



ICAO

International Civil Aviation Organization

**Tenth Meeting of the ICAO Asia/Pacific Search and Rescue
Workgroup (APSAR/WG/10)**

Siem Reap, Cambodia, 27 – 30 May 2025

Agenda Item 4: Asia/Pacific and Inter-regional SAR Planning, Coordination and Cooperation

**PROLIFERATION OF TECHNOLOGY AND SERVICES FOR EMERGENCY SATELLITE
COMMUNICATIONS AND AUTOMATIC CRASH DETECTION (NON-ICAO
APPLICATIONS)**

(Presented by USA)

SUMMARY

This paper presents a brief update on APSAR/WG Action Item 8/6 regarding proliferation of technology and services for emergency satellite communications and automatic crash detection (non-ICAO applications).

1. INTRODUCTION

1.1 APSAR/WG/8 in 2023 discussed paper APSAR/WG/8 WP/10 *iPhone 14 Emergency Satellite Communications and Automatic Crash Detection Function – Impact on SAR and ANS Units* by USA. The paper provided an overview of new capabilities on certain smartphones that could impact SAR and ANS units.

2. DISCUSSION

2.1 New capabilities continue to expand and the types of smartphones providing these services continue to proliferate. These are examples of emerging capabilities via satellite systems that relay distress alerts outside of the traditional distress alerting system. Issues of policy and operational procedures associated with the growing use of satellite-capable devices should be considered on the international level, and that such international guidance and standards could then also be helpful for national application.

2.2 While there has been general discussion about this matter and ideas of a way forward, the ICAO, IMO and ICAO/IMO Joint Working Group on SAR do not have this as a specific agenda item for in-depth discussion. Meeting participants may be aware of other regional or national efforts regarding this matter.

2.3 An update on steps since APSAR/WG/8 includes:

- a) updating of the existing standard for “satellite emergency notification and locating devices (SENDs)”. The Radio Technical Commission for Maritime Services (RTCM) developed the SENDs standard. RTCM is a USA-based organization that creates standards for satellite positioning and navigation system to facilitate all modes of transportation. RTCM standards are often accepted by other national authorities. Its update will take into account the mobile and global nature of today’s devices such as Apple, T-Mobile, Garmin and other providers. A primary goal is to explore and

identify the current means by which mobile device providers interface with SAR authorities and promote data content and format interface standards;

- b) content in the IAMSAR Manual could be updated by the ICAO/IMO JWG. IAMSAR Manual Volume I and Volume II each cover parts of the matter but need to be updated and edited for consistency. For example, Volume I briefly mentions SENDs but Volume II talks about “commercial locating, tracking and emergency notification service provider (non-Cospas-Sarsat)”; and
- c) APSAR/WG/8 WP/10 discussed “Crash Detection” capability provided by the Apple Watch or iPhone. This capability uses the local cellular connection or Wi-Fi calling with an Internet connection. An update on this capability is not being provided at this time but meeting participants may have experiences to share.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss relevant matters as appropriate.

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