24/6/2014			Cambodia	TBD	A
	Cook Islands	AIS Quality Management System - Not implemented	24/6/2014			Cook Islands	TBD	A
	DPR Korea	AIS Quality Management System - Not implemented	24/6/2014			DPR Korea	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
		implemented						
	Indonesia	AIS Quality Management System - Not implemented	24/6/2014			Indonesia	TBD	A
	Kiribati	AIS Quality Management System - Not implemented	24/6/2014			Kiribati	TBD	A
	Lao PDR	AIS Quality Management System - Not implemented	24/6/2014			Lao PDR	TBD	A
	Maldives	AIS Quality Management System - Not implemented	24/6/2014			Maldives	TBD	A
	Marshall Islands	AIS Quality Management System - Not implemented	24/6/2014			Marshall Islands	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Micronesia	AIS Quality Management System - Not implemented	24/6/2014			Micronesia	TBD	A
	Nauru	AIS Quality Management System - Not implemented	24/6/2014			Nauru	TBD	A
	Nepal	AIS Quality Management System - Not implemented	24/6/2014			Nepal	TBD	A
	Pakistan	AIS Quality Management System - Not implemented	24/6/2014			Pakistan	TBD	A
	Palau	AIS Quality Management System - Not implemented	24/6/2014			Palau	TBD	A
	Papua New Guinea	AIS Quality Management System - Not implemented	24/6/2014			Papua New Guinea	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
		implemented						
	Philippines	AIS Quality Management System - Not implemented	24/6/2014			Philippines	TBD	A
	Samoa	AIS Quality Management System - Not implemented	24/6/2014			Samoa	TBD	A
	Solomon Islands	AIS Quality Management System - Not implemented	24/6/2014			Solomon Islands	TBD	A
	Thailand	AIS Quality Management System - Not implemented	24/6/2014			Thailand	TBD	A
	Timor Leste	AIS Quality Management System - Not implemented	24/6/2014			Timor Leste	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Vanuatu	AIS Quality Management System - Not implemented	24/6/2014			Vanuatu	TBD	A
	Viet Nam	AIS Quality Management System - Not implemented	24/6/2014			Viet Nam	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
<u>SAR capability</u>								
Requirements of Annex 12	Afghanistan	SAR Capability Matrix	6/07/2015	SAR Capability (no data)		Afghanistan	2016	U
	Bhutan	SAR Capability Matrix	6/07/2015	SAR Capability (no data)		Bhutan	2016	U
	Cambodia	SAR Capability Matrix	6/07/2015	SAR Capability (14 of 20)		Cambodia	2016	U
	Cook Islands	SAR Capability Matrix	6/07/2015	SAR Capability (19 of 20)		Cook Islands	2016	U
	Cook Islands	Annex 12 requirements not implemented. No agreements with adjacent States.	31/1/95		Cook Islands - implement Annex 12 requirements and co- ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Cook Islands	2009. SAR agreement with New Zealand completed 2007.	U
	DPR Korea	SAR Capability Matrix	6/07/2015		SAR Capability (15 of 20 elements non- compliant)	DPR Korea	2016	U

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Fiji	SAR Capability Matrix	6/07/2015		SAR Capability (13 of 20 elements non- compliant)	Fiji	2016	U
	Kiribati	SAR Capability Matrix	6/07/2015		SAR Capability (no data)	Kiribati	2016	U
	Lao PDR	SAR Capability Matrix	6/07/2015		SAR Capability (10 of 20 elements non- compliant)	Lao PDR	2016	U
	Macau, China	SAR Capability Matrix	6/07/2015		SAR Capability (10 of 20 elements non- compliant)	Macau, China	2016	U
	Maldives	SAR Capability Matrix	6/07/2015		SAR Capability (9 of 20 elements non- compliant)	Maldives	2016	U

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Maldives	Annex 12 requirements not implemented. No agreements with adjacent States.	24/4/97	SAR services and facilities provided (details to be confirmed). SAR agreements with neighbouring States under development	Maldives - implement Annex 12 requirements and co-ordinate LOA with adjacent States ICAO - assist to develop SAR capability and to co-ordinate with adjacent States	Maldives	2009	U
	Marshall Islands	SAR Capability Matrix	6/07/2015		SAR Capability (no data elements non-compliant)	Marshall Islands	2016	U
	Micronesia	SAR Capability Matrix	6/07/2015		SAR Capability (20 of 20 elements non-compliant)	Micronesia	2016	U
	Myanmar	SAR Capability Matrix	6/07/2015		SAR Capability (17 of 20 elements non-compliant)	Myanmar	2016	U
	Nauru	SAR Capability Matrix	6/07/2015		SAR Capability (no data elements non-compliant)	Nauru	2016	U
	Nepal	SAR Capability Matrix	6/07/2015		SAR Capability (12 of 20 elements non-compliant)	Nepal	2016	U
	New Caledonia	SAR Capability Matrix	6/07/2015		SAR Capability (8 of 20 elements non-	New Caledonia	2016	U

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
					compliant)			
	Palau	SAR Capability Matrix	6/07/2015		SAR Capability (no data)	Palau	2016	U
	Papua New Guinea	SAR Capability Matrix	6/07/2015		SAR Capability (11 of 20 elements non- compliant)	Papua New Guinea	2016	U
	Philippines	SAR Capability Matrix	6/07/2015		SAR Capability (12 of 20 elements non- compliant)	Philippines	2016	U
	Samoa	SAR Capability Matrix	6/07/2015		SAR Capability (no data elements non- compliant)	Samoa	2016	U
	Solomon Islands	SAR Capability Matrix	6/07/2015		SAR Capability (no data)	Solomon Islands	2016	U
	Timor Leste	SAR Capability Matrix	6/07/2015		SAR Capability (no data)	Timor Leste	2016	U
	Tonga	SAR Capability Matrix	6/07/2015		SAR Capability (18 of 20 elements non- compliant)	Tonga	2016	U
	Vanuatu	SAR Capability Matrix	6/07/2015		SAR Capability (no data)	Vanuatu	2016	U

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
<u>Non Provision of Safety-related Data</u>								
Requirement of Paragraph 3.3.5.1 of Annex 11 (provision of data for monitoring the height keeping performance of aircraft)	Bangladesh	Annex 11 requirement not implemented.	11/9/09		Bangladesh— provide the safety related data as required. Bangladesh advised ATM/AIS/SAR/SG/20 that the data were submitted to MAAR in 2008 and 2009; Thailand to confirm.	Bangladesh		U
Requirement of Paragraph 3.3.5.1 of Annex 11 (provision of data for monitoring the height-keeping performance of aircraft)	India	Annex 11 requirement not implemented.		Established by RASMAG/20- failure to provide RVSM approvals summary data	Lack of	India		U

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
Requirement of Paragraph 3.3.5.1 of Annex 11 (provision of data for monitoring the height-keeping performance of aircraft)	Philippines	Annex 11 requirement not implemented.		Established by RASMAG/20- failure to provide RVSM approvals summary data		Philippines		U
Data Link Performance Monitoring and Analysis								
Requirements of Paragraph 2.27.5 of Annex 11 not met.	China	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA		China	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Indonesia	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Indonesia	TBD	A
	Malaysia	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Malaysia	TBD	A
	Myanmar	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Myanmar	TBD	A

WP07 Appendix T

Identification		Deficiencies			Corrective Action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action**
	Maldives	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Maldives	TBD	A
	Sri Lanka	Post-implementation monitoring not implemented	29/5/2015	Not registered with competent CRA. Problem Reports not provided to CRA. Performance monitoring and analysis not reported to FIT.		Sri Lanka	TBD	A
	Viet Nam	Post-implementation monitoring not implemented	29/5/2015	Performance monitoring and analysis not reported to FIT.		Viet Nam	TBD	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14, Volume I	Nepal Kathmandu International Airport	Runway/taxiways	ICAO Mission of February 2008	Provision of RESA in accordance with section 3.5 of ICAO Annex 14, Volume I.	RESA will be provided	Tribhuvan International airport/ CAAN	2015	U
				Insufficient runway strip, refer recommendations given in section 3.4 of Annex 14, Volume I.	Provide runway strip as per ICAO recommendations		Not possible	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14, Volume I	Maldives	Runway/ Taxiways	AGA Mission Report April 2008	Insufficient runway strip.	Runway strip available	Maldives Airports Company Pvt Ltd	Runway strip of 150m width on both sides of the runway is available now. However apron is within the strip and will be relocated with the implementation of the new master plan	U
	Male International Airport			Provision of RESA in accordance with section 3.5 of ICAO Annex 14, Volume I.	RESA will be provided	Maldives Airports Company Pvt Ltd	RESA available on runway 36 Declared as runway 36- 90m Runway 18-55m 90m of RESA for runway 18 will be provided with the implementation of the new master plan. Exemption granted by State and published in AIP	U
	Gan International airport	Runway	AGA Mission Report	Provision of RESA in accordance with section 3.5 of ICAO Annex 14, Volume I.	RESA will be provided	Addu International airport Pvt Ltd.	CAP has been submitted. RESA will be provided as per ICAO requirement by 2014	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	India	Runway	AGA mission January 2009	RESA not provided in accordance with Para 3.5 of Annex 14, Volume I requirements;	RESA will be provided	AAI	December 2012 RESA provided, however desired strength is yet to be provided.	U
	Chennai International Airport			Runway strip is insufficient-300m strip width is not available for the full length of runway 07/25 in accordance with 3.4.3 of Annex 14, Volume I.	300m strip width for full length of runway 07/25 will be made available.	AAI	December 2013 Action initiated	A
Annex 14, Volume I	Mumbai	Runway	AGA mission January 2009	RESA not provided for R/W 09 and R/W 14 in accordance with Para 3.5 of ICAO Annex 14, Volume I;	RESA will be provided	MIAL	R/w-09 RESA provided R/w-14- June 2013	U
	Mumbai International Airport			Runway strip is insufficient-300m strip width is not available for the full length of runway 09/27 in accordance with 3.4.3 of Annex 14, Volume I	300m strip width for full length of runway 09/27 will be made available	MIAL	R/w 09/27- August 2013 R/w 14/32- June 2013	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Cambodia Siem Reap International Airport	Runway	AGA mission of March 2009	RESA not provided as per Para 3.5 of Annex 14, Volume I. ;	RESA will be provided		RESA provided. RESA improvement plan under consideration to satisfy Para's 3.5.87 to 3.5.10 of Annex 14.	U

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Bangladesh	Runway/ Taxiway	ICAO mission April 2009	Runway strip width insufficient(300m strip not available for the full length of runway);	runway strip in accordance with Annex 14, volume I will be provided	CAABD	Runway strip width 300m available for the full length of runway (mitigation measures for storm water drain on the western side strip under process. No obstructions on graded area)	A
				runway edge lights and taxiway edge lights does not meet frangibility requirements in accordance with 9.9 of Annex 14, Volume I.	airfield lighting system satisfying frangibility requirements will be provided			Runway and taxiway overlay work completed. Runway edge lights and taxiway centre line lights provided in accordance with 9.9 of Annex 14, Volume I ; Taxiway centerline lights are installed instead of taxiway edge lights.

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14, Volume I	Thailand	Runway	AGA mission of July 2009	RESA to satisfy Section 3.5 of Annex 14, Volume I requirements;	RESA will be provided		Risk assessment study in process [DCA letter dated 9 April 2014)	U
	Phuket International Airport			Runway strip width insufficient (300m runway strip for precision approach runways in accordance with Para 3.4.5 of Annex 14, Volume I;	300m runway strip width for full length of runway will be made available		Risk assessment study in process [DCA letter dated 9 April 2014)	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Myanmar	Runway/ Taxiway	ICAO mission April 2010	Runway shoulder higher than adjacent strip	Flush strip with adjacent runway shoulder	Department of Civil Aviation	October 2011	A
	Yangon International Airport			Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I.	enhanced taxiway markings will be provided		DCA has planned to implement SMGCS. The system will start in 2012	A
				Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements;	RESA will be provided		March 2011	A
				Provisions of shoulders for taxiways	taxiway shoulders will be provided		Beginning of 2012	B
				Provision of road holding position signs at entrances to active runways	road holding position signs will be provided		October 2011	A
				Bird Hazard	Establishment of a national bird committee in accordance with APANPIRG Conclusion 18/1.	Establish National Bird Committee		DCA will establish National Bird committee.
Annex 14, Volume I	Mandalay Airport	Runway/ Taxiway	April 2010	Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements;	RESA will be provided	Department of Civil Aviation	Oct 2011	A
				Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I.	enhanced taxiway markings will be provided		DCA is reviewing the requirement for taxiway enhanced centerline marking	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
				Provision of road holding position signs at entrances to active runways.	road holding position signs will be provided.		Oct 2011	A
Annex 14 Vol. I Amendment 6 <i>§ 10.1</i> <i>§ 10.2</i>				A maintenance programme should be established to maintain facilities in a condition which does not impair safety of air navigation.	DCA establishes and implements producers to aerodrome operators meet national requirements for maintenance programme.		End of 2011	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Fiji Islands Nadi International Airport	Runway/ Taxiway	ICAO mission June 2010	Flush the strip with the adjacent runway shoulder	Flushed strip with adjacent runway shoulder	Civil Aviation Authority of Fiji	4 th Quarter 2013	A
				Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements;	RESA will be provided		3 rd quarter 2012	A
				Provision of Airfield signage in accordance with ICAO Annex 14, volume I, section 5.4	signage as per ICAO standards will be provided		4 th Quarter 2013	A
				Establishment of a national bird committee in accordance with APANPIRG Conclusion 18/1.	Established National Bird Committee		May 2012	B
				Provision of 300m strip width for the full length of precision approach CAT I runway in accordance with the standard 3.4.3, Annex 14, Volume I; remove obstacles from runway strip; flush the strip with the adjacent runway shoulder	runway strip will be provided and strip flushed with adjacent runway shoulder		4 th Quarter 2013	A
Annex 14 Volume I	Nausori International Airport	Runway/ Taxiway	June 2010	Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements.	RESA will be provided		4 th Quarter 2013	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirements	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Sri Lanka Bandaranaike International Airport	Runway/ Taxiway	ICAO mission April 2010	Provision of 300m strip width for the full length of precision approach CAT I runway in accordance with the standard 3.4.3, Annex 14, Volume I; remove obstacles from runway strip; flush the strip with the adjacent runway shoulder	runway strip in accordance with Annex 14, volume I will be provided, obstacles from strip will be removed and and flush strip with adjacent runway shoulder	CAASL	AASL has been granted a period of 12 years to cover the drains. Exemption for the period granted has been published in the AIP.	A
				Provision of runway hold position lights in accordance with Para 5.3.19 of ICAO Annex 14, Volume I	runway hold position lights will be provided		Airside safety committee has been formed to study all runway makings, signs and lighting to determine the adequacy of the system in order to prevent runway incursion	A
				Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I.	Enhanced taxiway markings will be provided		February 2011	A
				Establishment of a national bird committee in accordance with APANPIRG Conclusion 18/1.	National Bird Committee will be established		July 2010	A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Viet Nam Noi Bai International Airport, Hanoi	Runway/ Taxiway	ICAO mission March 2010	Runway shoulder higher than adjacent strip and obstacles on strip	Flush strip with adjacent runway shoulder and remove obstacles	Civil Aviation Administration of Vietnam		A
				Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I.	Provide enhanced taxiway markings			
				Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements.	Provide RESA			A
		Bird Hazard		Wildlife strike report submission to ICAO for inclusion in IBIS.	Submission of wildlife strike reports to ICAO for inclusion in IBIS.			B
Annex 14, Volume I	Tan Son Nhat International Airport, Ho Chi Minh City	Runway/ Taxiway	March 2010	Runway shoulder higher than adjacent strip and obstacles on strip.	Flush strip with adjacent runway shoulder and remove obstacles			A
				Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I.	Provide enhanced taxiway markings			
				Provision of RESA in accordance with Section 3.5 of Annex 14, Volume I requirements;	Provide RESA			A
				Wildlife strike report submission to ICAO for inclusion in IBIS.	Submission of wildlife strike reports to ICAO for inclusion in IBIS.			B

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Brunei Darussalam Brunei International Airport	Runway	ICAO Mission of April 2011	vegetation along pavement edges and strip higher than the adjacent runway pavement; uneven earth mounds on strip				A
				faded centre line and other markings;				A
		Taxiway		non provision of enhanced taxiway centre line marking in accordance with Para 5.2.8 of Annex 14, Volume I				A
				Objects on taxiway strips; vegetation on pavement joints and maintenance of joints				A
		Apron		non provision of ICAO compliant signage in accordance with section 5.4 Annex 14, Volume I				A
		Rescue and Fire Fighting (RFF):		non provision of direct access for the rescue and fire fighting vehicles from the fire station into the runway;				A
				non provision of road holding position sign at all road entrances to a runway; and				A
	Wildlife Hazards:	Establishing a national bird control committee in accordance with APANPIRG Conclusion 18/1;					B	

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Lao PDR Wattay International Airport	Runway	ICAO Mission of March 2011	Non provision of RESA in accordance with section 3.5 of Annex 14, Volume I rubber deposits and faded centre line markings.				U A
		Taxiway		Provision of runway hold position lights in accordance with Para 5.3.19 of ICAO Annex 14, Volume I Provision of enhanced taxiway centre line marking in accordance with Para 5.2.8 of Annex 14, Volume I				A
		Rescue and Fire Fighting (RFF):		Provision of road holding position sign at all road entrances to a runway;				A
		Wildlife Hazards:		Establishing a national bird control committee in accordance with APANPIRG conclusion 18/1.				B
		Luang Prabang International Airport	Runway		Provision of enhanced taxiway centre line marking in accordance with standard in Para 5.2.8.11 of Annex 14, Volume I			

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
		Taxiway		Provision of runway hold position lights in accordance with Para 5.3.19 of ICAO Annex 14, Volume I on new taxiways				A
		Rescue and Fire Fighting (RFF)		Provision of road holding position sign at all road entrances to a runway				A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
Annex 14 Volume I	Mongolia	Runway	ICAO Mission of July 2011	rubber deposits and faded centre line and other faded markings;				A
	Ulaan Baatar International Airport			Taxiway	Resealing cracks on pavement surface with sealants to prevent ingress of water and broken edges which could cause FOD issues.			
		Provision of enhanced taxiway centre line marking in accordance with Para 5.2.8 of Annex 14, Volume I.						A
		faded taxiway markings						A
		Maintenance of pavement cracks						A
		provision of runway hold position lights in accordance with Para 5.3.19 of ICAO Annex 14, Volume I .						A
		provision of taxiway hold position signs on all hangar taxiways at entrances to the active taxiways/runway.						A

AIR NAVIGATION DEFICIENCIES IN AOP FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date of completion	Priority for action**
		Apron		sealing the cracks on the apron surface				A
		Airfield signage		Provision of ICAO compliant signage in accordance with section 5.4 Annex 14, Volume I and to cut the vegetation in front of the signs.				A
		Wildlife Hazards		establishing a national bird control committee in accordance with APANPIRG conclusion 18/1; collect wildlife reports and forward to ICAO for inclusion in the ICAO IBIS;				B B

* Priority for action to remedy the shortcoming is based on the following safety assessments:

“U” priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions. Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.

“A” priority = Top priority requirements necessary for air navigation safety. Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.

“B” priority = Intermediate requirements necessary for air navigation regularity and efficiency. Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.

CNS SG/19
Appendix T to the Report

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE CNS FIELD IN THE ASIA/PACIFIC REGION

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action
Adequate and reliable VHF COM	Myanmar	Quality and reliability of RCAG VHF inadequate and unavailability of required coverage.	1998	Improvements in the quality of link to RCAG stations and power supply system at some remote stations are required.	An action plan was developed to upgrade equipment at RCAG stations, replace VSAT stations at 5 VSAT location for the relay link to RCAG sites, to improve power supply system. Latest update refer IP/15 from Myanmar to CNS SG/19 meeting	DCA Myanmar	December 2015	A
		Improvements had been observed with occasional communication problems reported.	June 2011		DCA Myanmar has replaced equipments at all 6 RCAG sites with digital VHF system and has provided VSAT links and solar power supply system at all sites.		This deficiency will be removed from the list upon receipt of official report providing full details of action taken by Myanmar and confirmation by the users.	
		From 2 to 13 April 2012, a survey was conducted by IATA. 129 of 349 aircraft from 11 airlines reported problems of one sort or another (HF, VHF or Data Link) 50 reported no communication had been established.	April 2012		The current VCSS (Voice Control Switching System) has already been upgraded since first quarter 2011		IATA conduct a visit and decide whether conducting a survey from its member airlines for the air/ground communication status in Yangon FIR by October 2015,	
		In Flight Broadcast Procedure (IFBP) currently still in place	July 2014		The interface between new ATM system and CSP was upgraded from X.25 to IP in March 2013. The connectivity was stable but ATM/FANS system exhibits some instability.			
					Further improvements need to be taken by the DCA Myanmar including both operational and technical arrangements			

APANPIRG/26 - WP/11
Appendix C

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action
Adequate and reliable Nav aids and navigation service REMOVED	Philippines	Un-serviceability of both the ILSs and the DVOR at Manila airport.	19 June 2010	A letter from CAAP informed that the ILS system with associated DME had been commissioned in January and April 2011 respectively. Arrangement for continuous DVOR/DME operation was made by temporarily relocating old DVOR/DME facilities from another place.	The significant breakdown of the services was considered a deficiency if remedial action was not taken. The Administration was requested to inform about the remedial action taken to avoid breakdown of power supply. Power supply module has been replaced; For DVOR/DME, a plan to replace temporary aging facilities with new system is in place which was expected to be completed in early 2012	Civil Aviation Authority of the Philippines (CAAP)	Letter received from CAAP that this deficiency had been removed since November 2014. (successful installation of the new VOR/DME at NAIA having been commissioned through flight calibration since November 2014 after new ILS serving both runway 06 and 24 put into operation in early 2011)	A
Reliable ground to ground communication as specified in the regional air navigation plan (Doc.9673)	Afghanistan and Pakistan	Unreliability of AFS communication between Afghanistan and Pakistan was brought to the notice of APANPIRG/21. Lack of reliability in the AFS including data communication between Kabul and Karachi and ATS voice communication between Lahore and Kabul was identified.	September 2010	Follow-up letters from ICAO regional offices were sent to Administrations concerned in April 2010 and further follow-up in March 2011 A COM coordination meeting – Afghanistan and Pakistan was held in June 2012 in Karachi, Pakistan. Further follow-up	In March 2012, initial discussion on improvement of AFS communication was held at a special ATS coordination meeting. The COM coordination meeting in June 2012 developed a remedial action plan which was further updated in February 2015. 1. Near-term by end of September 2012, fully utilize the VPN circuit operational since January 2012 for exchange of AFTN traffic, organize users' training if required; (status quo) 2. Mid-term by end of May 2015, harmonize VSAT terminal equipment and select common network service provider to recover the VSAT Links; Afghanistan has successfully changed	Ministry of Transport and Civil Aviation Afghanistan and CAA. Pakistan	December 2015	A

Identification		Deficiencies			Corrective Action			
Requirement	States/facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action
				was made in end of 2014 and early 2015. A Remedial action plan was updated. New proposal for using landline has also proposed to be established between two States.	the service provider in February 2015. Site visit by expert from Afghanistan was expected to visit Pakistan. 3. Long-term by end of end of 2015, establish a dedicated landline connection with multiplexers between Afghanistan and Pakistan to support both data and voice communication between COM centres and ACCs. A proposal has been received from Pakistan. PCAA recommended in July 2015 to use landline to recover both the AFTN and ATS voice communication through a service provider.			
Regional air navigation plan – FASID Table CNS 1A	Myanmar	AFS data circuit between Beijing and Yangon had been out of service since Mid. July 2008.	September 2008	The circuit serves exchanging traffic between Myanmar and Z AFS routing area and also plays a critical role as alternate routing for Bangkok-Yangon circuit.	A COM Coordination meeting in February 2014 developed an action item to rectify the deficiency as soon as possible. End of 2014, an E1 (2Mbytes) circuit was ordered by both States. the terminating equipment also purchased and under configuration and testing	DCA. Myanmar and ATMB	October 2015	A
Regional air navigation plan – FASID Table CNS 1D	China & Pakistan	Improvement of ATS Direct Speech circuit performance and A/G communication and surveillance coverage between China and Pakistan	May 2014 RASMAG/19	The ATS direct speech circuit via IDD between Urumqi and Lahore was observed not stable. Issues reported were in 2013	Remedial action plan was developed in May 2015 by both States through a COM coordination meeting. A VSAT is planned to be installed at Lahore for connection with Urumqi ACC and additional VHF station with VSAT link will be installed to cover the VHF gap at PURPA crossing point.	China ATMB and CAA. Pakistan	December 2015	A

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
Meteorological observations and reports. (Annex 3, Chapter 4)	Solomon Islands AP-MET-01	Weather information is inadequate and not provided on a regular basis	1996 Confirmed 2006 SOA	Reported by airlines operating to Solomon I.	<p>Equipment to be upgraded and arrangements to be made for regular observations.</p> <p>TC expert recommendation to replace and/or calibrate MET obs. equipment AGGH – 2008.</p> <p>State made aware of MET Services gaps identified by ICAO TC Project, CAEMSA-SP, in late 2008.</p> <p>CAEMSA-SP Phase II plan for Donors and associated remedies.</p> <p>Activation of WIFS will assist in overcoming deficiency.</p> <p>AWS was installed (2012) at Honiara (Henderson), AGGH, by New Zealand, including training of Solomon Is. technical personnel in the maintenance of the equipment.</p> <p>Responsibility for ongoing system calibration and verification may need to be determined.</p> <p>Secure transmission of weather information to the appropriate RODB may need to be verified (noting that transmission via email to the Australian Bureau of Meteorology may not be appropriate).</p> <p>[APANPIRG/25] Solomon Is. expected to address issues concerning calibration and verification of meteorological observation systems and proper/secure transmission of information.</p> <p>Solomon Islands advised that with the assistance from the WMO and Australia (Bureau of Met), Solomon Islands is now ready to take back these responsibilities – then these deficiencies will be addressed.</p>	Ministry of Transport, Works and Aviation, Solomon I. <i>Note: OPMET/M TF to carry out survey</i>	2011	A

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
Meteorological observations and reports. (Annex 3, Chapter 4)	Kiribati AP-MET-02	METAR from Kiribati not available on regular basis.	1998 Confirmed 2005 SIP	Reported by airlines	State's MET authority to consider urgent action to be taken for providing regular observations and reports. TC expert recommendation to purchase/install AWOS – 2008. ICAO SIP conducted in 2005. State made aware of MET Services gaps identified by ICAO TC Project CAEMSA-SP, in late 2008. CAEMSA-SP Phase II plan for Donors and associated remedies. Activation of WIFS will assist in overcoming deficiency. [APANPIRG/25] Kiribati requested assistance from New Zealand with respect to the supply of a new/replacement meteorological observing system. Kiribati was considering funding options for a new meteorological observing system and a full meteorological observing programme.	Directorate of Civil Aviation, Kiribati. <i>Note:</i> <i>OPMET/M TF to carry out survey</i>	2011	A
Reporting of information on volcanic eruptions to civil aviation units. (Annex 3, 3.6, 4.8)	Indonesia AP-MET-03	Information on volcanic activity not provided regularly to ATS units and MWOs.	1995 Confirmed by ICAO SIP mission Dec 2003	Observed by States concerned. Reported at the WMO/ICAO Workshop on Volcanic Ash Hazards (Darwin, 1995)	Three-party LOA to be signed between the MGA, DGCA and DVGHM. Information exchange between CVGHM & ABA in draft form. VSAT comms. installed to improve the monitoring in E Nusa Tenggara – provides direct transfer of data to CVGHM HQ full time. (AusAID-funded project). Bilingual reporting form based on VONA to improve comm. to VAAC in Sulawesi. [APANPIRG/25] Indonesia submitted an official report to the RO (August 2014) on corrective action taken: (a) BMKG and DGCA signed a MoU to	DGCA, MGA Indonesia	2014	A

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
					strengthen the dissemination of volcanic ash activity reports and to improve management of flight operations during volcanic eruptions; (b) CVGHM, NOTAM office–DGCA, MWOs and BMKG implemented a volcanic activity report dissemination system (1 May 2012) to ensure information on volcanic activity is provided regularly to ATS units and MWOs; and (c) Indonesia (BMKG, DGCA, and CVGHM) and VAAC (Darwin) held a coordination meeting (June 2014) to strengthen the coordination of volcanic ash information between Indonesia and VAAC. ICAO to validate the action taken and then inform APANPIRG on the status of the deficiency for possible removal from the Open List. [Secretariat] Future volcanic ash exercises in the APAC region would facilitate the validation of action taken with respect to provision of information on volcanic ash.			
Reporting of information on volcanic eruptions to civil aviation units. (Annex 3, 3.6, 4.8)	Papua New Guinea AP-MET-04	Information on volcanic activity not provided regularly to ATS units and MWOs.	1995 Confirmed by ICAO SIP mission Dec 2003	Observed by States concerned. Reported at the WMO/ICAO Workshop on Volcanic Ash Hazards (Darwin, 1995)	Procedures to be set up for exchange of data between NWS, ATS and Rabaul Volcano Observatory (RVO) and a LOA to be signed Discussion of an agreement between RVO & PNG CAA to provide volcanic information to aviation through cost recovery is underway. [APANPIRG/25] Recent analysis of meteorological services provided in PNG (conducted by PNG, Australia and the ICAO) produced a number of recommendations for actions that would strengthen services and help rectify MET deficiencies. Future volcanic ash exercises in the APAC region would facilitate reporting of information on volcanic eruptions to civil aviation units in States concerned.	NWS, ATS PNG <i>Note: ICAO Regional Office to monitor</i>	TBD (no action plan submitted to RO)	A

APANPIRG/26 - WP/11
Appendix D

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
Provision of SIGMET for volcanic ash (Annex 3, Chapter 7; ASIA/PAC FASID Table MET 1B)	Indonesia AP-MET-06 Philippines AP-MET-07 Papua New Guinea AP-MET-08	Requirements for issuance and proper dissemination of SIGMET, including SIGMET for volcanic ash, have not been fully implemented	ICAO SIP mission Dec 2003	a) Reported by airlines b) Noted by Volcanic Ash Advisory Centres	a) ICAO to carry out a Special Implementation Project (SIP) with the primary objective to improve implementation of SIGMET procedures, especially for VA. b) State to take urgent actions to implement the SIGMET procedures. Note. ICAO SIP carried out in 2003, progress in issuance of SIGMET for VA is noted; the outstanding problems to be resolved within 1-year (progress reported by VAAC Darwin) LOA between ATO, PHIVOCS & PAGASA signed in 2004 to make reporting part of information dissemination practice. LOA is undergoing periodic review (ref. letter of PAGASA dated March 12, 2008) VAAC Darwin trained forecasters in PNG and Philippines to prepare VA SIGMET Participated in VA SIGMET test 17 Nov 2009 SIGMET monitoring over a period of 2 months in August and September 2012 indicated that no SIGMET was received from PNG (MET SG/17, 8.4.3 & 13.9 refers). Indonesia advised (MET SG/17) that procedures were developed for the issuance of SIGMET (WS, WV and WC) compliant with ICAO provisions and that MWO Jakarta (WIII) and MWO Ujung Pandang (WAAF) have issued SIGMET according to the requirements since April 2013. MET SG/17 noted that validation of SIGMET receipt at RODBs and WIFS/SADIS gateways would be necessary and may require additional	a) State's Met authorities b) ICAO to implement the SIP. c) ICAO Regional Office to co-ordinate and monitor.	2014 (AP-MET-06), To be advised (AP-MET-07 and 08)	U

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
					<p>SIGMET monitoring and participation in SIGMET tests.</p> <p>[APANPIRG/25] Indonesia submitted an official report to the RO (August 2014) on corrective action taken: (a) BMKG implemented national procedures for issuance of SIGMET (April 2013) at both MWOs (Jakarta/WIII and Ujung Pandang/WAAA); and (b) MWOs successfully participated in SIGMET tests. ICAO to validate the action taken and then inform APANPIRG on the status of the deficiency for possible removal from the Open List. PNG did not participate in 2013 SIGMET tests. A recent analysis of the meteorological services provided in PNG (conducted by PNG, Australia and the ICAO) produced a number of recommendations for actions that would strengthen services and help rectify MET deficiencies. Future volcanic ash exercises in the APAC region would facilitate provision of SIGMET for volcanic ash in States concerned.</p> <p>Philippines participated in ICAO APAC SIGMET tests in November 2014 and has since requested assistance (from ICAO) with an assessment or evaluation in order to facilitate rectification of the deficiency. Philippines participated in first ICAO APAC volcanic ash exercise (VOLPHIN15/01), which tested SIGMET issuance. Debrief of VOLPHIN15/01, including assessment of SIGMET information, will be done in September 2015 (VOLCEX/SG/2).</p>			
a) Service for operators and flight crew members.	Cambodia AP-MET-09	Briefing and flight documentation not provided as required.	1999	Airlines do not receive the required flight documentation	States to consider urgent action for installation of SADIS VSAT for receiving WAFS products and OPMET information.	State's MET authorities	End 2011	A

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
(Annex 3, Chapter 9). b) WAFS products for flight documentation. (ASIA/PAC FASID Table MET 1A).		WAFS products not available		including WAFS forecasts.	Action plan proposed by ICAO MET mission 2003 A TC project proposal submitted to SSCA, Cambodia Cambodia expects to have SADIS FTP operational in 2011 and may require training from a nearby State Cambodia informed MET SG/17 that the Secure SADIS FTP system was installed but further action was required in relation to training of personnel to use the system. [APANPIRG/25] Specific training necessary for the personnel to provide the WAFS products for flight documentation was expected to be addressed by Cambodia.			
MWO for Phnom Penh FIR and SIGMET (Annex 3, Chapter 3 & 7; ASIA/PAC FASID Table MET 1B)	Cambodia AP-MET-11	Requirements for meteorological watch office (MWO) to be established at Phnom-Penh international airport have not been met.		MWO not established due to lack of trained personnel and technical facilities. No SIGMET service for Phnom Penh FIR	Establishment of MWO currently not feasible. SIGMET service is provided under bilateral agreement with China to meet requirements. A TC project proposal submitted to SSCA, Cambodia Cambodia is in process of establishing its own MWO with target date end of 2011. [APANPIRG/25] Bilateral arrangement with China has successfully addressed part of the deficiency (SIGMET issuance).	SSCA, Cambodia	TBD End 2011	A
Provision of SIGMET information (Annex 3, Chapter 7; ASIA/PAC FASID Table	Lao PDR AP-MET-12	Requirements for issuance and dissemination of SIGMET have not been fully implemented.	2000	SIGMET frequently not available Reported by airlines	State's MET authority to take urgent actions to implement the SIGMET procedures. Lao PDR has established MWO in 2010 and started issuing SIGMET since March 2011. As a result of monitoring by RODB Bangkok, LAO PDR was	State's MET authorities	End 2011	A

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
MET 1B)					<p>advised to correct noted formatting problem and to issue SIGMET on a regular basis to meet requirements.</p> <p>Lao PDR is expected to issue SIGMET regularly by the end of 2011. This deficiency can be considered for removal after correcting the above problems.</p> <p>SIGMET monitoring by RODB Bangkok in February 2012 failed to identify the issuance of any SIGMET by Lao PDR, indicating that the deficiency is still to be properly rectified (ROBEX WG/11, 2.1.4 refers).</p> <p>[APANPIRG/25] Lao PDR did not successfully participate in each of the three 2013 SIGMET tests. Lao PDR established a special MET Improvement Task Force to address deficiencies and is expected to report back to ICAO in due course on the status of implementation of corrective action.</p>			
<p>Provision of SIGMET information for Kathmandu FIR.</p> <p>(Annex 3, Chapter 7; ASIA/PAC FASID Table MET 1B)</p>	Nepal AP-MET-14	Requirements for issuance and dissemination of SIGMET have not been met.	2000	Not established due to lack of technical facilities. No SIGMET service for Kathmandu FIR	<p>Issuance of SIGMET currently not feasible.</p> <p>Action being taken to have SIGMET service provided under bilateral agreement with a neighbouring country to meet immediate requirement.</p> <p>Nepal is also planning to issue its own SIGMET.</p> <p>[APANPIRG/25] Nepal informed the RO of progress: now able to issue SIGMET when necessary; training was conducted by WMO (Nov 2013); SIGMET issuance in operation (July 2013); SIGMET information transmitted to ATS units and other CA units concerned; participated in 2013 SIGMET tests. Nepal expected to submit in writing an official report to the RO providing details of the</p>	MET Authority Nepal	2014	A

APANPIRG/26 - WP/11
Appendix D

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
					corrective action taken.			
MWO for Pyongyang FIR and SIGMET (Annex 3, Chapter 3 & 7; ASIA/PAC FASID Table MET 1B)	Democratic Peoples' Republic of Korea AP-MET-16	Requirements for meteorological watch office (MWO) to be established at Pyongyang international airport have not been met.	2008	MWO not established due to lack of trained personnel and lack of resources. No SIGMET service for Pyongyang FIR Reported by RO mission	MWO established in February 2009 as reported by State. DPRK is subsequently producing SIGMET on a regular basis and is routing SIGMET to RO DB Tokyo. It is required for Sunan MWO to participate the APAC SIGMET test in November 2011. This deficiency can be removed if SIGMET is continued to be issued regularly for another six months. DPRK informed RO that SIGMET were issued in May 2013; RO to coordinate confirmation of receipt of SIGMETs at required offices. [APANPIRG/25] DPRK to submit official report to RO providing details of corrective action taken. Validation would necessarily require SIGMET monitoring to confirm receipt at required offices. Test SIGMETs were not received from DPRK in 2013; assistance to be coordinated by ROBEX WG to resolve the communication issues.	General Administration of Civil Aviation (GACA) DPRK	2014	A
Volcanic activity information to be provided to ATS units, MWOs, and VAAC (Annex 3, 3.6 and 4.8)	Tonga AP-MET-17	Information on volcanic activity not provided regularly to ATS units, MWOs, and VAAC	2008	Reported by TCB CAEMSA-SP technical expert	Agreement drafted for the dissemination of volcanic ash information from MLSNRKT to MTKT for distribution to ACCs, MWOs and VAACs (under consideration) Tonga submitted official report to RO (10 May 2013) advising that MOU between the Ministry of Infrastructure (MOI) and the Ministry of Lands, Environment, Climate Change and Natural Resources (MLECCNR) signed 9 May 2013 for coordination procedures of the dissemination of	Ministry of Transport of the Kingdom of Tonga (MTKT) Ministry of Lands, Survey and Natural Resources of the Kingdom of Tonga	2014	U

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
					<p>detection of volcanic ash information to the appropriate ACC, VAAC and MWO.</p> <p>[APANPIRG/25] ICAO to validate the action taken (with assistance from VAAC Wellington) and then inform APANPIRG on the status of the deficiency for possible removal from the Open List.</p> <p>[Secretariat] Future volcanic ash exercises in the APAC region would facilitate the validation of action taken with respect to provision of information on volcanic ash.</p>	(MLSNRKT)		
<p>Briefing and flight documentation</p> <p>(Annex 3, Chapter 9, Appendix 2 & 8)</p>	<p>Kiribati AP-MET-18</p> <p>Nauru AP-MET-19</p> <p>Solomon Islands AP-MET-20</p>	<p>WAFS products not accessed and therefore not available for inclusion in flight briefings and documentation</p>	2008	<p>Reported by TCB CAEMSA-SP Technical Expert</p>	<p>WAFS Internet File Service (WIFS) allows for the retrieval of WAFS forecasts for flight briefings and documentation (versus more expensive satellite dish) – available for operations since May 2010</p> <p>Will seek donor ship for installation and training on WIFS as part of CAEMSA-SP Phase II</p> <p>Solomon Islands advised that with the assistance from the WMO and Australia (Bureau of Met), Solomon Islands is now ready to take back these responsibilities – then these deficiencies will be addressed.</p>	<p>MET Services, TCB, Donor, ISCS Provider State</p>	2012	U
<p>Provision of meteorological observations</p> <p>(Annex 3, 4.3.1, 4.5, 4.6)</p>	<p>Nauru AP-MET-21</p>	<p>No METAR/SPECI observing programme in place (no calibrated and maintained equipment available)</p>	2008	<p>Reported by TCB CAEMSA-SP Technical Expert</p>	<p>Automatic observing station needed as well as maintenance programme</p> <p>Will seek donor for observing system and maintenance contract and/or training as part of CAEMSA-SP Phase II</p>	<p>MET Service, TCB, Donor</p>	2012	U
<p>Provision of SIGMET information</p> <p>(Annex 3, Chapter 7)</p>	<p>Papua New Guinea AP-MET-22</p>	<p>Lack of SIGMET issued for the Port Moresby, Honiara, and Nauru FIRs.</p>	9/09/2011	<p>IATA emphasized the importance of having hazards reported in this</p>	<p>ICAO: States concerned are urged to take urgent action to seek assistance from a State in a position to do so to provide the service until such time the States concerned can provide their own SIGMET.</p>			U

APANPIRG/26 - WP/11
Appendix D

REPORTING FORM ON AIR NAVIGATION DEFICIENCIES IN THE MET FIELD IN THE ASIA/PAC REGION								
(Shaded text indicates additional information provided by States since APANPIRG/25)								
Identification		Deficiencies			Corrective action			
Requirements	States/ facilities	Description	Date first reported	Remarks	Description	Executing body	Target date for completion	Priority for action *
	Solomon Islands AP-MET-23 Nauru AP-MET-24			large sub-regional area that straddles the equator and deemed this situation unsafe and unacceptable to airline operations.	SIGMET monitoring over a period of 2 months in August and September 2012 indicated that no SIGMET was received (MET SG/17, 8.4.3 & 13.9 refers). [APANPIRG/25] Arrangement for issuance of SIGMET by PNG on behalf of Solomon Is. and Nauru has not been successful. APANPIRG/24 Conclusion 24/51 to further investigate and assess the feasibility of bilateral agreements for the provision of SIGMET. PNG did not participate in 2013 SIGMET tests. A recent analysis of the meteorological services provided in PNG (conducted by PNG, Australia and the ICAO) produced a number of recommendations for actions that would strengthen services and help rectify MET deficiencies. Future volcanic ash exercises in the APAC region would facilitate provision of SIGMET for volcanic ash in States concerned. Solomon Islands advised that with the assistance from the WMO and Australia (Bureau of Met), Solomon Islands is now ready to take back these responsibilities – then these deficiencies will be addressed.			