



International Civil Aviation Organization

The Second Meeting of the ICAO Asia/Pacific Search and Rescue Task Force (APSAR/TF/2)

Singapore, 27 – 30 January 2014

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

ASIA/PACIFIC 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. This paper relates to –

Strategic Objectives:

A: *Safety – Enhance global civil aviation safety*

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.: T 3/10.1.1 – AP145/13 (ATM) dated 08 October 2013 requested an update to the current information regarding the SAR Capability Matrix Table. The only updates received were from Mongolia and Sri Lanka.

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**. This data indicated that only five Asia/Pacific administrations had Annex 12 compliance in all twenty assessed elements.

2.3 **Attachment D** provides a regional overview, indicating significant Annex 12 compliance weaknesses in South Asia and the Southwest Pacific areas, and some weaknesses in Southeast Asia and the Democratic People's Republic of Korea. Improvements had been noted in French Polynesia, Mongolia and Sri Lanka since APSAR/TF/1.

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) consider ways to enhance and improve SAR capability in the Region.

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SAR AGREEMENTS

Updated: 07 February 2013

ID NO.	DATE	STATES	REMARKS
1	14 April 1972	ASEAN States - Indonesia, Malaysia, Philippines, Singapore and Thailand	Multilateral agreement
2	March 1997	ASEAN - Viet Nam	Viet Nam accession to 1972 ASEAN Agreement (as above)
13	November 1990	Australia / Indonesia	Updated 5 April 2004
30	April 2006	Australia / Maldives	Letter of Arrangement
28	2 April 2009	Australia / New Zealand	Notified 2013
20	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
17	16 December 1998	Brunei Darussalam / Malaysia	
		Bhutan / India	
19	February 1999	Cambodia / Viet Nam	
33, 41	1 June 2009	Chile / New Zealand	SAR services coordination
37	16 May 2007	China / Republic of Korea	
26	notified 2003	China / United States	
32	6 March 2012	Cook Islands / New Zealand	Notified 2012
35	notified July 2007	French Polynesia (Tahiti) / New Zealand	Final draft agreement being considered by FP authorities
35 bis	notified January 2013	French Polynesia (Tahiti) / United States	Draft agreement being considered by FP authorities
3	June 1982	Indonesia / Singapore	
12	1990	Indonesia / Papua New Guinea	JBC MOU signed
9	9 August 1986	Indonesia / Philippines	
11, 31	1988, July 2006	Indonesia / United States	SAR Services Agreement
42	17 March 2010	Japan/Philippines	SAR Agreement
38	30 April 2008	Japan / Republic of Korea	
10	1986	Japan / United States	
18	1998	Lao PDR / Vietnam	LOA for provision of assistance
5	29 August 1985	Malaysia / Indonesia	
8	9 December 1985	Malaysia / Philippines	
4	11 August 1984	Malaysia / Singapore	
7	9 September 1985	Malaysia / Thailand	
24	notified 2003	Marshall Islands / United States	
25	notified 2003	Micronesia / United States	
	11 April 2008	Mongolia/Russian Federation	
21	22 May 2002	New Caledonia / New Zealand	
34	notified July 2007	New Zealand/Niue	Government aid agreement
29	20 August 2003	New Zealand / Samoa	Notified 2005
36	Notified July 2007	New Zealand/Tokelau	Government aid agreement
27	17 June 2005	New Zealand / Tonga	
23	16 April 2003	New Zealand / United States	
22	26 November 2002	Palau / United States	

ID NO.	DATE	STATES	REMARKS
14	July 1996	Philippines / Singapore	
16	September 1996	Philippines / Viet Nam	
6	September 1985	Singapore / Thailand	Updated July 1996
15	July 1996	Singapore / Viet Nam	
39	March 2009	Viet Nam / Lao PDR	
40	March 2009	Viet Nam / Cambodia	

SAR Capability Matrix (Last Update: 21 January 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	C	C	C	C	C	C	D	B	C	B	C	E	C	D	E	C	C	C	E
French Polynesia	A	A	A	B	C	A	A	D*	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	D	E	E	E	E	E	E	E	B	E	C	E	E	E	E	E	E	E	E	E
Marshall Islands																				
Micronesia	C	D		E	E	D	C					E		D	D					

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	B	B	A	B	B	B	B	C	B	C	C	B	C	C	D	D	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	A	A	A	A	A	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

*French Polynesia Process fully implemented by July 2013

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)

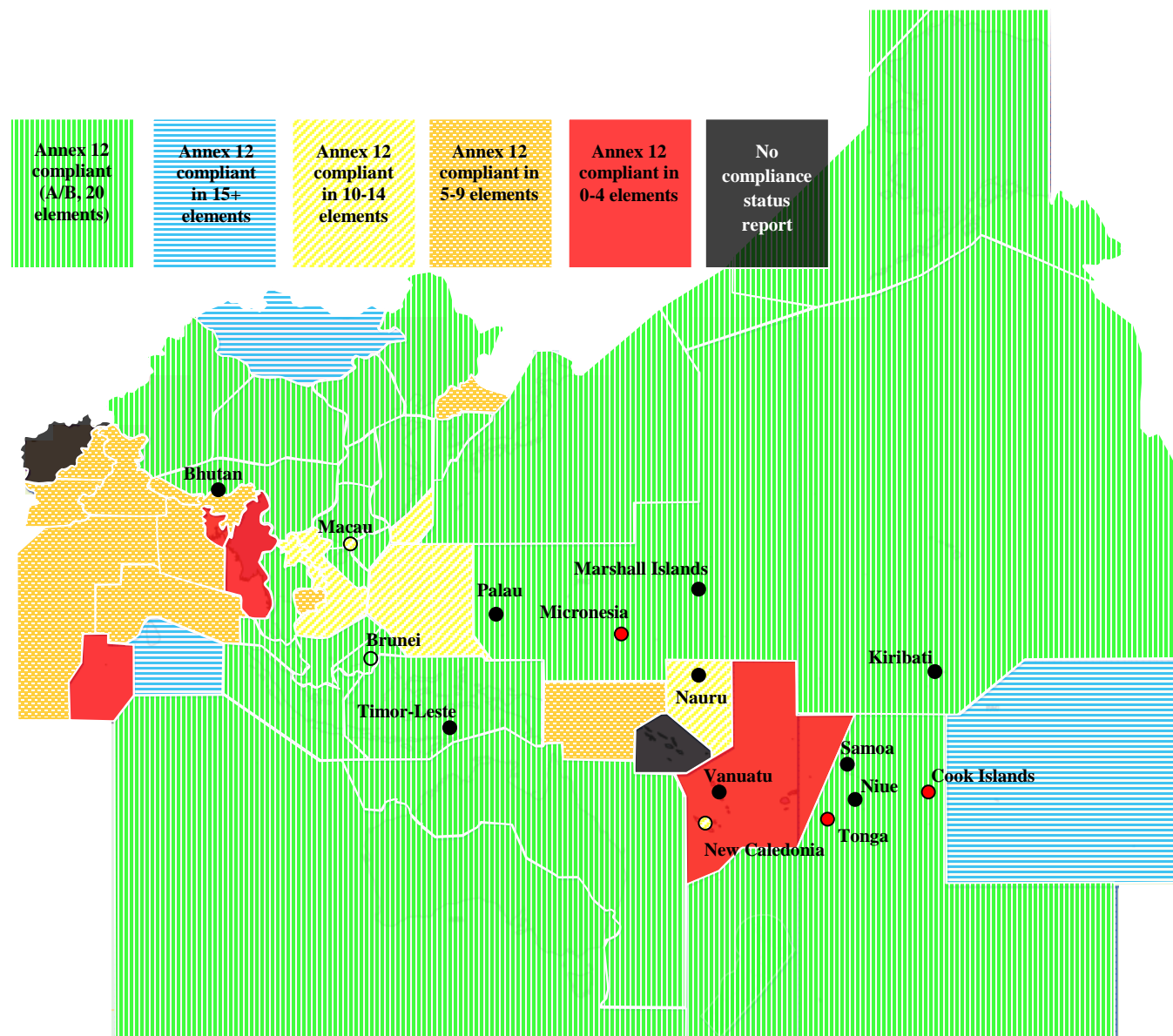
Special equipment: Equipment created for specific rescue scenarios (such as mountain or desert rescue) and equipment typically carried on designated SAR units to support coordination and locating functions as well as special supplies and survival equipment to aid survivors and facilitate their rescue.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



Effective 17 April 2013