

CSCAP MEMORANDUM NO. 29

Harmonisation of Aeronautical and Maritime Search and Rescue (SAR)



**A Memorandum from the
Council for Security Cooperation in the Asia Pacific (CSCAP)**

July 2017

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Introduction

Search and Rescue (SAR) is about saving lives through a cooperative approach to human safety and security. In doing so, states should set aside political differences, territorial disputes and security concerns. It is through the strengthening of SAR coordination that a seamless and timely response can be achieved. Government agencies, private industry and the civil society are part of the SAR response system. Efficient organisational structures, effective processes as well as technology-enabled capacities and capabilities need to be stitched together seamlessly in order to build a system that can save lives in any contingency or circumstance.

Background

The International Aeronautical and Maritime Search and Rescue (IAMSAR) manuals call for a comprehensive global SAR system based on a responsive Regional and National SAR system. However, the International Civil Aviation Organization (ICAO) Convention on Civil Aviation 1944 Annex 12 (SAR) and International Maritime Organization (IMO) SAR Convention 1979 have created distinct approaches to SAR. In light of this, the ICAO-IMO Joint Working Group (JWG) was established in 1993 with the objective of assisting ICAO and IMO in developing provisions on new holistic search and rescue techniques and procedures where both aeronautical and maritime interests are involved.

The Asia-Pacific is a maritime-configured region with increasing traffic, both by sea and air. The regional community is becoming increasingly aware of the imperatives of SAR, including the harmonisation of its aeronautical and maritime elements. In 2012, the ICAO Bangkok Regional Office established the Asia/Pacific Search and Rescue Task Force (APSAR/TF) with the objective of considering the enhancement and improvement of SAR capabilities within the Asia/Pacific Region and adjacent regions. In September 2015, the Task Force developed the Asia/Pacific SAR Plan. Separately, ASEAN is in the midst of developing an ASEAN Agreement on Aeronautical and Maritime Search and Rescue Cooperation.

In the Asia-Pacific, the ASEAN Regional Forum (ARF) is another leading forum on SAR matters. In the wake of the 2014 incident relating to the Malaysian Airlines flight MH 370, the ARF issued a statement that called “for regional countries to strengthen SAR coordination and cooperation at bilateral, regional and multilateral levels, including through dialogue and cooperation in ARF”.

Consequently, CSCAP established a Study Group on Harmonisation of Aeronautical and Maritime SAR (SG HAMSAR) to recommend policies for states to strengthen cooperation and coordination through the harmonisation of aeronautical and maritime SAR. CSCAP-Malaysia and CSCAP-India agreed to be Co-chairs of the SG HAMSAR.

Findings

The central philosophies of countries pertaining to SAR were observed to be largely similar, and based on the common overarching objective of saving lives of the people rendered helpless due to accidents or natural causes, in addition to meeting inescapable international obligations and commitments.

It was clearly brought out that the areas of responsibility of various countries demarcated for provision of aeronautical information and SAR services have no co-relation to sovereignty or sovereign rights of the concerned coastal states. Hence, the arrangements and acts of providing a SAR service in a particular area cannot lead to, undermine or reinforce any maritime/territorial claim. This stipulation is also articulated in the SAR Convention, 1979, the IAMSAR Manual Volume 1, Annex 12 to the Convention on International Civil Aviation, the Asia Pacific SAR Plan (APSAR), 2015 and the Agreement on Cooperation on Aeronautical and Maritime SAR in the Arctic, 2011.

An attendant imperative lies in the need for all countries in the region to accede and conform to the relevant international (IMO and ICAO) conventions governing SAR. A related issue is the development of enabling legislations at the national level. Also, while all country representatives asserted that appropriate national laws (and national plans) on SAR exist, these often exist separately for maritime and aeronautical SAR, and are thus not conjoined for a more effective and seamless SAR response to aeronautical contingencies. Therefore, the national SAR plans of many countries have yet to integrate the aeronautical and maritime elements, and are thus not prepared for audits by relevant international organisations.

The Study Group had an extensive discussion on the aspect of rationalisation/coordination of Flight Information Regions (FIRs)¹ and Search and Rescue Regions (SRRs). It was felt that in case of an aeronautical emergency involving the FIR of one country and SRR of another, adequate coordination and communication mechanisms should be in place to ensure immediate response. While the IAMSAR Manual and Asia/Pacific SAR plan calls for 'alignment' of SRRs and FIRs, (Art 7.1, sub para (g)), the Study Group considered it adequate for states to achieve effective SAR response through MoUs / arrangements.

¹ CSCAP Singapore takes the position that the term "FIR" should be replaced with "SRR", which is a more appropriate and technically correct term, as the main issue of this memorandum is about search and rescue.

While the MoUs are required at the inter-governmental / Ministerial level, arrangements need to be forged between relevant SAR agencies and the Rescue Coordination Centres (RCC) of two states. These MoUs / arrangements would need to cater for aeronautical contingencies at the margins of SRRs to resolve any ambiguity of maritime SAR responsibility.²

The organisations and associated structures for SAR of countries were found to be much at variance. For example, while some states have already adopted the concept of Joint RCC (JRCC) by merging the aeronautical and maritime RCCs (and some others are on their way to do so), yet some other states have decided to maintain separate ARCC and MRCCs, with software systems to harmonise the SAR effort cross-cutting its air and sea elements. Regardless of the specific means adopted by states, there was an unequivocal acknowledgement of the fact that maritime and aeronautical components of the SAR organisation need to be seamlessly integrated. Further, voluntary maritime reporting systems promulgated by some countries contribute effectively to such integration.

Premised on being a benign and humanitarian mission, SAR must necessarily transcend national security interests and concerns. Hence, in order to achieve a co-operative approach to delivering timely and effective SAR services anywhere in the region, states should share information on their SAR capabilities and coverage. Such information-sharing would need to address not only the requirement of enhanced Maritime Domain Awareness (MDA) for the SAR mission, but also for sharing of SAR capacities, logistics purposes and the media, when required. While national sensitivities may exist, states are encouraged to come together to develop a common regional SAR portal, and share the details and capabilities of SAR assets available to their respective national SAR authorities through existing multi-national frameworks such as ASEAN and the ICAO-IMO JWG.

Another 'common denominator' that was widely discussed and agreed upon was inter-agency cooperation among multiple national agencies, including the role of private industries and community, functionally connected with SAR. Seamless cooperation and coordination amongst all SAR agencies – particularly those across the aeronautical-maritime divide – was critically required. This could be achieved through periodic exercises and training through simulation of various scenarios, and with the optimal utilisation of identified assets. This will not only cater to different contingencies, it will address the management of scarce resources and prevent duplication of efforts.

² CSCAP Singapore however assesses that the MoUs for inter-governmental / Ministerial level agencies for effective SAR responses include the SAR agencies of their countries and hence there is no requirement for further arrangements between relevant SAR agencies.

Recommendations

- Recognise that the agreed common objective of regional and national SAR is to save lives.
- Urge all regional states to note that Search and Rescue Regions (SRR) are not about sovereignty; they are designed to facilitate seamless and cooperative SAR taking account of regional geography and national capacities.
- Encourage countries to accede to the IMO SAR Convention 1979 and Convention on International Civil Aviation; and make enabling national SAR legislations and plans, preferably amalgamating the aeronautical and maritime components of SAR.
- Dovetail organisational structures and processes with the provisions / guidelines contained in the IAMSAR Manual and Regional SAR Plan to the extent feasible, based upon the unique requirements of each state, with particular attention to ensure that effectiveness of SAR services is not adversely impacted in areas where deviations occur.
- Encourage countries to develop and update national SAR Plans in accordance with the IAMSAR Manual and Regional SAR Plan, and subject their respective plans to regular audits by relevant international organisations.
- Achieve greater seamlessness in cooperation and coordination among states through SAR 'MoUs / Agreements' between their respective governments and SAR 'Arrangements' between their respective SAR agencies, wherever such agreements / arrangements do not presently exist.
- Encourage countries to develop a regional framework for information sharing, leading not only to enhanced Maritime Domain Awareness (MDA) but also mutual awareness of the availability of SAR resources, assets and capabilities of various countries for an effective and seamless regional SAR response.
- Develop a regional template for SAR risk and vulnerability assessment. The recommendations from such assessment would be necessary for improved harmonisation of regional SAR policies, arrangements and facilities.
- Harmonise aeronautical and maritime alert and communication systems.
- Encourage countries to promulgate voluntary maritime reporting systems.

- Establish a regional database of SAR activities with a view to sharing case-studies and experiences as well as evolving best practices.
- Evaluate the civil-military interface in terms of SAR structures and processes for enhanced effectiveness of SAR.
- Include private industry and civil society into the SAR system.

ABOUT CSCAP

CSCAP is a non-governmental (second track) process for dialogue on security issues in the Asia Pacific. Membership in CSCAP is on an institutional basis and consists of Member Committees. Current membership comprises Australia, Brunei Darussalam, Cambodia, Canada, China, the EU, India, Indonesia, Japan, the Democratic People's Republic of Korea, the Republic of Korea, Malaysia, Mongolia, Myanmar, New Zealand, the Philippines, Russia, Singapore, Thailand, Vietnam and the USA.

The functions of CSCAP are as follows:

- a. to provide an informal mechanism by which political and security issues can be discussed by scholars, officials, and others in their private capacities;
- b. to encourage the participants of such individuals from countries and territories in the Asia Pacific on the basis of the principle of inclusiveness;
- c. to organise various working groups to address security issues and challenges facing the region;
- d. to provide policy recommendations to various intergovernmental bodies on political-security issues;
- e. to convene regional and international meetings and other cooperative activities for the purpose of discussing political-security issues;
- f. to establish linkages with institutions and organisations in other parts of the world to exchange information, insights and experiences in the area of regional political-security cooperation; and
- g. to produce and disseminate publications relevant to the other purposes of the organisation.

Study Groups are the primary mechanism for CSCAP activity. As of July 2017, there were five CSCAP Study Groups. These are concerned with: (i) Preventive Diplomacy; (ii) Non-Proliferation and Disarmament; (iii) Harmonisation of Aeronautical and Maritime Search and Rescue; (iv) Marine Environment Protection; and (v) Peacekeeping Operations.

This memorandum was produced by the CSCAP Study Group on Harmonisation of Aeronautical and Maritime Search and Rescue (SAR).

Further information on CSCAP can be obtained from the CSCAP website at www.cscap.org or by contacting the CSCAP Secretariat:

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CSCAP Memoranda

CSCAP Memoranda are the outcome of the work of Study Groups approved by the Steering Committee and submitted for consideration by the ASEAN Regional Forum and other bodies.

- Memorandum No.28 – Energy Security in the Asia Pacific Region
Author: Study Group on Energy Security
Date published: June 2016
- Memorandum No.27 – Implementation of UNSCR 1540
Author: Study Group on Countering the Proliferation of Weapons of Mass Destruction in the Asia Pacific
Date published: April 2015
- Memorandum No.26 – Towards an Effective Regional Security Architecture for the Asia Pacific
Author: Study Group on Regional Security Architecture
Date published: June 2014
- Memorandum No.25 – Maritime CBMs, Trust and Managing Incidents at Sea
Author: Study Group on Principles for Good Order at Sea
Date published: June 2014
- Memorandum No.24 – Safety and Security of Vital Undersea Communications Infrastructure
Author: Experts Group on Vital Undersea Communications Infrastructure
Date published: May 2014
- Memorandum No.23 – Enhancing Water Security in the Asia Pacific
Author: Study Group on Water Resources Security
Date published: January 2014
- Memorandum No.22 – Non-Proliferation of Weapons of Mass Destruction
Author: Study Group on Countering the Proliferation of Weapons of Mass Destruction in the Asia Pacific
Date published: September 2012
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Author: Study Group on Naval Enhancement in the Asia Pacific
Date published: August 2012
- Memorandum No.20 – Ensuring A Safer Cyber Security Environment
Author: Study Group on Cyber Security
Date published: May 2012

- Memorandum No.19 – Reduction and Elimination of Nuclear Weapons
 Author: Study Group on Countering the Proliferation of Weapons of Mass Destruction in the Asia Pacific
 Date published: February 2012
- Memorandum No.18 – Implementing the Responsibility to Protect (RtoP)
 Author: Study Group on the Responsibility to Protect (RtoP)
 Date published: September 2011
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 Author: Study Group on Countering the Proliferation of Weapons of Mass Destruction in the Asia Pacific
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 Author: Study Group on Safety and Security of Offshore Oil and Gas Installations
 Date published: January 2011
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 Author: Study Group on the Security Implications of Climate Change
 Date published: July 2010
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 Author: Export Controls Experts Group (XCXG)
 Date published: March 2009
- Memorandum No.13 – Guidelines for Maritime Cooperation in Enclosed and Semi-Enclosed Seas and Similar Sea Areas of the Asia Pacific
 Author: Study Group on Facilitating Maritime Security Cooperation in the Asia Pacific
 Date published: June 2008
- Memorandum No.12 – Maritime Knowledge and Awareness: Basic Foundations of Maritime Security
 Author: Study Group on Facilitating Maritime Security Cooperation in the Asia Pacific
 Date published: December 2007
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 Author: Study Group on Human Trafficking
 Date published: June 2007
- Memorandum No.10 – Enhancing Efforts to Address Factors Driving International Terrorism
 Author: Study Group on Enhancing the Effectiveness of the Campaign Against International Terrorism with Specific Reference to the Asia Pacific Region
 Date published: December 2005

- Memorandum No.9 – Trafficking of Firearms in the Asia Pacific Region
Author: Working Group on Transnational Crime
Date published: May 2004
- Memorandum No.8 – The Weakest Link? Seaborne Trade and the Maritime Regime in the Asia Pacific
Author: Working Group on Maritime Cooperation
Date published: April 2004
- Memorandum No.7 – The Relationship Between Terrorism and Transnational Crime
Author: Working Group on Transnational Crime
Date published: July 2003
- Memorandum No.6 – The Practice of the Law of the Sea in the Asia Pacific
Author: Working Group on Maritime Cooperation
Date published: December 2002
- Memorandum No.5 – Cooperation for Law and Order at Sea
Author: Working Group on Maritime Cooperation
Date published: February 2001
- Memorandum No.4 – Guidelines for Regional Maritime Cooperation
Author: Working Group on Maritime Cooperation
Date published: December 1997
- Memorandum No.3 – The Concepts of Comprehensive Security and Cooperative Security
Author: Working Group on Comprehensive and Cooperative Security
Date published: December 1995
- Memorandum No.2 – Asia Pacific Confidence and Security Building Measures
Author: Working Group on Confidence and Security Building Measures
Date published: June 1995
- Memorandum No.1 – The Security of the Asia Pacific Region
Author: CSCAP
Date published: April 1994