



WORKING PAPER

**ICAO/IMO JOINT WORKING GROUP
ON HARMONIZATION OF AERONAUTICAL
AND MARITIME SEARCH AND RESCUE (ICAO/IMO JWG-SAR)**

FOURTEENTH MEETING

Saint Gilles les Bains, La Réunion, France, 10 to 14 September 2007

**Agenda Item 3: Provisions of conventions, plans, manuals and other documents affecting SAR:
3.2: progress report on the possible alignment of the IMO Area SAR Plans, GMDSS
Master Plan and ICAO Regional Air Navigation Plans**

SAR CAPABILITY MATRIX

(Presented by United States)

SUMMARY

The ICAO/IMO JWG has been requested by the ICAO Asia-Pacific Regional Office to review the format of its *SAR Capability Matrix* which is used for 41 States and is being considered for use by other regions of the world. The review should also consider if the matrix may serve as part of the *International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual* and Volume I — *Organization and Management* (Doc 9731), Appendix H, *National Self-Assessment on Search and Rescue*.

Action by the ICAO/IMO JWG is in paragraph 3.

REFERENCES

None.

1. INTRODUCTION

1.1 The ICAO Asia-Pacific Regional Office is active in SAR initiatives in the Asia-Pacific region and its efforts influence many other regions. For many years it has relied upon its *SAR Capability Matrix* as a means for each State to self-report on its SAR capability as part of the Asia-Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) Sub-Group meeting held each year in late June/early July. The matrix has a list of 41 developed and developing States noting their implementation status under 20 categories. The July 2007 session of the APANPIRG Sub-Group discussed the fact that the format of the *SAR Capability Matrix* (see Annex) was established many years ago and would now benefit from a comprehensive review by SAR experts. This resulted in the final report containing the following conclusion:

Conclusion 17/10 — Review of Regional SAR Capability Matrix (the Regional Office seeks review of the Matrix format by the ICAO/IMO JWG on SAR, with particular guidance sought in relation to Cospas-Sarsat capabilities including Local User Terminal and SAR Point of Contact).

2. DISCUSSION

2.1 The *SAR Capability Matrix* provides a good technique to estimate the capability and capacity of individual States. Its use is gaining acceptance in other ICAO regions around the world. However, experience has shown that maritime SAR authorities are often not aware of what their own national aeronautical SAR authority is reporting or the obligation that the State may now have assumed and published for other States to see. The Matrix needs to be reviewed and updated.

2.2 Initial discussion at the APANPIRG Sub-Group meeting focused on the fact that the “LUT” column showed a very low level of implementation (not filled in, “Not Implemented” or “Initial Implementation”). Some States thought they had to have a LUT to meet this capability instead of just having arrangements to ensure receipt of Cospas-Sarsat distress alerts. One recommendation was to add a new column called “RCC/SPOC” to receive the Cospas-Sarsat distress alerts. It quickly became evident that other column titles were not clear to all and would benefit from a brief paragraph of explanation.

2.3 One example of a brief paragraph of explanation discussed was one to replace “LUT” with “Cospas-Sarsat Alerting” and the explanation of: Ability to receive Cospas-Sarsat distress alerts (not necessary to have an MCC or LUT but must have arrangements to receive the alerts; distribution of the alerts to SAR authority; registration database for the 406 MHz beacon, including the new personal locator beacon (PLB), for own use and for other RCCs; and national regulations for carriage of distress beacons.

2.4 Review of the *SAR Capability Matrix* should be done in conjunction with the ongoing update of IAMSAR Manual, Volume I, Appendix H, *National Self-Assessment on Search and Rescue*, since the Matrix is a type of national self-assessment. With the Matrix in use for many years and gaining acceptance in other regions of the world, it may be a worthwhile addition to Appendix H.

3. ACTION REQUIRED BY THE ICAO/IMO JWG-SAR

3.1 The ICAO/IMO JWG-SAR is invited to review the *SAR Capability Matrix* to:

- a) provide guidance to the ICAO Asia-Pacific Regional Office on Cospas-Sarsat capabilities including Local User Terminal and SAR Point of Contact;
- b) propose guidance on the matrix in general, including any changes to the categories and, if the matrix would benefit from a brief explanation of each category, then propose recommended text for each brief explanation; and
- c) decide if the matrix may be useful as part of IAMSAR Manual Volume I, Appendix H, *National Self-Assessment on Search and Rescue*, and as appropriate, propose the wording to insert into IAMSAR Manual, Volume I in addition to the matrix.

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Analysis of SAR Capability of ICAO States in the ASIA/PAC Region

	Training	Alerting	SAR committee	Agreements	Relationships	Communications	Quality Control	Civil/Military	Resources	SAREX	Library	Computerisation	SAR programme	Supply dropping	Special equipment	SAR aircraft	Navigation	ELTs	LUT
Australia	E	E	E	E	E	C	E	E	E	E	E	E	E	E	E	E	E	C	E
Bangladesh	B	C	D	A	A	C	C	A	D	A	A	C	A	A	C	C	D	A	C
Bhutan																			
Brunei	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	D	E	E	A
Cambodia	B	B	B	B	B	B	C	A	B	B	A	C	A	A	A	A	B	A	A
China	E	E	E	E	E	E	D	D	E	D	D	C	B	A	E	E	E	E	A
Cook Islands	A	B	B	A	A	C	C	C	B	A	B	A	A	A	A	B	B	A	A
DPR Korea	B	D	B	D	A	B	D	D	D	C	B	A	A	A	B	A	C	C	A
Fiji	B	C	C	C	C	C	C	B	D	C	D	C	A	C	B	A	C	C	A
French Polynesia	C	D	D	D	C	D	E	A	E	C	C	B	A	A	E	D	E	E	A
Hong Kong, China	E	E	E	E	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E
India	D	C	C	B	B	C	C	A	C	C	C	C	C	D	D	D	C	A	B
Indonesia	E	D	E	E	E	D	D	D	E	D	E	D	D	D	C	D	D	D	E
Japan	E	E	E	E	D	E	E	E	E	E	E	E	D	E	E	E	E	E	E
Kiribati																			
Lao PDR	B	A	B	B	B	A	B	A	B	B	A	C	A	A	A	A	A	A	A
Macau, China	E					E	E				E						E		
Malaysia	E	E	C	E	D	E	E	E	E	E	E	D	E	E	E	D	E	E	B
Maldives	B	A	A	A	A	A	A	A	D	A	C	A	A	A	A	A	A	A	A
Marshall Islands																			
Micronesia	C	B		A	A	B	C					A		B	B				
Mongolia	A	C	C	A	B	B	B	A	B	B	B	C	B	B	A	A	A	A	B
Myanmar	B	A	B	C	A	D	C	C	D	A	A	A	A	A	C	A	D	C	A
Nauru																			
Nepal	D	D	C	B	A	C	C	B	D	B	A	B	A	D	D	C	D	D	B
New Caledonia	C	D	D	D	C	D	E	A	E	C	C	B	A	A	E	D	E	E	E
New Zealand	E	E	E	E	A	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Pakistan	C	C	D	D	A	D	D	C	D	C	A	A	A	A	D	A	D	D	C
Palau																			
Papua New Guinea	D	E	D	C	D	D	C	C	D	C	C	D	C	C	C	A	A	A	E
Philippines	D	C	E	D	D	C	D	D	E	C	C	C	C	C	C	B	C	E	C
Rep. of Korea	C	C	C	C	C	D	E	E	E	E	C	A	D	E	D	E	E	E	E
Samoa																			
Solomon Islands																			
Singapore	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Sri Lanka	D	A	C	D	B	C	C	D	E	D	B	C	A	A	D	D	C	A	C
Thailand	E	E	E	E	D	E	E	E	E	E	E	D	B	B	E	E	E	E	B
Timor Leste																			
Tonga	C	B	A	A	B	C	C	A	D	A	A	A	A	A	A	A	C	A	E
United States	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
Vanuatu																			
Viet Nam	D	D	D	E	D	D	D	C	E	D	C	C	B	C	C	D	D	C	B
Updated 30 June 2006																			
Categorisations:																			
A = Not implemented										D = Meets Annex 12 requirements in most areas									
B = Initial implementation										E = Fully meets Annex 12 requirements									
C = Meets Annex 12 requirements in some areas										Blank = No response									