



International Civil Aviation Organization

**Third Meeting of the Asia/Pacific Regional Search and Rescue Task Force
(APSAR/TF/3)**

Maldives, 25 – 29 January 2015

Agenda Item 4: Asia/Pacific and inter-regional SAR planning, coordination and cooperation

ASIA/PACIFIC REGIONAL SAR STATUS

(Presented by the Secretariat)

SUMMARY

This paper presents the status of Search and Rescue (SAR) information in the Asia/Pacific Region known to the ICAO Regional Office, and requests States to update this information.

1. INTRODUCTION

1.1 The Asia/Pacific Regional Office maintains records of the information provided from administrations regarding SAR Status in order to report to the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG).

2. DISCUSSION

2.1 State Letter Ref.: T3110.1.1 -AP128/14 (ATM) dated 02 September 2014 requested an update to the current information regarding the SAR Capability Matrix Table. The only update received was from the Philippines.

2.2 The current List of SAR Agreements is presented in **Attachment A**. This List is presented in alphabetical order so updated agreements can be identified. A SAR Agreement Matrix is provided in **Attachment B**. The SAR Capability Matrix Table is appended as **Attachment C**.

2.3 This data indicated that only seven Asia/Pacific administrations had a high level of Annex 12 compliance in all twenty assessed elements (Australia, Hong Kong China, Japan, New Zealand, Republic of Korea, Singapore and the United States of America).

2.4 **Figure 1** (WP04 page 2) provides a regional overview at APSAR/TF/2. **Figure 2** provides the updated overview for APSAR/TF/3, indicating significant Annex 12 compliance weaknesses remained in the South Asia area and the Southwest Pacific (improvements had been noted in Fiji since APSAR/TF/2). In addition, there were parts of Southeast Asia and East Asia that indicated a need for compliance improvement.

2.5 Many States had not provided any information on their SAR compliance status, and therefore they are assumed to be deficient until such time as clarification is provided. There had also been no update from the Tabei Flight Information Region (FIR).

2.6 In summary, the Asia/Pacific appears to have made only marginal progress in the past two years in the SAR area since the APSAR/TF/1 was held. There remained significant risk of poor SAR responses unless major changes, including increased resources and effort, were applied to this important area of safety.

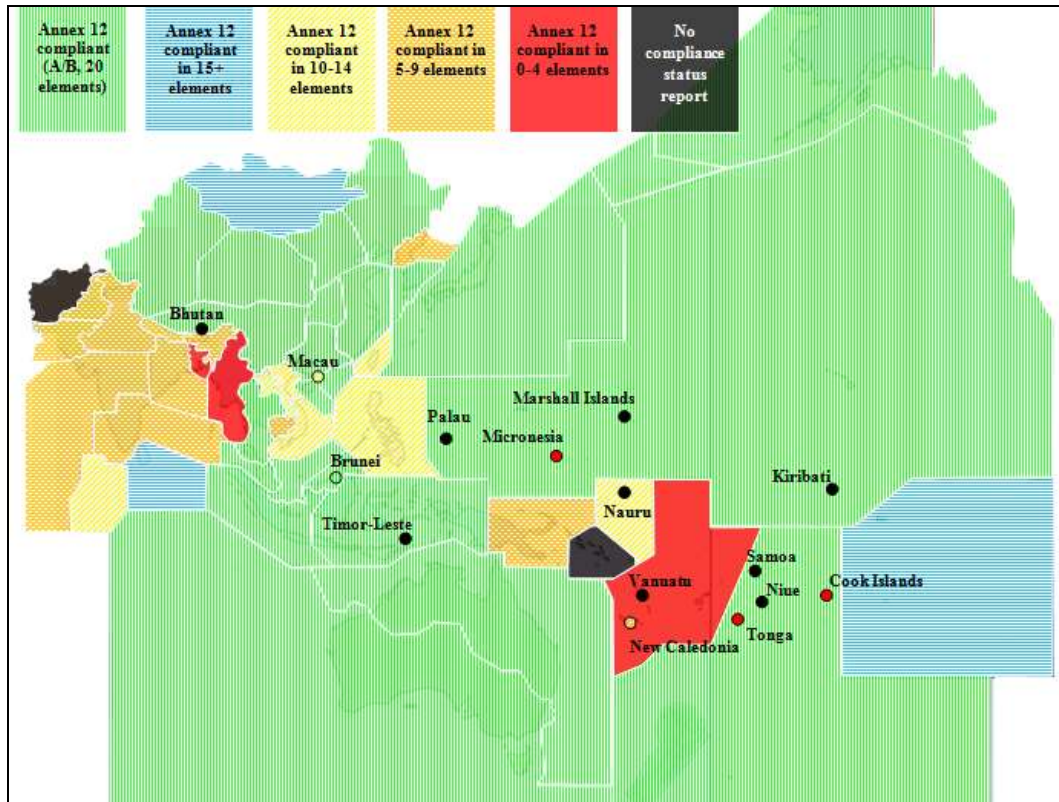


Figure 1: APSAR/TF/2 Asia/Pacific Regional SAR Overview

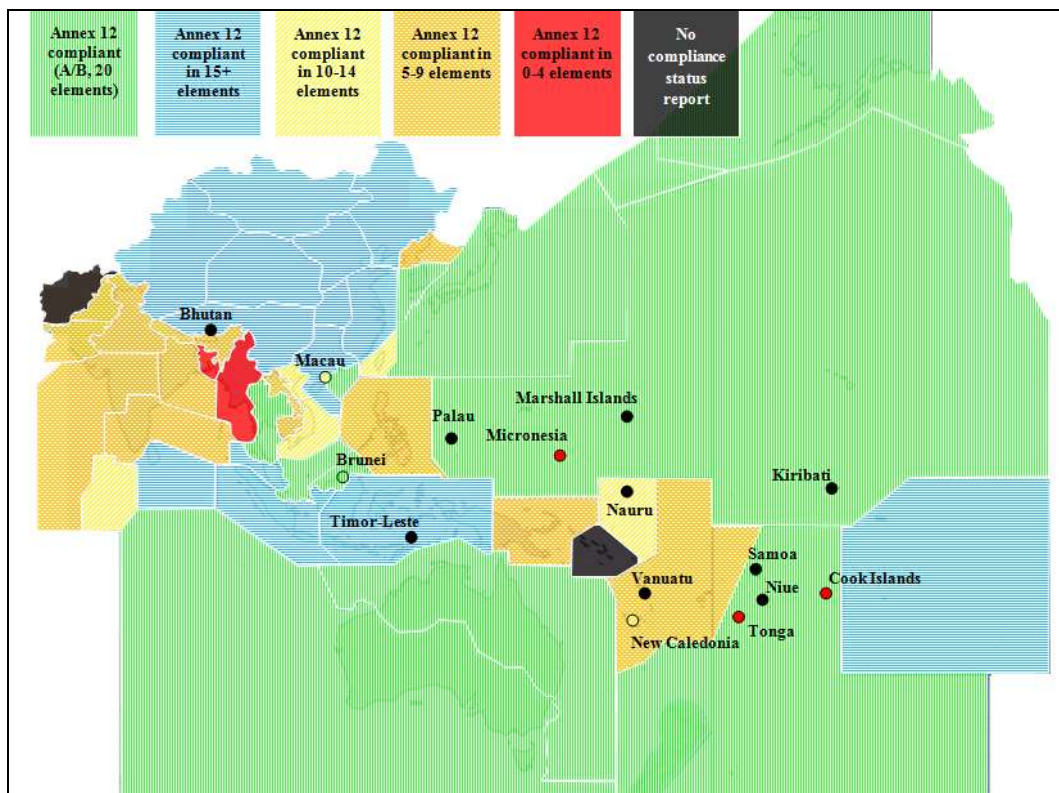


Figure 2: APSAR/TF/3 Asia/Pacific Regional SAR Overview

2.7 States and administrations should review and discuss the complete list of SAR compliance deficiencies proposed for APANPIRG/26's attention (as noted at APANPIRG/25) as follows:

- **Afghanistan**
 - SAR Capability (no data)
- **Bangladesh**
 - SAR Capability (16 of 20 Annex 12 elements non-compliant)
- **Bhutan**
 - SAR Capability (no data)
- **Cambodia**
 - SAR Capability (14 of 20)
- **Cook Islands**
 - SAR Capability (19 of 20)
- **DPR Korea**
 - SAR Capability (15 of 20)
- **Fiji**
 - SAR Capability (13 of 20)
- **India**
 - SAR Capability (14 of 20)
- **Kiribati**
 - SAR Capability (no data)
- **Lao PDR**
 - SAR Capability (10 of 20)
- **Macau, China**
 - SAR Capability (10 of 20)
- **Maldives**
 - SAR Capability (9 of 20)
- **Marshall Islands**
 - SAR Capability (no data)
- **Micronesia**
 - SAR Capability (20 of 20)
- **Myanmar**
 - SAR Capability (17 of 20)
- **Nauru**
 - SAR Capability (no data)
- **Nepal**
 - SAR Capability (12 of 20)
- **New Caledonia**
 - SAR Capability (8 of 20)
- **Pakistan**
 - SAR Capability (11 of 20)
- **Palau**
 - SAR Capability (no data)

- **Papua New Guinea**
 - SAR Capability (11 of 20)
- **Philippines**
 - SAR Capability (12 of 20)
- **Samoa**
 - SAR Capability (no data)
- **Solomon Islands:**
 - SAR Capability (no data)
- **Timor Leste**
 - SAR Capability (no data)
- **Tonga**
 - SAR Capability (18 of 20)
- **Vanuatu**
 - SAR Capability (no data)
- **Viet Nam:**
 - SAR Capability (7 of 20)

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review and update the:
 - i) List of SAR Agreements in **Attachment A**;
 - ii) SAR Agreement Matrix in **Attachment B**;
 - iii) SAR Capability Matrix Table in **Attachment C**; and
- b) review and discuss the proposed APANPIRG SAR Deficiencies at paragraph 2.7; and
- c) consider ways to enhance and improve SAR capability in the Asia/Pacific Region, especially in South Asia and the Southwest Pacific.

.....

SAR AGREEMENTS

Updated: 21 November 2014

DATE	STATES	REMARKS
14 April 1972	ASEAN States - Indonesia, Malaysia, Philippines, Singapore and Thailand	Multilateral agreement
March 1997	ASEAN - Viet Nam	Viet Nam accession to 1972 ASEAN Agreement (as above)
August/Sept. 2004	Australia/Fiji	
November 1990	Australia / Indonesia	Updated 5 April 2004
April 2006	Australia / Maldives	Letter of Arrangement
2 April 2009	Australia / New Zealand	Notified 2013
February 2001	Australia / Papua New Guinea	
29 July 1999	Australia / New Caledonia	Maritime Arrangement for SAR Cooperation
8 October 1998	Australia / Solomon Islands	SAR Arrangement
29 April 2014	Australia/Sri Lanka	SAR Arrangement
16 December 1998	Brunei Darussalam / Malaysia	
	Bhutan / India	
February 1999	Cambodia / Viet Nam	
1 June 2009	Chile / New Zealand	SAR services coordination
16 May 2007	China / Republic of Korea	
notified 2003	China / United States	
Signed 25 Oct 2013	China/Mongolia	
6 March 2012	Cook Islands / New Zealand	Notified 2012
notified July 2007	French Polynesia (Tahiti) / New Zealand	Final draft agreement being considered by FP authorities
notified January 2013	French Polynesia (Tahiti) / United States	Draft agreement being considered by FP authorities
June 1982	Indonesia / Singapore	
1990	Indonesia / Papua New Guinea	JBC MOU signed
25 August 1986	Indonesia / Philippines	
1988, July 2006	Indonesia / United States	SAR Services Agreement
17 March 2010	Japan/Philippines	SAR Agreement
30 April 2008	Japan / Republic of Korea	
1986	Japan / United States	
1998	Lao PDR / Vietnam	LOA for provision of assistance
29 August 1985	Malaysia / Indonesia	
9 December 1985	Malaysia / Philippines	
11 August 1984	Malaysia / Singapore	
9 September 1985	Malaysia / Thailand	
25 June 2014	Maldives/Sri Lanka	
notified 2003	Marshall Islands / United States	
notified 2003	Micronesia / United States	
11 April 2008	Mongolia/Russian Federation	
22 May 2002	New Caledonia / New Zealand	
notified July 2007	New Zealand/Niue	Government aid agreement
20 August 2003	New Zealand / Samoa	Notified 2005
Notified July 2007	New Zealand/Tokelau	Government aid agreement

DATE	STATES	REMARKS
17 June 2005	New Zealand / Tonga	
16 April 2003	New Zealand / United States	
26 November 2002	Palau / United States	
July 1996	Philippines / Singapore	
20 September 1996	Philippines / Viet Nam	
September 1985	Singapore / Thailand	Updated July 1996
July 1996	Singapore / Viet Nam	
March 2009	Viet Nam / Lao PDR	
March 2009	Viet Nam / Cambodia	

SAR Capability Matrix (Last Update: 21 November 2014)

	Training	Alerting	Legislative	SAR Committee	SAR Agreements	Relationships	Communications	Quality Control	Civil Military	Resources	SAREX	Library	Computerisation	SAR Programme	Supply Dropping	Special Equipment	SAR aircraft	Navigation	ELTs	COSPAS-SARSAT Alerts
Afghanistan																				
Australia	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	B	A
Bangladesh	D	C	B	E	E	E	C	E	B	E	E	C	E	E	C	C	B	E	B	C
Bhutan																				
Brunei	A	A	A	A	A	A	A	A	A	A	A	A	A	A	B	B	A	A	A	E
Cambodia	B	B	C	B	C	B	C	E	B	C	C	C	D	C	E	E	D	D	E	B
China	A	A	A	A	A	A	B	B	A	B	B	C	D	E	A	A	A	A	A	E
Cook Islands	E	D	D	E	E	C	C	C	D	E	D	E	E	E	E	D	D	E	A	E
DPR Korea	D	B	D	B	E	D	B	B	B	C	D	E	E	E	D	E	C	C	E	E
Fiji	D	A	C	C	C	C	B	C	B	C	B	C	C	B	D	C	C	C	B	A
French Polynesia	A	A	A	B	C	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A
Hong Kong, China	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
India	B	C	C	C	D	C	C	E	C	C	C	C	C	B	B	B	C	E	A	A
Indonesia	A	B	A	A	A	B	B	B	A	B	A	B	B	B	C	B	B	B	B	B
Japan	A	A	A	A	B	A	A	A	A	A	A	A	B	A	A	A	A	A	A	A
Kiribati																				
Lao PDR	C	B	C	B	B	B	B	D	B	B	C	C	C	C	B	D	D	B	D	A
Macau, China	A	A	A	B	A	-	A	-	-	-	A	-	-	-	-	-	A	-	A	A
Malaysia	A	A	C	A	B	A	A	A	A	A	A	B	A	A	A	B	A	A	A	D
Maldives	C	A	C	E	B	A	B	C	A	C	B	B	B	A	C	C	C	A	C	A
Marshall Islands																				
Micronesia	C	D		E	E	D	C					E		D	D					

APSAR/TF/3
WP04 Attachment C

Mongolia	C	A	B	C	B	B	A	A	A	B	A	A	A	B	D	B	A	B	A	A
Myanmar	D	E	D	C	E	B	C	C	B	E	E	E	E	E	C	E	B	C	E	E
Nauru																				
Nepal	B	B	C	D	E	C	C	D	B	D	E	D	E	B	B	C	B	B	B	D
New Caledonia	C	B	B	B	C	B	A	E	A	C	C	D	E	E	A	B	A	A	A	A
New Zealand	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Pakistan	C	C	B	B	E	B	B	C	B	C	E	E	E	E	B	E	B	B	C	A
Palau																				
Papua New Guinea	B	A	B	C	B	B	C	C	B	C	C	B	C	C	C	E	E	E	A	E
Philippines	C	B	A	C	B	C	B	C	C	C	C	D	C	C	D	C	B	A	A	A
Republic of Korea	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Samoa																				
Solomon Islands																				
Singapore	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Sri Lanka	A	A	A	A	D	B	A	B	A	B	B	A	D	B	B	B	C	B	A	A
Thailand	B	A	A	A	B	A	A	A	A	A	A	B	B	B	A	A	A	A	A	A
Timor Leste																				
Tonga	C	D	E	E	D	C	C	E	B	E	E	E	E	E	E	E	C	E	A	E
United States	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Vanuatu																				
Viet Nam	B	B	B	A	B	B	B	C	A	B	C	C	D	C	C	B	B	C	B	B

A = Fully meets Annex 12 requirements

B = Meets Annex 12 requirements in most areas

C = Meets Annex 12 requirements in some areas

D = Initial implementation

E = Not implemented

Blank = No response

SAR Matrix Element Descriptions

Training: The appropriate level and type of training for SAR coordinator, SAR mission coordinator, on-scene coordinator, and operational facilities. (IAMSAR Manual Vol. 1, Chapter 3)

Alerting: Fast and reliable means for the rescue coordination center to receive distress alerts. (IAMSAR Manual Vol. 1, Chapter 2)

Legislative: Statutes and related provisions that establish a legal foundation for establishing a SAR organization and its resources, policies, and procedures. (IAMSAR Manual Vol. I, Chapter 1)

SAR committee: Typically established under a national SAR plan, the SAR coordinating committee is comprised of SAR system stakeholders. (IAMSAR Manual Vol. 1, Chapter 6 and Appendix J)

Agreements : States should enter into agreements with neighboring States to strengthen SAR cooperation and coordination. (Chapter 3 – *Cooperation*, in both Annex 12 – Search and Rescue, and the International Convention on Maritime SAR)

Relationships: Close cooperation between services and organizations which may contribute to improving SAR service in areas such as operations, planning, training, exercises and research and development.

Communications: Communication capability for receipt of distress alerts and operational coordination among the SAR mission coordinator, the on-scene coordinator and SAR facilities. (IAMSAR Manual Vol. 1, Chapter 3)

Quality Control: Procedures to focus on improving the quality of SAR services so as to improve results and reduce costs. (IAMSAR Manual Vol. 1, Chapter 6)

Civil/Military: Close cooperation between the various civilian and military organizations.

Resources: The primary operational facilities made available to the national SAR system by various authorities and arrangements with others. (IAMSAR Manual Vol. 1, Chapter 5 and Appendix C)

SAR Exercise: Exercise to test and improve operational plans, provide learning experience and improve liaison and coordination skills. (IAMSAR Manual Vol. 1, Chapter 3; Annex 12, and Annex 14 regarding Airport Emergency Plan)

Library: Quick access to the applicable international, national, and agency SAR publications that provide standards, policy, procedures and guidance.

Computerization: Use of or access to output of various computer resources including databases, computer aids for SAR system management, search planning software, etc. (IAMSAR Manual Vol. 1, Chapter 2)

SAR programme: National structure to establish, manage and support the provision and coordination of SAR services. (IAMSAR Manual Vol. 1, Chapter 1)

Supply dropping: Supplies and survival equipment carried by air and maritime SAR facilities to aid survivors and facilitate their rescue, as appropriate. (IAMSAR Manual Vol. 1, Chapter 2 and Appendix B)

Special equipment: Equipment created for specific rescue scenarios (such as mountain or desert rescue) and equipment typically carried on designated SAR units to support coordination and locating functions as well as special supplies and survival equipment to aid survivors and facilitate their rescue. (IAMSAR Manual Vol. 1, Chapter 2 and 4)

SAR aircraft: An aircraft provided with specialized equipment suitable for the efficient conduct of SAR missions (Annex 12, Chapter 2 - *Organization*)

Navigation: Suitable means provided within the SAR region to determine position, and the responding SAR facilities have the appropriate equipment on board to determine their position in the SAR region they are likely to operate. (IAMSAR Manual Vol. 1, Chapter 2)

ELT: National regulations for carriage of ELTs, and arrangements for registration of the 406 MHz beacon and rapid access to the beacon registration database. (Annex 6 – Operation of Aircraft and Annex 10 - Aeronautical Telecommunications; and IAMSAR Manual Vol. 1, Chapter 4)

Cospas-Sarsat Distress Alerts : A SAR Point of Contact (SPOC) designated for receipt of Cospas-Sarsat distress data, and arrangements for efficient routing of the distress data to the appropriate SAR authority (the aeronautical emergency locator transmitter ELT), maritime emergency position-indicating beacon (EPIRB), and personal locator beacon (PLB)). (Annex 12, paragraph 3.2.5 and Section 2.4; and, IAMSAR Manual Vol. 1, Chapter 4)