



ICAO

*International Civil Aviation Organization*

**The Combined Tenth Meeting of the South Asia/Indian Ocean  
ATM Coordination Group (SAIOACG/10) and Twenty—  
Seventh Meeting of the South East Asia ATS Coordination  
Group (SEACG/27)**

Bangkok, Thailand, 30 March – 03 April 2020

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### **Agenda Item 3: Review of Current Operations and Problem Areas**

#### **AIR NAVIGATION SERVICE DEFICIENCIES LIST**

(Presented by the Secretariat)

##### **SUMMARY**

This paper presents a list of Air Navigation Deficiencies noted by the Thirtieth meeting of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/30) in the ATM/AIS/SAR fields for review by the meeting. 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*.

## **1. INTRODUCTION**

1.1 Under the Terms of Reference of APANPIRG, one of the primary objectives is to identify and address specific deficiencies in the air navigation field. In meeting this objective, APANPIRG facilitates the development and implementation of action plans by States to resolve identified deficiencies, where necessary. Consequently, APANPIRG and its Sub-groups regularly review deficiencies in their respective fields and develop recommendations for remedial actions.

1.2 APANPIRG Air Navigation Services (ANS) deficiencies are identified in accordance with the *Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies*, together with the related Asia/Pacific Supplement to the Uniform Methodology, as detailed in the APANPIRG Procedural Handbook.

1.3 The Twenty-First Meeting of APANPIRG (APANPIRG/21, September 2010) reviewed the updated List based on information provided by concerned States to ATM/AIS/SAR/SG/20 (July 2010, Singapore). The meeting urged States who had not taken firm corrective action to eliminate the deficiencies, and adopted the following Conclusion.

#### ***Conclusion APANPIRG21/ 53 – Elimination of ATM Air Navigation Deficiencies***

*That, States concerned*

*a) be urged to take urgent actions to correct the deficiencies in the ATM/AIS/SAR fields identified in Attachment A to the Report on Agenda Item 4;*

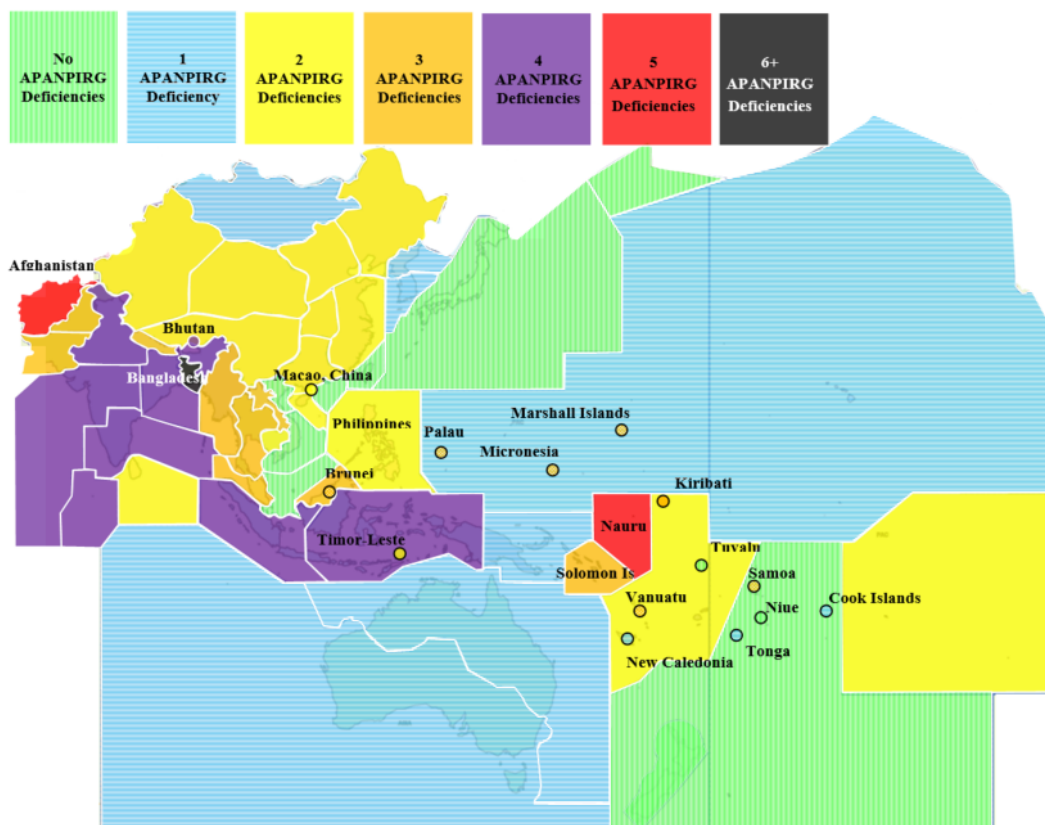
*b) notify details of the problems/difficulties to the Regional Office; and*

*c) designate a point of contact in each State to deal with deficiencies and provide details to the Regional Office by 22 October 2010.*

## 2. DISCUSSION

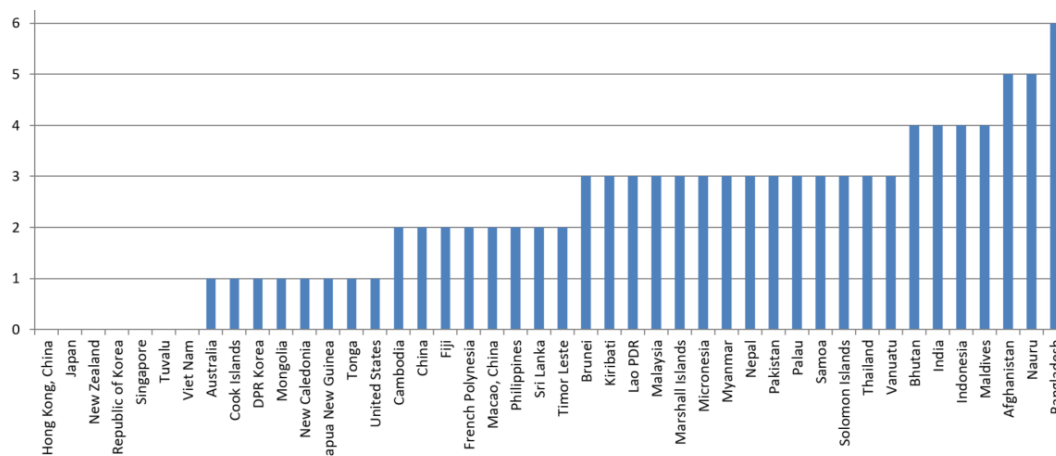
2.1 The current List of APANPIRG Air Navigation Deficiencies in the ATM, AIS and SAR fields is at **Attachment A** to this paper.

2.2 The Air Navigation Deficiencies agreed by APANPRG/30 are shown in **Figure 1**:



**Figure 1:** APANPIRG/30 ANS Deficiencies

2.3 **Figure 2** provides a graphical indication of the number of APANPIRG Air Navigation Deficiencies currently recorded by APANPIRG for each State:



**Figure 2:** Comparison of State Deficiencies

### AIM Deficiencies

- 2.4 The following States had WGS-84 Deficiencies:
- Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Marshall Islands, Micronesia, Nauru, Palau, Samoa, Thailand and Vanuatu.
- 2.5 The following States had AIP format Deficiencies:
- Kiribati and Nauru.
- 2.6 The following States had AIS Quality Management System Deficiencies:
- Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, Indonesia, Kiribati, Lao PDR, Maldives, Marshall Islands, Micronesia, Myanmar, Nauru, Nepal, Palau, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste and Vanuatu.
- 2.7 The following State had Aeronautical Data Area of Responsibility Deficiencies:
- Bangladesh.
- 2.8 The following States had designation of restricted area Deficiencies:
- Australia, India, and Indonesia.

### Airspace Classification Deficiencies

- 2.9 The following States and Administrations had airspace classification Deficiencies:
- China, Macao China, Nauru and the Solomon Islands.
- 2.10 The meeting should note that the improper designation of military Special Use Airspace (SUA) is the subject of discussion for potential APANPIRG Deficiencies within the SAIOACG/9 *Civil/Military Cooperation Update* paper.

### ATS Messages and Flight Planning Deficiencies

- 2.11 The following States had ATS messaging Deficiencies:
- Bangladesh, India, Malaysia, Maldives, Nepal and the United States.

### SAR Deficiencies

- 2.12 The following States and Administrations had Search and Rescue (SAR) Deficiencies:
- Afghanistan, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Cook Islands, DPR Korea, Fiji, French Polynesia, India, Indonesia, Kiribati, Lao PDR, Macao China, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, New Caledonia, Palau, Pakistan, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga and Vanuatu.

### Safety Reporting Deficiencies

2.13 The following States had non-provision of safety-related data Deficiencies:

- Afghanistan, Bangladesh, Bhutan, French Polynesia, Lao PDR and Pakistan.

2.14 The following States had ANS Deficiencies concerning responsibility to comply with the Annex 6 height-keeping monitoring requirements of Annex 6:

- Afghanistan, Malaysia and Pakistan.

### ATS Datalink Deficiencies

2.15 The following States had datalink performance monitoring and analysis Deficiencies:

- Fiji, India, Maldives and Myanmar.

### IFALPA Deficiencies

2.16 According to the APANPIRG Procedural Handbook, deficiencies identified by IFALPA are valuable sources of information that should be considered by APANPIRG, especially those that are safety related (excerpt follows):

*2.3 Appropriate International Organizations, including the International Air Transport Association (IATA) and the International Federation of Air Line Pilots' Associations (IFALPA) are valuable sources of information on deficiencies, especially those that are safety related...*

2.17 Therefore, the deficiencies identified by IFALPA are at **Attachment B** and **Attachment C** for the meeting's review (*note: the 2020 iterations were expected to become available in May 2020*). For States wishing to contact IFALPA to discuss the IFALPA Deficiencies, the following list of contacts has been provided by IFALPA:

- EVP Asia/Pacific- Ishtiaque Hossain (Bangladesh) [ishtiaquehossain@ifalpa.org](mailto:ishtiaquehossain@ifalpa.org);
- RVP Asia/East- Jaffar Hassan (Singapore) [jaffar747@gmail.com](mailto:jaffar747@gmail.com);
- RVP Asia/West- Shavantha Pedris (Sri Lanka) [shavantha.pedris@gmail.com](mailto:shavantha.pedris@gmail.com);
- RVP NOP- Captain Max Masumoto (Japan) [max.matsumoto@alpajapan.org](mailto:max.matsumoto@alpajapan.org);
- RVP SOP- Dave Griffin (New Zealand) [david@griffin.org.nz](mailto:david@griffin.org.nz); and
- Senior Technical Officer/Regional Officer- Carole Couchman (Montreal) [carolecouchman@ifalpa.org](mailto:carolecouchman@ifalpa.org).

### Air Navigation Plan and Reporting Deficiencies

2.18 **Attachments D and E** contain a copies of State Letters that inform about the Regional Air Navigation Plan's requirement for the development of a National Air Navigation Plans (NANP) in response to the Ministerial Beijing Declaration's requirements. The State Letters also clarify the provisions for APANPIRG Deficiencies in the case of inadequate ANS planning, reporting and implementation, and urges States to complete a NANP survey.

2.19 States should note that during 2020 the status of NANPs will be first assessed from the survey results, and a NANP seminar/workshop is being planned in mid-2020. States that have a ‘robust’ status NANP [below 90% achievement of the Basic Planning Elements] will not receive an APANPIRG Deficiency when reassessed during 2021. However, those States that do not have a ‘robust’ status may be considered for a Deficiency at the Ninth Meeting of the ATM Subgroup (ATM/SG/9) and APANPIRG/32.

Points of Contact

2.20 The List of Contacts for Deficiencies currently on the ICAO Secure Portal website at <https://portal.icao.int/DEF/Pages/default.aspx> is at **Attachment F** for review as required.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) review and update the list of ANS Deficiencies for review by APANPIRG/31;
- b) if possible, identify actions to be taken to correct the identified deficiencies;
- c) urge States to discuss any applicable IFALPA-reported safety related deficiencies with IFALPA, with a view to remedying the issues, and to consider long-standing validated concerns as potential APANPIRG Deficiencies;
- d) discuss the status of NANP development and associated survey;
- e) update the Deficiency Points of Contact List as required; and
- f) discuss any relevant matters as appropriate.

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ATM/AIM/SAR Deficiencies List (Updated 06 November 2019)

States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
	<b>WGS-84 Requirements of Paragraph 1.2.1 of Annex 15</b>					
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
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
Palau	WGS-84 - Not implemented	24/6/2014		Palau	TBD	A
Samoa	WGS-84 - Not implemented	24/6/2014		Samoa	TBD	A
Thailand	WGS-84 - Not implemented	24/6/2014		Thailand	TBD	A
Vanuatu	WGS-84 – Not implemented	2/7/1999	Implemented at main airports	Vanuatu	1999	A
	<b>AIP Format Requirements of Chapter 5 of Annex 15</b>					
Kiribati	AIP Format - Not implemented	7/7/99	ATM/AIS/SAR/SG/18 (June 2009) was advised AIP in draft stage	Kiribati		A
Nauru	AIP Format - Not implemented	7/7/99	ATM/AIS/SAR/SG/18 (June 2008) was advised work soon to start	Nauru		A

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
	<b><u>AIS Quality Management System Requirements of Paragraph 3.6.1 of Annex 15 Quality Management System - Not implemented</u></b>					
<b>Afghanistan</b>	AIS Quality Management System - Not implemented	24/6/2014		Afghanistan	TBD	A
<b>Bangladesh</b>	AIS Quality Management System - Not implemented	24/6/2014		Bangladesh	TBD	A
<b>Bhutan</b>	AIS Quality Management System - Not implemented	24/6/2014		Bhutan	TBD	A
<b>Brunei Darussalam</b>	AIS Quality Management System - Not implemented	24/6/2014		Brunei Darussalam	TBD	A
<b>Cambodia</b>	AIS Quality Management System - Not implemented	24/6/2014		Cambodia	TBD	A
<b>Indonesia</b>	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
<b>Lao PDR</b>	AIS Quality Management System - Not implemented	24/6/2014		Lao PDR	TBD	A
<b>Maldives</b>	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
Micronesia	AIS Quality Management System - Not implemented	24/6/2014		Micronesia	TBD	A
<b>Myanmar</b>	AIS Quality Management System - Not implemented	9/6/2016		Myanmar	TBD	A

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
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
Palau	AIS Quality Management System - Not implemented	24/6/2014		Palau	TBD	A
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
Sri Lanka	AIS Quality Management System - Not implemented	9/6/2016		Sri Lanka	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
Vanuatu	AIS Quality Management System - Not implemented	24/6/2014		Vanuatu	TBD	A
	<b><u>Aeronautical Data Area of Responsibility</u> - requirements of Paragraph 2.1.2 of Annex 2 to ensure that the provision of aeronautical data and aeronautical information covers its own territory and those areas over the high seas for which it is responsible for the provision of ATS</b>					

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Bangladesh	Aeronautical Data Promulgation Within the State's Area of Responsibility - Not implemented	29/03/2019 SAIOACG /9		Bangladesh	TBD	A
	<b>Designation of Restricted Areas - requirements of Annex 2 (Definitions) to ensure that restricted areas are designated above the land areas or territorial waters of a State</b>					
Australia	Designation of Restricted Areas Above the Land Areas or Territorial Waters of a State - Not implemented	29/03/2019 SAIOACG /9	Danger areas within international airspace that is part of a State's responsibility is acceptable	Australia	TBD	A
India	Designation of Restricted Areas Above the Land Areas or Territorial Waters of a State - Not implemented	29/03/2019 SAIOACG /9	Danger areas within international airspace that is part of a State's responsibility is acceptable	India	TBD	A
Indonesia	Designation of Restricted Areas Above the Land Areas or Territorial Waters of a State - Not implemented	29/03/2019 SAIOACG /9	Danger areas within international airspace that is part of a State's responsibility is acceptable	Indonesia	TBD	A
	<b>Airspace Classification Requirements of Paragraph 2.6 of Annex 11</b>					
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
Macao, China	Airspace Classification - Not implemented	05/09/2018		Macao, China	TBD	A
Nauru	Airspace Classification - Not implemented	7/7/99		Nauru	TBD	A

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Solomon Islands	Airspace Classification - Not implemented	7/7/99		Solomon Islands	TBD	A
	<b>ATS Message Addressing Requirements of Doc 4444 PANS-ATM Section 11.4 (Message Types and their Application)</b>		Note: the threshold for a Deficiency is 5% or more DEP messages reported to have not been sent, and where the analysed data provided evidence of a systemic (either systems or human factors) failure to send the message			
Bangladesh	DEP message transmission	05/09/2018	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	Bangladesh	TBD	A
India	DEP message transmission	05/09/2018	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	India	TBD	A
Malaysia	DEP message transmission	05/09/2018	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	Malaysia	TBD	A
Maldives	DEP message transmission	09/08/2019	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	Maldives	TBD	A
Nepal	DEP message transmission	09/08/2019	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	Nepal	TBD	A

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
USA	DEP message transmission	05/09/2018	DEP messages inconsistently transmitted Conclusion APANPIRG/27/12 and ICAO correspondence	USA	TBD	A
	<b>SAR capability: Requirements of Annex 12 as defined in the Regional Air Navigation Plan Volume II Part I – GENERAL PLANNING ASPECTS Section 3 SPECIFIC REGIONAL REQUIREMENTS, failure to reach 90% or more implementation of the Asia/Pacific SAR Plan</b>					
Afghanistan	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 45%	Afghanistan	<del>2016</del> -2019	U
Bangladesh	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 69%	Bangladesh	2019	U
Bhutan	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 34%	Bhutan	<del>2016</del> -2019	U
Brunei	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 63%	Brunei	2019	U
Cambodia	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 76%	Cambodia	2019	U
China	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 82%	China	2019	U
Cook Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Cook Islands	2019	U
DPR Korea	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 66%	DPR Korea	2019	U
Fiji	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 80%	Fiji	2019	U

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
French Polynesia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 84%	French Polynesia	2019	U
India	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 88%	India	2019	U
Indonesia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 87%	Indonesia	2019	U
Kiribati	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 26%	Kiribati	2019	U
Lao PDR	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 57%	Lao PDR	2019	U
Macao, China	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 85%	Macao, China	2019	U
Malaysia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 77%	Malaysia	2019	U
Maldives	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 71%	Maldives	2019	U
Marshall Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Marshall Islands	2019	U
Micronesia	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Micronesia	2019	U
Mongolia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 63%	Mongolia	2019	U
Myanmar	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 67%	Myanmar	2019	U
Nauru	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Nauru	2019	U
Nepal	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 17%	Nepal	2019	U
New Caledonia	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 54%	New Caledonia	2019	U

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
Palau	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Palau	2019	U
<b>Pakistan</b>	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 84%	Pakistan	2019	U
Papua New Guinea	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Papua New Guinea	2019	U
<b>Philippines</b>	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 61%	Philippines	2019	U
Samoa	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Samoa	2019	U
Solomon Islands	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Solomon Islands	2019	U
<b>Sri Lanka</b>	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 60%	Sri Lanka	2019	U
<b>Thailand</b>	Asia/Pacific SAR Plan	17/05/2019	APSAR/WG/4 82%	Thailand	2019	U
<b>Timor-Leste</b>	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Timor-Leste	2019	U
Tonga	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Tonga	2019	U
Vanuatu	Asia/Pacific SAR Plan	6/07/2015	APSAR/WG/4 0%	Vanuatu	2019	U
	<b><u>Non Provision of Safety-related Data Requirement of Paragraph 3.3.5.1 of Annex 11 (provision of data for monitoring the height-keeping performance of aircraft) and APANPIRG Conclusion 16/6 – Non Provision of safety related data by States</u></b>					
Afghanistan	Non-provision of safety related data	12/07/2019	Failure to submit Kabul LHD data for January-December 2018	Afghanistan	RASMAG24	U
Bangladesh	Non-provision of safety related data	12/07/2019	Failure to submit the 2018 TSD.	Bangladesh	RASMAG24	U

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
			Failure to submit Dhaka LHD data for January-December 2018			
Bhutan	Non-provision of safety related data	12/07/2019	Failure to submit the annual RVSM approval snapshot for two consecutive years	Bhutan	RASMAG24	U
French Polynesia	Non-provision of safety related data	05/07/2018	Failure to submit the 2016, 2017 and 2018 TSD	French Polynesia	RASMAG23	A
Lao PDR	Non-provision of safety related data	13/07/2017	Failure to submit the annual RVSM approval snapshot for four consecutive years	Lao PDR	RASMAG23	A
Pakistan	Non-provision of safety related data	12/07/2019	Failure to submit Karachi LHD data for July-December 2018. Late submission of 2018 Karachi TSD	Pakistan	RASMAG24	U
	<b>State Responsibility to comply with the Annex 6 Height-Keeping Monitoring Requirement Annex 6 Part I Section 7.2.9 (10<sup>th</sup> Ed.) and Part II Section 2.5.2.10 (9<sup>th</sup> Ed.)</b>					
Afghanistan	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/23	Remaining monitoring burden of 38% reported in RASMAG/23	Afghanistan	RASMAG24	A
Malaysia	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/23	Remaining monitoring burden of 38% reported in RASMAG/23	Malaysia	RASMAG24	A
Pakistan	Non-compliance with LTHM requirement (remaining monitoring burden more than 30%)	RASMAG/22	Remaining monitoring burden of 69% reported in RASMAG/23 RASMAG24 56%	Pakistan	RASMAG24	A
	<b>Data Link Performance Monitoring and Analysis Requirements of Paragraph 2.28 and/or 3.3.5.2 of Annex 11 not met</b>					
Fiji	Post-implementation monitoring not implemented	25/06/2018	Problem reports not provided to CRA. RASMAG24	Fiji	TBD	A
India	Post-implementation monitoring not	13/07/2017	Performance monitoring and	India	TBD	A

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States/facilities	Deficiencies			Corrective Action		
	Description	Date first reported	Remarks	Executing body	Target date	Priority **
	implemented		analysis was reported for the Chennai FIR, but was not reported for the Kolkata and Mumbai FIRs.			
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
Myanmar	Post-implementation monitoring not implemented	29/5/2015	Problem Reports not provided to CRA.	Myanmar	TBD	A

\*\* Note: In accordance with the *APANPIRG Handbook - Asia/Pacific Supplement to the Uniform Methodology for the Identification, Assessment and Reporting of Air Navigation Deficiencies*, priority for Air Navigation Deficiencies is guided by the principle that a deficiency with respect to an ICAO Standard is accorded a “U” status, while a non-compliance with a Recommended Practice or a PANS is considered as “A” or “B” subject to additional expert evaluation. The final prioritization of deficiencies is the prerogative of APANPIRG.

**Subsection.** This column denotes the ICAO heading under which the deficiency occurs, as follows:

- |         |   |
|---------|---|
| AGA     | <ul style="list-style-type: none"> <li>(1) Runways</li> <li>(2) Approach Lighting</li> <li>(3) VASIS/ PAPIS</li> <li>(4) Runway Lighting</li> <li>(5) Taxiways</li> <li>(6) Parking Areas</li> <li>(7) Markings</li> <li>(8) Fire &amp; Safety Equipment/Personnel Standards</li> <li>(9) Primary Power Supply</li> <li>(10) Standby Power Supply</li> <li>(11) Snow Removal</li> </ul> |
| ATM     | <ul style="list-style-type: none"> <li>(1) Air Traffic Clearance</li> <li>(2) Air Traffic Services</li> <li>(3) Arrival and Departure Procedures (SIDs and STARs)</li> </ul>  |
| SAR     | <ul style="list-style-type: none"> <li>(1) SAR Facilities</li> </ul>  |
| COM     | <ul style="list-style-type: none"> <li>(1) VHF Tower</li> <li>(2) VHF Approach</li> <li>(3) VHF</li> <li>(4) HF</li> <li>(5) SELCAL</li> <li>(6) ATIS (COM Aspects)</li> <li>(7) AIM</li> <li>(8) VOLMET</li> </ul>   |
| NAVAIDS | <ul style="list-style-type: none"> <li>(1) ILS</li> <li>(2) VOR</li> <li>(3) DME</li> <li>(4) Radar (Primary and Secondary)</li> <li>(5) NDB and LOC</li> <li>(6) Other Aids</li> </ul>   |
| MET     | <ul style="list-style-type: none"> <li>(1) Forecasts</li> <li>(2) Briefing</li> <li>(3) Observations</li> <li>(4) SIGMET</li> <li>(5) ATIS (Content)</li> <li>(6) VOLMET (Content)</li> </ul>   |

SECURITY

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/East**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**CAMBODIA**

**Siem Reap (VDSR)**

**DEFICIENT [Nov 2019]**

AGA (1) & ATM (1) & MET (3)	Due to Angkor Wat Temple complex being located on final approach to runway 23 landing is only allowed on runway 05. The runway is short and not grooved. Caution should be used at all times particularly in the rainy season where the weather conditions can deteriorate very quickly.	
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**Phnom Penn (VDPP) (PNH)**

**DEFICIENT [Nov 2019]**

AGA (4) (5)	No Runway Guard light	Grass cutting required
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**INDONESIA**

**Depansar (WADD) (DPS)**

**DEFICIENT [Nov 2019]**

ATM (3)	Inadequate procedure design that incorporates restrictive speed and level restrictions which are then regularly removed when the procedure is flown	Procedure design needs reviewing
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**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/East**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Jakarta (WIII)**

**DEFICIENT [Nov 2019]**

AGA (5)	Taxi along TWY WC1 - After vacating RWY 25L and proceeding to the northern apron via WC1, it may be difficult to ascertain wing-tip clearance from aircraft parked at the apron east of WC1 due to poor lighting.	
AGA (6)	<p>Poor Apron Lighting and Faint Apron Markings - There have been reports of poor apron lighting and faint apron markings for night operations. The situation can be exacerbated when the apron is wet, resulting in a highly reflective surface.</p> <p>VDGS Panel for Bay G23, has been installed at the same pole as the G22 signage location. This can cause confusion for the flight crew. There are other examples of this for Apron G.</p>	
AGA (7)	Aim-Point Markings on all Runways - Multiple aim-point markings exist. The old markings have not been sufficiently removed and are still visible along with the new markings.	
ATM (1) (3)	Poor ATC Clearances associated with both SID and STAR, non-standard phraseology is used.	Often the STAR does not match with the runway given.
NAVAIDS (1)	Large Kites reported on approach to RWY 07L which are flown higher than the ILS Glidepath.	Only valid in the dry season (March – September). Kites are large often connected by steel cables.

**Note:** Due to long delays and the possibility of holding prior to landing it is recommended that extra fuel may be required.

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/East**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**PHILIPPINES**

**Manila (RPLL)**

**DEFICIENT [Oct 2018]**

<p>AGA (4)</p>	<p>Runway Intersection holding points - the runway intersection holding points do not have red runway 'Stop Bars' light and runway intersection signage (e.g. between taxiway D and Rwy 06/24, and taxiway R1 and Rwy 13/31). The taxiway markings are newly painted but incorrect in several places such as: a taxiway intermediate holding position marking (broken yellow line) shown as runway holding position markings ("Pattern A" according to Annex14, some pilots call it "CAT-I holding position marking"). Strange markings that looks like "double pattern A"</p>	
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**Note:** Due to long delays and the possibility of holding prior to landing it is recommended that extra fuel may be required.

There are often CPDLC issues in the west of the airspace.

**THAILAND**

**THAIPA**

**Bangkok (VTBS)**

**DEFICIENT [Nov 2019]**

<p>AGA (1)</p>	<p>Runway Surface - Rwy 01R/19L does not have grooving or any open macro-texture surface. Under heavy precipitation, there is an increased likelihood of aquaplaning during a landing or rejected take-off.</p>	<p>There are some improvements.</p>
<p>AGA (5)</p>	<p>Underground water problem on taxiways causing surface damage, when they are being repaired appropriate markings and lighting needs to be addressed. Heavy rutting on taxiways.</p>	<p>There are some improvements.</p>
<p>Wildlife Management</p>	<p>Vegetation in the water way close to runways. This attracts different species of birds. The water level needs managing, and the marshy ground needs to be removed.</p>	<p>Many different bird species flying in large flocks are reported</p>

**ICAO Region/ANP: ASIA****IFALPA Region: ASIA/East**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Phuket (VTSP)****DEFICIENT [Nov 2019]**

AGA (1)	No runway end safety area (RESA) at the end of both runways (09-27).	According to ICAO Annex 14 para 3.5.3 (90m from end of runway strip for aerodrome code 3 or 4).
AGA (1)	Insufficient width of runway strip	According to ICAO Annex14 para 3.4.3 (150m from each side of runway centerline for a precision approach runway code 3 or 4).
SECURITY	People congregating outside the perimeter fence at both ends of the runway.	

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**AFGHANISTAN**

**Kabul (OAKB)**

**CRITICALLY DEFICIENT BLACK [April 2020]**

AGA (5) (6)	Some uncontrolled vehicle traffic and pedestrians on TWY's and aprons. TWY's used as parking space, helicopter landings and cargo offloading	
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**Remarks:** Civilian traffic is limited to flying between sunrise and sunset.

**Special Operating Measures:**

Operations should be restricted to daylight VMC only

**AR 2020**

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Kabul FIR**

**DEFICIENT [Nov 2019]**

	<p>Safety of aircraft operating in the Kabul FIR requires strict adherence to AIP procedures. Due to the nature of operations within the Kabul FIR, some deviations from ICAO Standards, Recommended Practices and Procedures may not be detailed in this AIP.</p>	<p>It is the aircrew’s responsibility to read all NOTAMS prior to flight.  Operators are advised that NOTAM publishing during weekends and holidays is limited.</p>
ATM (2)	<p>Poor co-ordination Kabul/Ashgabat sometimes results in last-minute re-routing, or else much lower flight levels assigned due to airspace restrictions</p>	
NAV (6)	<p>En Route holding will be used in Kabul FIR when needed to expedite the flow of traffic. There are no established holding patterns in the En Route structure.</p>	

**Notes:**

There is a steady improvement with the reliability. It is however necessary to call Kabul 10 minutes prior to the FIR boundary. The IFBP should be used if communications are not established.

Pilots shall continuously monitor the VHF emergency frequency 121.5 MHz and shall operate their transponder at all times during flight.

It is imperative for aircraft flight safety that the procedures within this AIP are strictly followed and that operators check all current NOTAMS issued by the Airspace Control Authority regarding flight operations in the Kabul FIR.

There should be no over flight below FL310. Flight level changes should not be initiated except in an emergency – as long as Kabul ACC has not become operational and high-level airways have not been reclassified as Class A airspace.

Additional fuel is required to cover possible en-route holdings, rerouting or airspace entry denial.

RNAV equipment should be operated so as to give a warning well before the RNP 10 criteria.

Operators must review NOTAMs regularly for changes affecting the information in this document.

**SECURITY ISSUES**

Considering the threat arising from MANPADS, vehicle mounted armour, and ground fire, over flight of the national airspace of Afghanistan, should take place 10,000 ft above the maximum known ceiling capability of the specific weapon, or under certain circumstances and in coordination with appropriate security agencies. Each Member Association is asked to evaluate the above and appropriately advise their crews.

**ICAO Region/ANP: ASIA****IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**BANGLADESH****BAPA****Dhaka (VGHS)****DEFICIENT [Nov 2019]**

AGA (1)	Tire deposits on Runway 14. There is no established procedure to remove this deposit.	
AGA (6)(7)	Surface markings on apron area and guidelines are not visible during night hours and rain owing to improper paint being used for markings. Ground control not sufficient for amount of traffic.	
AGA (6)	Marshallers need to be trained to ensure smooth docking in on hard standing.	
COM (6) & MET (5)	ATIS inadequate in content and communication.	
NAVAIDS (1)	ILS runway 32 is in use with higher visibility requirement. As a result, it become unusable during morning fog in winter resulting approaches to runway 14 using a maximum tailwind component. This then results in several go-arounds in winter due to the sun's position.	
NAVAIDS (4) ATM (2)	On Saturdays the service remains unavailable for 3 hours. Radar vectoring by controllers is not always been accurate. Inadequate on performance of different type of aircraft and lacking in anticipation ability creates difficulties to maintain efficient traffic flow pattern. In general, the ATS/ATC service provided by DAC is extremely poor, due in part to poor knowledge of ATC procedures and English Language. Frequent resolution advisory (RA) on TCAS particularly during military flying in TMA which is rarely NOTAMed.	
MET (3)	No lighted wind-sock. Airfield beacon not visible during night hours.	

**Remarks:** Caution bird hazard at all times causing frequent bird-strikes.

Bird Control Programme required to prevent birds from hovering over the runway and taxiways.

**ICAO Region/ANP: ASIA****IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Chittagong (VGEG)****DEFICIENT [Nov 2019]**

AGA (1)(5)(6)(7)	Runway, Taxiway and Apron Markings faded and require repainting. Taxiway signs are difficult to identify and not lit hard to see in poor visibility conditions and at night. Taxiway markings and guide lines are not visible during night hours and rain owing to improper paint being used for markings. No lighted wind-sock. Runway surface is very rough and uneven.	
AGA (6)	Marshallers need to be trained to ensure smooth docking in.	
NAVAIDS (1)	ILS needs to be recalibrated.	
NAVAIDS (4) ATM (2)	Radar service unavailable ATC controlling is very poor.	

**Remarks:** Frequent bird activities in and around the airfield causing frequent bird-strikes. Bird Control Programme required to prevent birds from hovering over the runway and taxiways.

**Sylhet (VGSY)****DEFICIENT [Nov 2019]**

AGA (1)	Tire deposits on Runway 11.	
NAVAIDS (1)	ILS Glideslope is frequently U/S.	
NAVAIDS (4) ATM (2)	Radar service unavailable ATC gives misleading weather information	

**Caution:** Frequent bird activities in and around the airfield causing frequent bird strikes. Bird Control Programme required to prevent birds from hovering over the runway and taxiways.

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**INDIA**

**ALPA INDIA**

**General**

Poor frequency discipline with up to 5 clearances given in one transmission.

**Mumbai /Chatrapati Shivaji Int (VABB)**

**DEFICIENT [Nov 2019]**

AGA (5) (7)	Taxiway E. The lead in lights and markings cut across runway 09/27 but there are no stop bars installed so there is a potential for aircraft to cross an active runway without realising.	
AGA (6)	Visual docking guidance system requires further calibration.	
AGA (6) (7)	Lead-in Lines - Lead-in lines to the parking bays have been reported to be difficult to discern, especially when the taxiway surface is wet	

**Kolkata (VECC)**

**DEFICIENT [Nov 2019]**

AGA (1)	Runway19L/01 R Holding Position on Taxiway A - The runway holding position marking for RWY 19L/01R on taxiway A was reportedly marked before the brightly lit runway holding position sign. Active visual acquisition of the faint markings on taxiway A is necessary to prevent overshooting the designated hold short position and causing any possible runway incursion.	
AGA (5)	Taxiway signage - There are no signs or markings to indicate taxiway G from F. CAT 1 holding point and signage do not coincide at runway 19L. Signage is placed next to the edge lights at taxiway beyond the holding point on taxiway A.	
AGA (6)	New international terminal stand number can only be seen when docking in, markings not illuminated and not clear. Stand number placed in an inappropriately	

**ICAO Region/ANP: ASIA**

**IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**MYANMAR [Burma]**

**Yangon FIR**

**DEFICIENT-[Nov 2019]**

COM (3)	VHF Communications can be unreliable and poor quality (poor contact, intermittent background noise and echoes on VHF frequencies 126.75 and 128.75)	
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**Yangon (VYYY)**

**DEFICIENT-[Nov 2019]**

AGA (1) (4)	<p>Approach and Landing - The runway elevation is 43ft at the RWY 21 threshold point rising to 110ft at the end of the runway. Due to the pronounced runway slope and poor drainage, water accumulation at the touch down zone may occur during rain.</p> <p>The runway lights are located beyond the runway edge and can affect the visual perspective during the landing phase. Do note that the runway does not have a paved runway shoulder.</p>	
AGA (3)	There is only one PAPI for Runway 21 and that needs to be calibrated.	

**ICAO Region/ANP: ASIA****IFALPA Region: ASIA/WEST**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**NEPAL****Kathmandu (VNKT)****Notes**

- 1 Flights departing for Kathmandu with any navigation system failure should not be permitted.
- 2 Pilots should be aware of terrain surrounding the airport, especially on the “Romeo” approach path.
3. RWY 02 VOR/DME App, MDA point results in a steep final segment, resulting in a far from optimal situation.
4. High descent profile required between 10nm and 5nm DME on Romeo approach due to terrain. Departure and go-around procedures are restrictive and demanding due to terrain.

**Remarks:**

1. Caution: bird hazards during months of October and November.
2. Due to long delays and the possibility of holding prior to landing it is recommended that extra fuel may be required at peak times.
3. Pilots should have received their ADC/FIC number prior to departure

**PAKISTAN****PALPA**

**Lahore FIR:** Chirat is controlled by military.

**Lahore (OPLA)****DEFICIENT [Nov 2019]**

COM (2)	Unable to contact Delhi control at low level on departure	
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**Remarks:**

Caution bird hazards at all times – no effective BCU

***Response from Pakistan***

*Unable to contact Delhi control is a deficiency belong to Delhi FIR and problem of communication with Delhi FIR at low level after departure from Lahore which is under jurisdiction of Delhi Control. Matter requires to addressed to Delhi instead of Lahore.*

**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Subsection.** This column denotes the ICAO heading under which the deficiency occurs, as follows:

- AGA
  - (1) Runways
  - (2) Approach Lighting
  - (3) VASIS/ PAPIS
  - (4) Runway Lighting
  - (5) Taxiways
  - (6) Parking Areas
  - (7) Markings
  - (8) Fire & Safety Equipment/Personnel Standards
  - (9) Primary Power Supply
  - (10) Standby Power Supply
  - (11) Snow Removal
- ATM
  - (1) Air Traffic Clearance
  - (2) Air Traffic Services
  - (3) Arrival and Departure Procedures (SIDs and STARs)
- SAR
  - (1) SAR Facilities
- COM
  - (1) VHF Tower
  - (2) VHF Approach
  - (3) VHF
  - (4) HF
  - (5) SELCAL
  - (6) ATIS (COM Aspects)
  - (7) AIM
  - (8) VOLMET
- NAVAIDS
  - (1) ILS
  - (2) VOR
  - (3) DME
  - (4) Radar (Primary and Secondary)
  - (5) NDB and LOC
  - (6) Other Aids
- MET
  - (1) Forecasts
  - (2) Briefing
  - (3) Observations
  - (4) SIGMET
  - (5) ATIS (Content)
  - (6) VOLMET (Content)

SECURITY

**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**PEOPLE'S REPUBLIC OF CHINA****Beijing (ZBAA)****DEFICIENT [Nov 2019]**

AGA (1)	Crews should expect extended taxi times of over 30 minutes for departure flights at all times of day, due to poor runway usage for departure such as minimum time on runway for landing and line up sequencing, saturated times at peak periods, and insufficient air routes.	
AGA (5)	Taxiway nomenclature is illogical and confusing.	
ATM (1)	Due to poor airspace design Approach Clearance expect early descent with high ROD required by ATC (i.e. 2000ft/min).	A/c may expect to receive delayed hold instructions to effect sufficient separation. Expect Runway changes, radar vectoring can be less than optimum.
ATM (2)	Altitude restrictions in STARs are unreasonably high. However, can be disregarded after confirming with ATC.	Proper descent profiles should be established.
	Late assignment of STAR results in 'heads down' at critical phases of flight.	ATC should assign the STAR at an appropriate time. Multiple runway changes during Approach increases the risk of errors in separation and terrain clearance. ATC should use standard runway assignments and as far as possible, not make changes after the runway has been assigned.
ATM (2)	Non-standard R/T communication. Overcrowded frequencies.	Controllers required to be trained in use of standard R/T. Use of English not always practiced, will be implemented.
NAVAIDS (1)	ILS Signal RWY 36L/R & 01 There have been some reports of poor integrity of the ILS signals at low altitudes.	

Remarks: Sandstorms occur frequently

**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Shanghai/Pudong (ZSPD)****DEFICIENT [Nov 2019]**

ATM (1)	Due to poor airspace design Approach Clearance expect early descent with high ROD required by ATC (i.e. 2000ft/min). A/C may expect to receive delayed hold instructions to effect sufficient separation. Expect Runway changes, radar vectoring can be less than optimum. Altitude restrictions in STARs are unreasonably high. However, can be disregarded after confirming with ATC. Proper descent profiles should be established.	
ATM (2)	Non-standard R/T communication. Overcrowded frequencies. Controllers required to be trained in use of standard R/T.	

**Hong Kong (VHHH)****DEFICIENT [Nov 2019]**

ATM (1)	Due to poor airspace design. Approach Clearance from North and West expect early and high ROD before GYA.	
ATM (2)	Air routes to and from Beijing and Shanghai from the south are being utilised close to capacity leading to extensive flow control problems. In addition, in the event of bad weather or other disruption, airspace can be closed, leading to aircraft being turned back from PRC airspace or being held on the ground for extended periods (in excess of 30 minutes)	Action is required to increase the capacity on these routes including the release of more airspace for civil use.

**ICAO Region/ANP: PAC**

**IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
<b>PRC FIRs</b>		<b>DEFICIENT [Nov 2019]</b>
COM (3)	VHF communication is often interfered with by non-ATC conversation in Mandarin on the same frequency. During peak times when flow control is in operation pertinent information is often not relayed	There are improvements being made.
ATM (1)	Non-application of positive control procedures within controlled airspace. Non-use of radar vectors for separation to facilitate climb. ATC prefers vertical separation to lateral Often separation is kept at 15-20 minutes at all levels.	
ATM (2)	Non-ICAO standard altimetry.	Transition Alt/Level should be unified at all aerodromes in PRC. Potential collision risk high at FIR boundaries due climb/descent required during transition from non-metric altimetry procedures to metric altimetry procedures.
	Air routes to and from Beijing and Shanghai from the south are being utilised close to capacity leading to extensive flow control problems. In addition, in the event of bad weather or other disruption, airspace can be closed, leading to aircraft being turned back from PRC airspace or being held on the ground for extended periods.	Action is required to increase the capacity on these routes including the release of more airspace for civil use.
MET (3)/ATM (1)	WX avoidance often difficult to obtain due to military restrictions along coastal airway. This has led to aircraft penetrating CB's	

**Remarks**

- 1 The Authorities should be urged to publish appropriate warnings in the National AIP.
- 2 Pilots should exercise extreme caution at all times.

**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Note: WGS-84 and Non-standard metric altimetry in operation.**

WGS 84 is implemented but there is coordinate shift in eastern part of China, impacting the PBN implementation, airlines need to switch off the satellite navigation function on board aircraft and use ILS. Currently it is a State policy to make this shift on map, there is work with the aviation authority to change it.

The hand-over of air traffic from Hong Kong ACC to Guangzhou ACC and vice-versa appears to be well co-ordinated for over-flight traffic probably due to the unidirectional airways employed. Transition from non-metric altimeter info procedures to metric altimeter procedures and vice-versa does not pose any problem.

An issue with a discrepancy between the runway end points supplied for use in the FMC on Boeing aircraft that are not aligned with the actual point on the earth. Consequently, there have been a number of nuisance “not on runway” alerts to the extent that the protection has to be switched off. This is a problem throughout China.

**A461 & A470 (BEIJING & SHANGHAI)****DEFICIENT [April 2020]**

The Air Traffic Flow Management within the People's Republic of China is still saturated however, there has been some improvement to the significant delays to scheduled services between Hong Kong and the Mainland, specifically on the air routes A461 and A470 (Beijing and Shanghai). Airspace management problems that, in the past, have led to delays in excess of 6 hours for flights departing from Hong Kong to Shanghai and/or Beijing seem to have decreased somewhat.

Authorities have yet to adopt a visible Slot Allocation System (SLAS) for departure operation. Authorities should implement more air routes and flexible tracking, specifically between Hong Kong and Beijing/Shanghai. The routings should be unidirectional (one northbound and one southbound as a minimum) and designed for RNAV/RVSM, taking full advantage of the navigation capabilities of modern airliners.

Air Traffic Management have yet to be more flexible with respect to weather deviations. Radio frequencies across China are becoming congested making requests difficult to get through in an appropriate time frame. Extended conversations between Chinese aircraft and ATC Controllers or other aircraft in Mandarin make other important transmissions on the radio more difficult.

The use of the International Guard frequency – 121.5 MHz still remains a problem for aircraft flying in Mainland airspace and even in the Hong Kong FIR. Aircrew who are monitoring the Guard frequency often have to switch it off due to the continual chatter on the Channel in Chinese.

M503, has alleviated some of the congestion but ad-hoc military airspace closure makes weather avoidance extremely difficult with limited deviations allowed toward the East near Taiwanese airspace.

**Editorial note:** Minor improvements are being made with the introduction of M503, but it should be noted there is NOTAM action indicating that a 7nm right offset is required.

**ICAO Region/ANP: PAC**

**IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**JAPAN**

**ALPA -Japan**

**Chūbu Centrair International Airport (RJGG)**

**DEFICIENT [Nov 2019]**

AGA (1)	To prevent bird-strikes, runway may be selected considering the location of bird activity when wind is about 7 knots or less.	
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**Narita/New Tokyo Int'l (RJAA)**

**DEFICIENT [Nov 2019]**

AGA (1)	Obstacles (trees) above the approach surface slope (2%) on finals for runway 34R	
AGA (5)	Taxiway naming in non-standard and can lead to confusion.	Some TWY naming have improved. Taxiway layouts itself are still complicated.

**Okinawa/Naha (ROAH)**

**DEFICIENT [Nov 2019]**

AGA (5)	There are night taxiway closures; the closed taxiways are lit but the open taxiways are not lit.	Individual lights cannot be controlled, as they can only be on or off for the entire taxiway lights.
AGA(8)	No adequate RFF facilities for over water areas.	
ATM (3)	1000ft. altitude restriction for traffic departing/go-around traffic RWY 36 is extremely dangerous.	
COM (1)	Aircraft are backtracking on active runway but on Ground Frequency – situational awareness is lost.	

**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Osaka/Itami (RJOO)****DEFICIENT [Nov 2019]**

ATM (2)	Curfew (2100-0700LCL, 1200-2200UTC) is too rigid	No CIQ available. Refueling for overseas flight takes long time due to fuel tax problem. Recommendation not to use as international alternate airport between 1900LCL (1000UTC) and 0700LCL (2200UTC).
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**Osaka/Kansai (RJBB)****DEFICIENT [Nov 2019]**

AGA(8)	No adequate RFF facilities for over water areas.	
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**Tokyo/Haneda (RJTT)****DEFICIENT [Nov 2019]**

AGA (5)	Taxiway C3B is called "Charlie three Branch", Branch is not standard phraseology	
AGA (8)	Inadequate RFF equipment for water area.	Launches and amphibious vehicles required.
ATM (2)	The airport has also instituted the use of simultaneous localizer directional aid (LDA) on runways 22 and 23. The Localisers are offset 55° on runway 22 and 47° on runway 23 which may cause misidentification for runway 23 and 22.	See IFALPA Safety Bulletin 11SAB15
ATM (3)	Because of the airport runway allocation procedure, aircraft arriving from the North & East (landing runway 23 will have to cross the track with aircraft inbound from the South & West (landing 22) after the Initial Approach Fix (IAF) with only 1,000ft of vertical separation and vice versa.	See IFALPA Safety Bulletin 11SAB15

**ICAO Region/ANP: PAC**

**IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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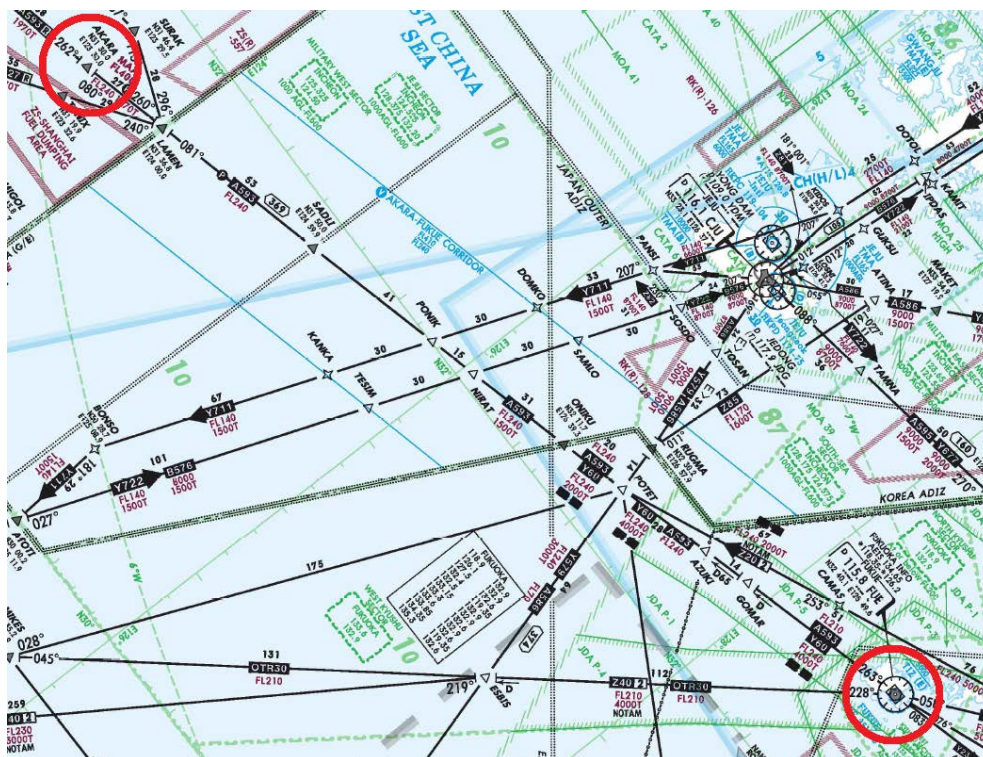
**KOREA**

**ALPA-K**

**A593 in Incheon FIR (Korea)**

**DEFICIENT [Nov 2019]**

<p>ATM (2)</p>	<p>Aircraft flying through airway A593, between the waypoint AKARA in Shanghai FIR and FUE (FUKUE VOR) in Fukuoka FIR are not in contact with Incheon ATC even though they fly through Incheon FIR. There is a limitation on available Flight Levels; FL250, 290, 310, 390 for east-bound and FL240, 280, 300, and 400 for west-bound under the agreement between the China/Korea/Japan authorities.</p> <p>There are crossing airways to A593 which are Y711 and Y722/B576 mainly for inbound/outbound to Korean destinations. Traffic flying through these airways, can choose flight levels other than those for A593 and under the control of the Korean ATC.</p> <p>Due to the traffic expansion in this region, safety issues are becoming a concern. If there is an abnormal aircraft engine/system occurrence, it may occur in the Incheon FIR but on different frequencies and under the control of different agencies (China and Japan for east/west traffic, and Korea for north/south traffic).</p> <p>Additionally, traffic departing from Shanghai / PUD, are often forced to be grounded until the east-bound airspace become available.</p>	
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**ICAO Region/ANP: PAC****IFALPA Region: NOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**MONGOLIA****MONALPA****Ulaanbaatar (ZMUB)****DEFICIENT [Nov 2019]**

AGA (1)	Runway slope (2.1%) exceeds normal operations.	
ATM (3)	No STAR	

**ICAO Region/ANP: PAC**

**IFALPA Region: SOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**AUSTRALIA**

**AUSALPA**

**Melbourne (YMEN) (MEB)**

**CRITICALLY DEFICIENT BLACK [April 2020]**

AGA (1)	<p>Runway 08/26 Runway strip width should be 150 m either side of the centre line.</p> <p>- CASA Instrument 153/15 requires 300 m Runway strip width to be published by YMEN. Non-frangible obstacles, including buildings infringe to 230 m.</p> <p>Current YMEN airport operator publishes Runway strip width at 180 m.</p>	<p>Airport should be regulated to maintain 300 m Runway strip width with existing infringing buildings and obstacles listed in AIP.</p>
AGA (1)	RESA RWY 08/26 inadequate	<p>(100m Western end and 110 m Southern end)</p> <p>Increase RESA length at both ends to 240m (or 240m equivalent)</p>

**Special Operating Measures**

**AR 2020**

1. Limited runway operations for corporate business jets, (narrow runway operations)
2. Special departure procedure needs to be developed for new building in the vicinity of RWY 26
3. Plans for runway strip width to be reduced to 75m.

**Remarks:**

1. Pilots should exercise extreme caution at all times as this airport does not meet international or domestic standards.
2. The State Authorities should be urged to enforce local and ICAO standards when national aerodromes under lease, plan to change obstacle limitation and runway surface dimensions.
3. The State Authorities should publish differences to ICAO RWY dimensions and warn operators and pilots of obstacles in AIP. Airports should refrain from planning building developments that infringe ICAO and local OLS/RWY dimension standards.

**FIJI**

**Nandi (NFFN) (NAN)**

**DEFICIENT [Nov 2019]**

MET (1) (3)	<p>The Automated Weather Observing System (AWOS) is situated adjacent the runway intersection and there is no threshold measuring equipment. The surface wind measurement is taken 2500m away from the threshold of Runway 02. This has resulted in inaccurate information being relayed to the operators who at times have not had sufficient fuel. .</p>	<p>There is inadequate funding for MET services for Fiji.</p>
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**ICAO Region/ANP: PAC**

**IFALPA Region: SOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**NEW ZEALAND**

**NZ-ALPA**

**Queenstown (NZQN)**

**DEFICIENT [Nov 2019]**

AGA (1)	1. Runway End Safety Areas inadequate or not yet provided. Apply/Increase RESA length at both ends to 240m (or 240m equivalent if EMAS used). 2. Steep Terrace just short of RWY 23 Threshold.	Install Full 240M RESA or equivalent EMAS.
ATM (3)	1.Non-Precision (NPA), non-Runway aligned circling approaches that require high descent rates over mountainous terrain. 2.The NPA circling approaches do not meet ICAO PANS OPS circling criteria due to high terrain infringing the circling areas. 3.Approaches with straight-in landing DA(H) minima are available, but these are Proprietary RNP(AR) approaches available only to operators with CAANZ approval. 4.Extreme caution is needed especially with turbulent conditions and with strong South Westerly winds.	

**Remarks:** Due to the proximity of steep mountains in nearly all directions, some turbulence is experienced in most wind conditions.

**Taupo (NZAP)**

**DEFICIENT [Nov 2019]**

NAVAIDS (5)	NDB step-down approaches do not provide adequate protection against CFIT.	Disestablish NDB approaches. Use the published RNAV/GNSS approaches.
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**Remarks:**

1. Use of NDB/DME BRAVO approach should be avoided unless by day, reported conditions indicate VMC will be encountered before commencement of final approach.
2. Arrivals from the south are required to make no less than four frequency changes coincident with transitioning from controlled airspace into uncontrolled airspace (Ohakea ACC(R), Christchurch ACC(R) (Bay Sector), Christchurch FIS, Taupo AWIB and Taupo). Expect very high flight deck workload and decreased ability to maintain good situational awareness.
3. Intensive PJE takes place on the field.
4. Intense glider activity takes place in and around C478, Operating on a separate frequency (134.45) at Centennial Field. The lateral boundary of C478 passes close to the RNAV 17 final approach track.

**ICAO Region/ANP: PAC****IFALPA Region: SOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**Rotorua International (NZRO)****DEFICIENT [Nov 2019]**

AGA (1)	RESA RWY 18/36 inadequate (110m Northern end and 220 m Southern end)	Increase RESA length at both ends to 240m (or 240m equivalent if EMAS used)
AGA (1)	Runway Width inadequate (30m) for A320 and B737 Aircraft	Increase runway 18/36 width to 45m

**Wellington Intl. (NZWN)****DEFICIENT [Nov 2019]**

AGA (1)	Runway-End Safety Areas RWY 16/34 inadequate (only 90m at each end)	Increase RESA length from 90m to 240m (or 240m equivalent if EMAS used)
AGA (1)	Runway strip width should be 150m either side of the centre line.	Exemption of 75m approved by CAA

**Note** Each end of the single RWY [16/34] has an embankment.

**PAPUA NEW GUINEA****PNG-ALPA****Port Moresby (AYPY)****DEFICIENT [Nov 2019]**

NAVAIDS (6)	NOTAMS on ATC Procedures are outdated (2002) and require updating.	
MET (1)	METARS often not available, weather information in general is insufficient.	

**ICAO Region/ANP: PAC**

**IFALPA Region: SOP**

Subsection	IFALPA Deficiency	Action Required/Remarks
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**SAMOA**

**Apia (NSFA)**

**DEFICIENT [Nov 2019]**

ATM (2) MET (3)	Inaccurate reporting of weather conditions	
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**SOLOMON ISLANDS**

**Honiara (NFTF)**

**DEFICIENT [Nov 2019]**

SECURITY	Dog hazard – packs of dogs regularly access and run wild on the runway.	
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**TONGA**

**Tongatapu/Fua’Amotu (NFTF)**

**DEFICIENT [Nov 2019]**

AGA (3) (4)	Settings for the runway lights and PAPIs low intensity with inconsistent brightness which tower is occasionally unable to control.	
MET (3)	Inaccurate cloud heights in met reports are made by Fua’Amotu tower.	

**Remarks:**

No marine rescue equipment available here.



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المدني الدولي

国际民用  
航空组织

Ref.: T 3/10.1.21 – AP068/19 (ATM)

15 July 2019

**Subject:** Asia/Pacific Seamless ATM Plan and State  
National Air Navigation Plan Template

**Action Required:** to note the PfA consultation results

Sir/Madam,

I am pleased to advise you of the consultation outcomes from the Proposal for Amendment (PfA) to the Regional Air Navigation Plan conveyed in the ICAO State Letter Ref.: T 3/10.1.21 – AP043/19 (ATM) dated 10 April 2019 and Ref.: T 3/10.1.21 – AP063/19 (ATM) dated 11 June 2019.

All respondents agreed with the need for a National Air Navigation Plan (NANP), which was a positive result. Some States/Administrations requested clarification on the status of the NANP Template, and the benchmark which would describe an acceptable or 'robust' plan.

I am therefore circulating the Regional Air Navigation Plan Volume II amendment, which includes clarifications that have been made in response to the feedback received. This amendment is expected to be inserted within the Regional Air Navigation Plan on 01 September 2019.

In addition, I am pleased to provide the updated NANP Template, also with clarifications as a result of the consultation. I would like to thank States/Administrations for their engagement in this important process, which has resulted in a positive development that may benefit not just the region but also the global effort to advance air navigation infrastructure implementation.

If your administration has any questions, please contact the Regional Office via the following email address ([apac@icao.int](mailto:apac@icao.int)) with a copy to [hchew@icao.int](mailto:hchew@icao.int).

Yours sincerely,

Arun Mishra  
Regional Director

**Enclosures:**

- A – Regional Air Navigation Plan Amendment
- B - State National Air Navigation Plan Template Version 6.0



**PROPOSAL FOR AMENDMENT OF THE ICAO  
ASIA AND PACIFIC REGIONS AIR NAVIGATION PLAN, VOLUME II**

(Serial No.: APAC – II 19/13 – ATM)

a) **Plan:** Air Navigation Plan (ANP) - Asia and Pacific Regions, Volume II

b) **Proposed amendment:** **Volume II Part I – GENERAL PLANNING ASPECTS  
Section 3 SPECIFIC REGIONAL REQUIREMENTS**

*Editorial Note:* Amendments are arranged to show deleted text using strikeout (text to be deleted), and added text with grey shading (text to be inserted)

*Add, Amend or Delete* requirement as follows:

*Amend the current paragraph 3.1 to paragraph 3.2.*

*Add new paragraph 3.1:*

States shall establish and maintain a National Air Navigation Plan (NANP) that supports implementation of the Global Air Navigation Plan and regional air navigation planning. The NANP shall be accessible to key stakeholders, including ICAO; however, specific details related to national security may be withheld from public release.

The NANP should detail the State's assessment of its requirements and the implementation process for applicable global and regional air navigation planning elements.

States shall report their implementation progress and status of the applicable global and regional air navigation planning elements at least once each year (preferably prior to 01 April) to support:

- global and regional plans (including the Seamless Air Traffic Management Plan and the Regional Air Navigation Plan Volume III); and
- specific plans for aerodromes, Aeronautical Information Management (AIM), Air Traffic Flow Management (ATFM), Air Traffic Management (ATM) contingency and Search and Rescue (SAR).

*Note: a 'robust' status plan that is not subject to consideration as an APANPIRG Deficiency is one that is evaluated as achieving 90% or more implementation of the planning elements.*

The NANP should include the following Basic Planning Elements:

**Background** – a brief introduction aimed at high level decision-makers that describes the need for the plan with benefits and costs, including the necessity for global and regional harmonization and interoperability:

a) general (not necessarily quantitative) description of the Plan's benefits;

b) general description of the costs\*; and

c) details of how the State Plan connects to the global and regional planning hierarchy.

*\*Note 1: this is a matter for the State to determine, and could be in terms of quantitative, qualitative, cost of implementation or cost of not implementing.*

*\*Note 2: ICAO do not require details of costs from States, as this is for the State's benefit.*

Stakeholder Consultation – high level descriptions and statements:

a) of the process used to consult with stakeholders, including the military; and

b) from key stakeholders (such as Heads of CAAs, ANSPs, military organisations, etc.) endorsing the State Plan.

Analysis – Information on the State's analysis of:

a) all applicable ASBU and regional elements deemed to be applicable, including a statement of the State's priorities\* for implementation; and

b) elements that are deemed to be not applicable, and how these were determined.

*\*Note: this assessment should be guided by the priorities determined by APANPIRG*

Planning – descriptions of:

a) the implementation process, such as how the different stakeholders will work together, design systems and provide feedback on implementation; and

b) each applicable global and regional element's implementation managers (those responsible for execution of the implementation) and timelines.

Progress – details in the State Plan as to the progress of implementation against the planning timelines.

*Note 1: this also provides an indication that the Plan is a 'living document' subject to periodic review and update.*

*Note 2: ICAO would not normally be interested in the details of the Plan (except where specific need is identified at APANPIRG Contributory bodies). The NANP will need to address the BPEs at a high level and States should send detailed information only when requested by ICAO.*

c) **Originated by:** ICAO

d) **Originator's reasons for amendment:** This proposed strengthening of National ANS Plans was discussed at the ICAO – FAA ASBU Workshop (Focus - South East Asia, ICAO Asia Pacific Office, Bangkok, Thailand 29 January – 31 January 2019). The proposal is in response to the Ministerial Beijing Declaration, paragraph 2.1 g), which commits to national planning frameworks supported by National Air Navigation Plans.

e) **Intended date of implementation:** As soon as possible following approval.  
 [Regional agreement] (Volume II)

f) **Proposal circulated to the following States and International Organizations:**

Afghanistan	Micronesia	CANSO
Australia	Mongolia	IATA
Bangladesh	Myanmar	IBAC
Bhutan	Nauru	IFALPA
Brunei Darussalam	Nepal	IFATCA
Cambodia	New Zealand	
China	Pakistan	
- <i>Hong Kong, China</i>	Palau	
- <i>Maocao, China</i>	Papua New Guinea	
Cook Islands	Philippines	
Democratic People's Republic of Korea	Republic of Korea	
Fiji Islands	Samoa	
France	Singapore	
- <i>French Polynesia</i>	Solomon Islands	
- <i>New Caledonia</i>	Sri Lanka	
India	Thailand	
Indonesia	Timor-Leste	
Japan	Tonga	
Kiribati	Tuvalu	
Lao People's Democratic Republic	United States of America	
Malaysia	Vanuatu	
Maldives	Viet Nam	
Marshall Islands		
<i>* for information</i>		

g) **Secretariat Comments:**

1. ICAO supports the amendment as a means of improving the overall poor progress of Aviation System Block Upgrade (ASBU) implementation.

## **[State] National Air Navigation Plan**

Template version 6.0

Note to States (delete this note) - The NANP doesn't need to be called a 'NANP'. It can be titled whatever the State wants, and could be several different documents depending on how the State does planning. It could even be in html form using an Internet-based portal instead of a traditional document, as long as it sets out key steps in the planning process.

NANP are primarily for the State and not the region, so ICAO is only interested that that State has a NANP, and that it addressed certain Basic Planning Elements (BPEs). The detail within each BPE is not really of interest to ICAO either, especially the security-related parts which should only be made available to State officials. NANP excerpts should be all that required to establish the structure of the NANP that addresses the BPEs.

**Contents**

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Background ..... 1  
Stakeholder Consultation ..... 2  
Analysis ..... 3  
Planning ..... 4  
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## Background

Specific regional blue text to be modified by other regions as required

States to modify the yellow text accordingly

1.1 The *Asia/Pacific Seamless ANS Plan*, which was first approved by the Twenty Fourth Meeting of the International Civil Aviation Organization (ICAO) Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/24, September 2013), is the regional air navigation planning framework for the civil aviation system. The *Asia/Pacific Seamless ANS Plan* also contains expectations for military and other State agencies whose activities interface with civil aviation.

1.2 This National Air Navigation Plan (NANP) is necessary to describe the State's planning arrangements to align with both regional and global objectives, to ensure the greatest degree of harmonization and interoperability with other States.

1.3 Insert here a brief introduction aimed at high level decision-makers that further describes the purpose for the NANP in the context of the State's aviation system, challenges to the aviation system such as increased passenger demand and how important aviation is to the State in terms of its economy, transport connectivity, etc. Some States may wish to include reference to the specific ICAO and governmental policies that determine objectives, priorities and development directions.

1.4 Describe the scope of what the National Air Navigation Plan (NANP) covers, who it affects, and what is expected to be achieved, including the necessity for global and regional harmonization and interoperability.

1.5 Provide a general (not necessarily quantitative) description of the Plan's benefits.

1.6 Provide a general description of the costs. It should be noted that this is a matter for the State to determine, and could be in terms of quantitative, qualitative, cost of implementation or cost of not implementation. ICAO does not require details of costs from States, as this is for the State's benefit.

1.7 Provide details of how the NANP connects to the global and regional planning hierarchy.

## Stakeholder Consultation

2.1 The *Asia/Pacific Seamless ANS Plan* was expected to be implemented by the use of a NANP that encompassed a whole-of-government approach. Key stakeholders were expected to include military agencies, heads of regulatory bodies and Air Navigation Service Providers (ANSPs), and users such as airlines.

2.2 Provide a high level description of the process used to consult the NANP with affected stakeholders, including military agencies.

2.3 Insert here statements from Heads of CAAs, ANSPs, military agencies, space launch agencies, airlines, major airports etc. At the end of this Section there should be a place for the Heads to sign the document to indicate their concurrence and their organisation's continued support for the agreed plans in the NANP.

## Analysis

3.1 Insert here Information on the State's analysis of all applicable Aviation System Block Upgrade (ASBU) and regional elements deemed to be applicable to the State, including a statement of the State's priorities for implementation. This assessment should be guided by the priorities determined by APANPIRG.

3.2 Describe the ASBU and regional elements that are deemed to be not applicable, and how these were determined.

## Planning

4.1 The following section contains descriptions of the implementation process for each planning element, such as how the different stakeholders will work together, design systems and provide feedback on implementation and post-implementation. Each applicable global and regional element’s implementation managers (those responsible for execution of the implementation) and the project timelines are provided, including regular review milestones.

4.2 Table X provides an overview of the planning elements that originate from the Global Air Navigation Plan and their priorities. Table Y provides an overview of the regionally-specific planning elements that originate from the Planning and Implementation Regional Group (PIRG).

Functional Category	Element	Regional Priority	State Priority
Information	AMET-B0/1 – 4: Meteorological observations, forecast, warning, climatological and historical products, and dissemination (PASL 7.41)	1	
	AMET-B1/1 – 4: Meteorological products supported by automated decision systems or aids using IWXXM (PASL 7.55)	2	
	DATM-B1/1 – 7: Provision of quality-assured digital aeronautical data and information, including AIP, terrain and obstacle, aerodrome and instrument flight procedure data sets, and NOTAM improvements (PASL 7.40)	1	
	FICE-B0/1: Automated basic AIDC (PASL 7.26)	1	
	ACDM-B0/1-2: ACIS (PARS 7.3)	1	
	ACDM-B1/1 – 2: Airport CDM Integration with ATM Network, AOP and APOC (PARS 7.18)	2	
	APTA-B0/1 – 2: Basic PBN SID and STAR procedures, PBN non-precision approaches (PARS 7.4, 7.5, 7.10, 7.13)	1	
	APTA-B0/3 and 6: SBAS/GBAS CAT I precision approach procedures, and PBN Helicopter PinS Operations (PARS 7.6, 7.7)	3	
	APTA-B0/4 – 5, 7 – 8: CDO (Basic) and CCO (Basic), and performance-based aerodrome operating minima for advanced/basic aircraft (PARS 7.19)	2	
	APTA-B1/1 – 5: advanced capability PBN approaches, PBN SID and STAR procedures and performance-based aerodrome operating minima for advanced aircraft with SVGS, CDO and CCO (Advanced) (PASL 7.14, PARS 7.21, 7.22)	3	
	Operational	CSEP-B1/1 – 4: basic airborne situational awareness AIRB and VSA (PARS 7.20)	2

<b>Operational</b>	FRTO-B0/1 – 4: Direct routing, Airspace Planning and FUA, Flexible Routings, and basic conflict detection and conformance monitoring (PASL 7.29, 7.31, 7.36)	1	
	FRTO-B1/1 – 7: Free Route Airspace, RNP routes, Advanced FUA and Airspace Management (ASM), Dynamic Sectorisation, Enhanced Conflict Detection Tools and Conformance Monitoring, and Multi-Sector Planner Function (PASL 7.29, 7.51)	2	
	NOPS-B0/1 – 5: Initial integration of ASM with ATFM, Collaborative Network Flight Updates, Basic Network Operation Planning and Initial Airport/ATFM slots, A-CDM Network Interface and Dynamic Slot Allocation (PASL 7.38)	1	
	NOPS-B1/1 – 10: Short Term ATFM measures, Enhanced NOPS Planning, Enhanced integration of airport operations and NOPS planning, Enhanced Traffic Complexity Management, Full integration of ASM with ATFM, Initial Dynamic Airspace configurations, Enhanced ATFM slot swapping, Extended Arrival Management, ATFM Target Times and Collaborative Trajectory Options Programme (PASL 7.52)	2	
	OPFL-B0/1: ITP	3	
	OPFL-B1/1: CDP	3	
	RATS-B1/1 – Remotely Operated Aerodrome Air Traffic Services	3	
	RSEQ-B0/1 – 2: Arrival and Departure Management (PASL 7.32)	1	
	RSEQ-B0/3 – Point merge	3	
	RSEQ-B1/1 – Extended arrival metering (PASL 7.46)	2	
	SNET-B0/1 – 4: STCA, MSAW, APW, APM (PASL 7.31)	1	
	SNET-B1/1 – 2: Enhanced STCA with aircraft parameters and in complex TMAs (PASL 7.50)	2	
	SURF-B0/1 – 3: Basic ATC surface operations tools, comprehensive situational awareness, situational awareness, alerting service (PASL 7.47)	2	
	SURF-B1/1 – 5: Advanced surface traffic management visual aids, pilot comprehensive awareness and runway alerting, enhanced ATC alerting, routing service to support ATC and EVS for taxiing (PASL 7.48)	2	

<b>Operational</b>	TBO-B0/1: Introduction of time-based management within a flow centric approach (PASL 7.52)	2	
	TBO-B1/1 – Initial Integration of time-based decision making processes (PASL 7.52)	2	
<b>CNS Technology and Services</b>	ASUR-B0/1 – 3: ADS-B, MLAT, SSR-DAPS (PARS 7.8, 7.11, PASL 7.26, 7.28, 7.30)	1	
	ASUR-B1/1 – Reception of aircraft ADS-B signals from space (SB ADS-B) (PASL 7.54)	2	
	COMI-B0/1 – 2, 4 – 6: ACARS, ATN/OSI, VDL Mode 2 Basic, SATCOM Class C Data, HFDL (PASL 7.54)	2	
	COMI-B0/3, 7: VDL Mode O/A, AMHS (PASL 7.25)	1	
	COMI-B1/1 – 4: VDL Mode 2 Multi-Frequency, SATCOM Class B (SB-S) Voice and Data, ATN/IPS and AeroMACS Ground-Ground (PASL 7.53)	2	
	COMS-B0/1 – 2: CPDLC (FANS 1/A & ATN B1) for domestic and procedural airspace and ADS-C (FANS 1/A) for procedural airspace (PARS 7.14, PASL 7.29, 7.53)	2	
	COMS-B1/1 – 3: PBCS approved CPDLC (FANS 1/A+), ADS-C and SATVOICE for domestic and procedural airspace (PARS 7.14, PASL 7.53)	2	
	NAVS-B0/1 – 4: SBAS, GBAS, ABAS, MON (PARS 7.7)	2	
	NAVS-B1/1: Extended GBAS	3	

**Table X:** Regional Planning Elements Related to the GANP

<b>Functional Category</b>	<b>Regional Seamless ANS Element</b>	<b>Regional Priority</b>	<b>State Priority</b>
<b>Operational</b>	Aerodrome management and coordination (PARS 7.1)	2	
	Optimization of runway capacity facilities (PARS 7.2)	3	
	ADS-B, SSR Mode S and PBN Airspace (PARS 7.8, 7.9, 7.10)	2	
	Flight Level Orientation Scheme (FLOS) (PARS 7.12)	2	
	Civil/Military SUA management (PARS 7.13)	1	
	Adjacent ATS sector coordination (PASL 7.19)	2	
	Airspace classification (PASL 7.28)	2	
	ATC horizontal separation (PASL 7.29)	2	
	Flight Level Allocation Schemes (FLAS) (PASL 7.30)	2	
	ATC sector capacity (PASL 7.32)	2	
	Electronic Flight Progress Strips (PASL 7.34)	2	
	Enhanced SAR systems (PASL 7.37)	1	
	ANSP human and simulator performance (PASL 7.38)	1	

	Civil/Military strategic and tactical coordination (PASL 7.39)	1	
	Civil/Military common procedures and training (PASL 7.39)	2	
	Ballistic launches/space re-entry management (PASL 7.40)	1	
	Unmanned Aircraft Systems (PARS TBA)	2	
<b>CNS Technology and Services</b>	ATS surveillance data sharing (PASL 7.23)	2	
	Civil Military integrated systems and facilities (PASL 7.39)	2	
	Departure Clearance (DCL) (PASL 7.44)	2	

**Table Y:** Regional Planning Elements Related to Regionally-Specific Requirements

4.3

X

## **Progress**

5.1 The following section contains details of the progress of implementation of each element against the planning timelines. It should regularly updated to reflect the actual implementation of the applicable elements.

5.2 This section should also provide information on the results and lessons learnt from post-implementation reviews, including the effectiveness of any improvements against planning goals and Key Performance Indicators.



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Ref. T 3/10.0 – AP122/19 (ATM)

14 November 2019

**Subject:** Seamless ANS Plan and ATM Performance Management

**Action required:** To note and take action in accordance with the APANPIRG Conclusions as appropriate and to provide the National Air Navigation Plan (NANP) by **01 July 2020**

Sir/Madam,

I wish to draw your attention to the Conclusions of the Thirtieth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/30) held in Bangkok, Thailand from 4 to 6 November 2019, with respect to the Seamless ANS Plan and ATM Performance Management.

***Conclusion APANPIRG/30-5: Asia/Pacific Seamless ANS Plan***

*That, given the urgency and priority of Air Navigation Service (ANS) planning and modernization, and the lack of progress in implementing the Aviation System Block Upgrade (ASBU) Block 0, Asia/Pacific States are urged to:*

- (1) review Version 3.0 of the Asia/Pacific Seamless ANS Plan appended as **Appendix A to the Report on Agenda Item 3.2**; and*
- (2) consider utilising the Asia/Pacific Seamless ANS Plan to develop a National Air Navigation Plan (NANP) after considering the NANP Template at **Appendix B to the Report on Agenda Item 3.2**, to enable timely implementation of applicable Seamless ANS elements.*

States and Administrations are requested to provide a copy of their NANP in electronic form (or the hyperlink to the NANP) to the APAC Regional Office to ([apac@icao.int](mailto:apac@icao.int); [pchalayonnawin@icao.int](mailto:pchalayonnawin@icao.int);) **no later than 01 July 2020**.

Please note that it is expected that any material within the NANP that is either commercially sensitive or which has national security implications may be redacted. The main purpose of the ICAO review is to establish that the Basic Planning Elements (BPEs) are addressed, rather than to assess the details of the NANP. For ease of reference, the BPEs are copied from the Regional Air Navigation Plan Vol. II as follows:

2/...

The NANP should include the following Basic Planning Elements:

Background – a brief introduction aimed at high level decision-makers that describes the need for the plan with benefits and costs, including the necessity for global and regional harmonization and interoperability:

- a) general (not necessarily quantitative) description of the Plan's benefits;
- b) general description of the costs\*; and
- c) details of how the State Plan connects to the global and regional planning hierarchy.

*\*Note 1: this is a matter for the State to determine, and could be in terms of quantitative, qualitative, cost of implementation or cost of not implementing.*

*\*Note 2: ICAO do not require details of costs from States, as this is for the State's benefit.*

Stakeholder Consultation – high level descriptions and statements:

- a) of the process used to consult with stakeholders, including the military; and
- b) from key stakeholders (such as Heads of CAAs, ANSPs, military organisations, etc.) endorsing the State Plan.

Analysis – Information on the State's analysis of:

- a) all applicable ASBU and regional elements deemed to be applicable, including a statement of the State's priorities\* for implementation; and
- b) elements that are deemed to be not applicable, and how these were determined.

*\*Note: this assessment should be guided by the priorities determined by APANPIRG*

Planning – descriptions of:

- a) the implementation process, such as how the different stakeholders will work together, design systems and provide feedback on implementation; and
- b) each applicable global and regional element's implementation managers (those responsible for execution of the implementation) and timelines.

Progress – details in the State Plan as to the progress of implementation against the planning timelines.

*Note 1: this also provides an indication that the Plan is a 'living document' subject to periodic review and update.*

*Note 2: ICAO would not normally be interested in the details of the Plan (except where specific need is identified at APANPIRG Contributory bodies). The NANP will need to address the BPEs at a high level and States should send detailed information only when requested by ICAO.*

***Conclusion APANPIRG/30-6: ICAO HQ Support for Regional ANS Implementation***

*That, ICAO HQ is invited to:*

*(1) given the greatly increased number and complexity of Aviation System Block Upgrade (ASBU) elements in the draft 6<sup>th</sup> Edition of the Global Aviation Navigation Plan (GANP), the redefinition of ASBU Block 0 elements that were expected to be completed by 2019, and the need for more detailed and comprehensive guidance provided on the ASBU Portal for each element than is currently provided, consider:*

*(i) the consequences for States of different capabilities to ensure that the No Country Left Behind (NCLB) policy is fully considered; and*

*(ii) the extra resources, tools and training required to enable States to be able to understand, review, determine priorities and costs/benefits, and implement the applicable ASBU elements; and*

*(2) ensure that the redevelopment of the Regional Air Navigation Plan Volume III templates allow the Asia/Pacific Seamless Air Navigation Service (ANS) Plan to be fully incorporated into Vol. III*

***Conclusion APANPIRG/30-7: Asia-Pacific ATM Performance Measurement Framework***

*That, States are urged to consider:*

*1. analysing the Asia/Pacific ATM Performance Measurement Framework (ATM PFM) at Appendix C to the Report on Agenda Item 3.2;*

*2. tailoring the ATM/PFM according to their own conditions, as appropriate;*

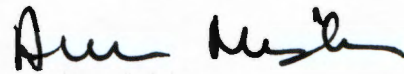
*3. promoting the ATM PFM through encouraging the stakeholders to initiate their own performance measurement practice;*

*4. when time and condition permit, publish a report, supporting the initiative to conduct a trial of the first phase for the initial performance measurement work; and*

*5. the means by which to guide the stakeholders to perform analysis and manage improvement internally, for example, develop a comprehensive information demonstration platform for performance measurement to gather data, display outcomes with computerised support tools and technology documents as appropriate.*

Accordingly, States are requested to take note of Conclusion 30-5, 30-6, and 30-7 to take action as appropriate. The Asia/Pacific Seamless ANS Plan Version 3.0, National Air Navigation Plan Template Version 6.0, and Asia/Pacific ATM Performance Measurement Version 1.0 are provided in **Attachments A, B, and C.**

Yours sincerely,



Arun Mishra  
Regional Director

**Enclosures:**

- A — Asia/Pacific Seamless ANS Plan Version 3.0
- B — National Air Navigation Plan Template  
Version 6.0
- C — Asia/Pacific ATM Performance Measurement  
Version 1.0



ICAO

LIST OF FOCAL POINT FOR AIR NAVIGATION DEFICIENCIES

Updated 26 November 2019

STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>Australia</b>	<p>Name: Mr. Neil Bain            Designation: ATS Specialist Team Leader            Address: Airservices Australia            Tel: +61 7 3866 3526            Email: <a href="mailto:neil.bain@airservicesaustralia.com">neil.bain@airservicesaustralia.com</a>;</p>
<b>Bangladesh</b>	<p>Name: Mr. Md. Anwar Hossain            Designation: Communication Engineer &amp; CNS Inspector            Address: Civil Aviation Authority of Bangladesh            Flight Safety &amp; Regulations Division            Tel: +88 01712851761            Fax: +88 8901411            Email: <a href="mailto:ahossaincaab@gmail.com">ahossaincaab@gmail.com</a>;  <a href="mailto:anwar_hossain@caab.gov.bd">anwar_hossain@caab.gov.bd</a>;</p>
<b>Bhutan</b>	<p>Name: Mr. Pema Tashi            Designation: Superintendent, ANS            Address: Bhutan Civil Aviation Authority            Tel: +975 8271912            Fax: 00975 8 271944            Email: <a href="mailto:ptashi@bcaa.gov.bt">ptashi@bcaa.gov.bt</a>;</p>
<i>Alternate</i>	<p>Name: Ms. Devi Maya Adikari            Designation: COM/NAV Officer            Address: Department of Air Transport, Paro            Tel: +975 8 271511            Fax: +975 8 271407            Email: <a href="mailto:dmadhikari@doat.gov.bt">dmadhikari@doat.gov.bt</a>;</p>
<b>Brunei Darussalam</b>	<p>Name: Mr. Mohamad Fauzi bin Mohamad Sidek            Designation: Deputy Director            Address: Department of Civil Aviation, Brunei Darussalam            Tel: +673 2330142            MoB: +673 8168909            Email: <a href="mailto:fauzi.sidek@civil-aviation.gov.bn">fauzi.sidek@civil-aviation.gov.bn</a>; <a href="mailto:mfauzi_311@yahoo.com">mfauzi_311@yahoo.com</a>;</p>
<b>Cambodia</b>	<p>Name: Mr. Chhun Sivorn            Designation: Director of Air Navigation Standards and Safety Department            Address: State Secretariat of Civil Aviation            Tel: +855 23 224 258            MoB: +755 12 866 659            Email: <a href="mailto:ans.ssca@gmail.com">ans.ssca@gmail.com</a>; <a href="mailto:ans.ssca@civilaviation.gov.kh">ans.ssca@civilaviation.gov.kh</a>;</p>



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>China</b>	Name: Ms. Zhang Ying Designation: Engineer of AirSpace Management Division Address: Air Traffic Management Bureau, CAAC Tel: +86 (10) 8778 6837 Fax: +86 (10) 2778 6830 Email: <a href="mailto:zhangying@atmb.net.cn">zhangying@atmb.net.cn</a> ;
<b>Hong Kong, China</b>	Name: Mr. Simon CHEAN Designation: Senior Safety Manager Address: Civil Aviation Department Headquarters 1 Tung Fai Road, Hong Kong International Airport, Lantau, Tel: +852 2910 6442 Fax: +852 2910 0186 Email: <a href="mailto:skchean@cad.gov.hk">skchean@cad.gov.hk</a> ;
<b>Macao, China</b>	Name: Mr. Lam Tat Ming Designation: Director of Airport Infrastructure & Air Navigation Address: Civil Aviation Authority of Macao Alameda Dr. Carlos D'Assumpção, 336-342, Centro Comercial Cheng Feng, 18 Andar, Macao, China Tel: +853 8796 4120 Fax: +853 2833 8089 Email: <a href="mailto:taftlam@aacm.gov.mo">taftlam@aacm.gov.mo</a> ;
<i>Alternate</i>	Name: Mr. Lo Veng Tong Designation: Safety Officer of Airport Infrastructure & Air Navigation Address: Civil Aviation Authority of Macao Tel: +853 8796 4132 Fax: +853 2833 8089 Email: <a href="mailto:freemanlo@aacm.gov.mo">freemanlo@aacm.gov.mo</a> ;
<b>Fiji Islands</b>	Name: Ms. Theresa Levestam Designation: Controller Ground Safety Address: Civil Aviation Authority of the Fiji Islands Tel: +679 672 1555 [+679 9995206 – Mobile] Fax: +679 672 1500 Email: <a href="mailto:cgs@caaf.org.fj">cgs@caaf.org.fj</a> ;
<b>India</b>	Name: Mr. A. P. Gajbe Designation: General Manager (ATM) Address: Directorate of Air Traffic Management Airports Authority of India Safdarjung Airport, New Delhi -110003 Tel: +91 (11) 2465 2236 Email: <a href="mailto:anandraopg@aai.aero">anandraopg@aai.aero</a> ;



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>Indonesia</b>	Name: Mr. M. Hasan Bashory Designation: Deputy Director of Standardization and Air Navigation Standardization and Procedure of Air Navigation Address: Directorate General of Civil Aviation, Ministry of Transportation Email: <a href="mailto:bashory@aviasi.org">bashory@aviasi.org</a> ;
	Name: Mr. Okta Kurnia Putra Designation: Head of Standardization of Air Navigation Section Address: Directorate General of Civil Aviation, Ministry of Transportation Email: <a href="mailto:oktakurniaputra@gmail.com">oktakurniaputra@gmail.com</a> ;
<b>Japan</b>	Name: Mr. Takanari Aono Designation: Special Assistant to the Director Address: Air Traffic International Affairs Office Japan Civil Aviation Bureau Ministry of Land, Infrastructure Transport and Tourism Tel: +81 3 5253 8740 Fax: +81 3 5253 1664 Email: <a href="mailto:aono-t2ty@mlit.go.jp">aono-t2ty@mlit.go.jp</a> ;
<b>Kiribati</b>	Name: Mr. Tiamwa Teaiwa Designation: Air Navigation and Aerodrome Inspector Address: Civil Aviation Authority of Kiribati Tel: 686 74026003 Email: <a href="mailto:ans.ai@mcttd.gov.ki">ans.ai@mcttd.gov.ki</a> ;
<b>Lao PDR</b>	Name: Mr. Bountaeng Symoon Designation: Deputy Director General Address: Department of Civil Aviation of Laos Wattay International Airport, P.O.Box 119, Vientiane Mob: +8562022206472 Email: <a href="mailto:bountaeng@dcal.gov.la">bountaeng@dcal.gov.la</a> ;
<b>Alternate</b>	Name: Mr. Khonekham Souvongsa Designation: Acting Director of Air Navigation Address: Department of Civil Aviation of Laos Wattay International Airport, P.O.Box 119, Vientiane Mob: +8562022071799 Email: <a href="mailto:khonekham@gmail.com">khonekham@gmail.com</a> ;
	Name: Mr. Thanongdeth Nalisak Designation: Air Traffic Management Planning Officer Address: Department of Civil Aviation of Laos Mob: +8562054212446 Email: <a href="mailto:thanongdeth@dcal.gov.la">thanongdeth@dcal.gov.la</a> ;



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
	Name: Mr. Amdounla Salinthone Designation: Director of Air Traffic Services Division Address: Lao Air Navigation Services Mob: +85620255668240 Email: <a href="mailto:asalinthone@gmail.com">asalinthone@gmail.com</a> ;
<b>Malaysia</b>	Name: Mr. Nasuruddin Bin Zainol Abidin Designation: Deputy Director Air Traffic Management Address: Civil Aviation Authority of Malaysia Level 1-4 , Block Podium, 62618 Putrajaya ,Malaysia Tel./Mob: 603-88714000 / 60123247089 Fax: 603 88810530 Email: <a href="mailto:nasuruddin@caam.gov.my">nasuruddin@caam.gov.my</a> ;
<b>Maldives</b>	Name: Mrs. Fathimath Ramiza Designation: Director, Air Navigation and Aerodromes Address: Maldives Civil Aviation Authority 11 <sup>th</sup> Floor, Velaanaage, Ameeru Ahmed Magu, Male' 20096, Maldives Tel: +960 332 4983 Fax: +960 332 3039 Email: <a href="mailto:ramiza@caa.gov.mv">ramiza@caa.gov.mv</a> ;
<b>Mongolia</b>	Name: Mr. Odgerel Davaadorj Designation: Senior officer of the Air Navigation Services Department Address: Civil Aviation Authority of Mongolia 17120 Buyant Ukhaa, Khan Uul District, Ulaanbaatar, Mongolia Tel: +976 11 282081 Fax: +976 7004 9640 Email: <a href="mailto:odgerel@mcaa.gov.mn">odgerel@mcaa.gov.mn</a> ;
<b>Myanmar</b>	Name: Mr. Soe Paing Designation: Director (Air Navigation Safety) Address: Department of Civil Aviation Tel: +95 1 533008 Fax: +95 1 533000 Email: <a href="mailto:soepng1@gmail.com">soepng1@gmail.com</a> ;
<i>Alternate</i>	Name: Mr. Thein Naing Designation: Deputy Director (ANSD) Address: Department of Civil Aviation DCA Headquarters Building, P.O. Box 11021, Mingaladon Tel: +95 1 533215 Fax: +95 1 533016 Email: <a href="mailto:ansd.myanmar@gmail.com">ansd.myanmar@gmail.com</a> ; <a href="mailto:chittwo975.c@gmail.com">chittwo975.c@gmail.com</a> ;



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>New Zealand</b>	Name: Mr. Sean Rogers Designation: Manager Aeronautical Services Address: Civil Aviation Authority of New Zealand P.O. Box 3555, Wellington 6140 Tel: / Mob: +64 (4) 560 9522 / +64 27 807 4875 Fax: +64 4 569 2024 E-mail: <a href="mailto:sean.rogers@caa.govt.nz">sean.rogers@caa.govt.nz</a> ;
<b>Nepal</b>	Name: Mr. Deepak Baral Designation: Director, Air Traffic Management Department Address: Civil Aviation Authority of Nepal (CAAN) Kathmandu, Nepal Tel: +977 1 4166139 Mob: +977 9851071819 E-mail: <a href="mailto:deepak.baral@caanepal.gov.np">deepak.baral@caanepal.gov.np</a> ; <a href="mailto:dpkbaral@live.com">dpkbaral@live.com</a> ;
<i>Alternate</i>	Name: Mr. Suresh Man Singh Designation: Director, Flight Operations Department Address: Civil Aviation Authority of Nepal (CAAN) Tribhuvan International Airport Civil Aviation Office Tel: +977 1 4498775 E-mail: <a href="mailto:fod_tiacao@caanepal.gov.np">fod_tiacao@caanepal.gov.np</a> ; <a href="mailto:kirtism2001@yahoo.com">kirtism2001@yahoo.com</a> ;
<b>Philippines</b>	Name: Mr. Arnold R. Balucating Designation: Assistant Director General I, Air Navigation Service Address: Civil Aviation Authority of the Philippines Tel: +632 879 9244 Fax: +632 879 9189 E-mail: <a href="mailto:arbalucating@caap.gov.ph">arbalucating@caap.gov.ph</a> ; <a href="mailto:arnoldrbalucating@yahoo.com">arnoldrbalucating@yahoo.com</a> ;
<i>Alternate</i>	Name: Mr. Michael E. Mapanao Designation: Acting Assistant Director General I Air Navigation Service Address: Civil Aviation Authority of the Philippines Tel: +632 879 9129 Fax: +632 879 9129 E-mail: <a href="mailto:mikeecho905@yahoo.com">mikeecho905@yahoo.com</a> ;
<i>Alternate</i>	Name: Mr. Luciano R Macuse Designation: Officer-In-Charge, Aerodrome and Air Navigation Safety Oversight Office Address: Civil Aviation Authority of the Philippines E-mail: <a href="mailto:lrm.aansoo2014@gmail.com">lrm.aansoo2014@gmail.com</a> ;



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>Republic of Korea</b>	Name: Ms. Sohyun Park Designation: Assistant Director of Air Traffic Division Address: Korea Office of Civil Aviation, Ministry of Land, Infrastructure and Transportation #11, Doum-ro 6, Sejong City, 30103 Tel: +82-201-4196 Fax: +82-201-5631 E-mail: <a href="mailto:psohyon@korea.kr">psohyon@korea.kr</a>
<b>Singapore</b>	Name: Mr. Hermizan Jumari Designation: Senior Chief (ATM) Address: Civil Aviation Authority of Singapore Singapore Changi Airport, P.O. Box 1, Singapore 918141 E-mail: <a href="mailto:hermizan_jumari@caas.gov.sg">hermizan_jumari@caas.gov.sg</a>
<i>Alternate</i>	Name: Mr. Michael Shee Designation: Chief (ATM) Address: Civil Aviation Authority of Singapore Singapore Changi Airport, P.O. Box 1, Singapore 918141 E-mail: <a href="mailto:michael_shee@caas.gov.sg">michael_shee@caas.gov.sg</a>
<b>Sri Lanka</b>	Name: Mr. Rohan Manukulasooriya Designation: Head of Section - Air Navigation Services Address: Civil Aviation Authority of Sri Lanka No. 64, Galle Road, Colombo 3 Tel: +94 (11) 235 8910 E-mail: <a href="mailto:hosans@caa.lk">hosans@caa.lk</a>
<b>Thailand</b>	Name: Mr. Preeda Youngsuksathaporn Designation: Deputy Director General Address: The Civil Aviation Authority of Thailand (CAAT) Tel: +662 568 8820 E-mail: <a href="mailto:preeda.y@caat.or.th">preeda.y@caat.or.th</a>
<i>Alternate</i>	Name: Ms. Tawika Huayhongthong Designation: Manager, Air Navigation Services Standard Department Address: The Civil Aviation Authority of Thailand (CAAT) Tel: +662 568 8824 E-mail: <a href="mailto:tawika.h@caat.or.th">tawika.h@caat.or.th</a>
<b>Timor-Leste</b>	Name: Mr. Carlito Noronha Designation: - Address: Civil Aviation Authority of Timor-Leste E-mail: <a href="mailto:manewalun88@gmail.com">manewalun88@gmail.com</a>



STATE/ADMINISTRATION	FOCAL CONTACT PERSON
<b>Tonga</b>	Name: Ms. Vinolia K. Salesi Designation: Acting Director for Civil Aviation Address: Ministry of Infrastructure –Civil Aviation Division Tel: + 676 28 024 E-mail: <a href="mailto:vfifita@infrastructure.gov.to">vfifita@infrastructure.gov.to</a> ;
<b>United States</b>	Name: Mr. Braks Etta Designation: Senior Air Traffic Representative, Asia Pacific Address: Federal Aviation Administration American Embassy Singapore 27 Napier Road, Singapore 258508 Tel: + 65 6476-9170 E-mail: <a href="mailto:braks.etta@faa.gov">braks.etta@faa.gov</a> ;
<b>Viet Nam</b>	Name: Mr. Nguyen The Hung Designation: Director, Air Navigation Department Address: Civil Aviation Administration of Viet Nam 119 Nguyen Son Street, Gia Thuy Ward Long Bien District, Hanoi 10000 Tel: +84 24 3872 3600 Fax: +84 24 3927 4194 E-mail: <a href="mailto:hungand@caa.gov.vn">hungand@caa.gov.vn</a> ; <a href="mailto:hungand_caav@yahoo.com">hungand_caav@yahoo.com</a>



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