International Civil Aviation Organization

NINTH MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/9)

Bangkok, Thailand, 07 – 09 May 2025

Agenda Item 4: Review Frequency planning requirements for the Asia/Pacific Region
4.3 Other matters

PROPOSAL TO ASSIGN FREQUENCY FOR RESCUE AND FIREFIGHTING COMMUNICATION IN EMERGENCY AT AIRPORT

(Presented by Thailand)

SUMMARY

This paper proposes the assignment of a frequency to be used for direct communication between the rescue and firefighting (RFF) service and the flight crew of an aircraft in emergency situations, aiming to enhance safety during emergencies.

1. INTRODUCTION

1.1 Annex 14 Attachment A describing supplement information serves as a comprehensive resource to help aerodrome operators and authorities implement the standards and recommended practices effectively, ensuring the safety and efficiency of aerodrome operations.

1.2 Section 17 of Attachment A, Annex 14 provide in detail the implementation of rescue and firefighting service. Aerodrome operators could establish a two-way radio communication to serve as a direct communication between the rescue and firefighting (RFF) service and the flight crew of an aircraft in emergency, as one of its purpose.

1.3 In addition, DOC 9137 Airport Services Manual Part 1 - Rescue and Firefighting also provide comprehensive guidelines and standards for RFF services at airports. The requirements for communication and alarm are described in Chapter 4 which cover system facilities, fire station communications, RFF vehicle communications and other communication and alerting facilities.

1.4 However, there is no information on the frequency to be used to support a radio communication for RFF service at airports.

2. DISCUSSION

2.1 Thailand's goal of improving safety in aviation is a top priority, ensuring secure and efficient air travel for all passengers and crew. One aspect of improving safety at the aerodrome is enhancing rescue and firefighting communications.

2.2 To enhance emergency response, the improvement plan proposes direct communication between the RFF service and the flight crew, establishing a new ground emergency communication line separate from the 121.5 MHz emergency channel. This initiative will follow the guidelines in Annex 14 Attachment A and DOC 9137 Part 1. The expected outcome is a clear and focused information exchange to enhance coordination between responsible parties.

2.3 Due to no frequency assignment in Annex 10 Vol V and DOC 9718 to support this requirement in 2.2, Thailand is investigating information through published Regulations and Aeronautical Information Publication for possible allocation frequency that can be used to support direct communication between the RFF service and the flight crew of an aircraft in emergency. Below is the information that could be considered as an example for possible frequency assignment:

- New Zealand published information of Discrete emergency frequency at 134.7 MHz
- Singapore published information of ground emergency channel at 121.0 MHz
- United Kingdom published CAP 670 Air Traffic Services Safety Requirement Chapter, COM06.8 assigned frequency 121.6 MHz to be used for communication between aerodrome fire service vehicles and aircraft on the ground during a declared emergency
- United State published information of Discrete Emergency Frequency (DEF) which was designated by Air Traffic Control (ATC) from the operational frequencies assigned to that facility

2.4 Based on the information available so far, the assigned frequency and naming conventions vary depending on the State.

2.5 Considering the nature of the service to provide a communication channel for ground emergency situations, Thailand is considering using the frequency 121.6 MHz from the Aerodrome Surface (AS) allotment.

2.6 Thailand proposes that, to optimize frequency usage, direct communication between the RFF service and the flight crew during emergencies on the ground should employ frequencies from the Aerodrome Surface allotment (121.55 – 121.9917 MHz), and amend the Asia/Pacific Regional Aeronautical Radio Frequency Management Guidance Material provided, details are provided in **Appendix A**.

<table>
<tr><td colspan="3">Drafted Decision XX/XX - Asia/Pacific Regional Aeronautical Radio Frequency Management Guidance Material edition 1.1</td></tr>
<tr><td colspan="2">What: To amend the Guidance Material by using frequency from the Aerodrome Surface allotment (121.55 – 121.9917 MHz) to support direct communication between the RFF service and the flight crew during emergencies on the ground</td><td>Expected impact:
☐ Political / Global
☐ Inter-regional
☐ Economic
☐ Environmental
☒ Ops/Technical</td></tr>
<tr><td>Why: Annex 14 and DOC 9137 Part 1 provide guidelines for establishing a communication link between the rescue and firefighting service and the flight crew of an aircraft in emergency. However, Annex 10 Volume V does not specify any frequency assignment for this communication link.</td><td colspan="2">Follow-up: ☐Required from States</td></tr>
<tr><td>When: 9-May-25</td><td colspan="2">Status: Draft to be adopted by Subgroup</td></tr>
<tr><td colspan="3">Who: ☒Sub groups ☐APAC States ☐ICAO APAC RO ☐ICAO HQ ☐Other: XXXX</td></tr>
</table>

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;

b) consider and agree on the draft conclusion in paragraph 2.6; and

c) discuss any relevant matter as appropriate

– – – – – – – – – – – – –

NOTES ON THE PRESENTATION OF THE PROPOSED AMENDMENT

1. The text of the amendment is arranged to show deleted text with a line through it and new text highlighted with grey shading, as shown below:

a) ~~Text to be deleted is shown with a line through it.~~	text to be deleted in
b) New text to be inserted is highlighted with grey shading.	new text to be inserted in
c) ~~Text to be deleted is shown with a line through it~~ followed by the replacement text which is highlighted with grey shading.	new text to replace existing text

Chapter 3
AIR-GROUND COMMUNICATION FREQUENCY MANAGEMENT

3.2 VHF Air-ground Communication Frequency bands

3.2.9.1 Following the discussions in SRWG/9, the meeting agreed that direct communication between the rescue and firefighting service and the flight crew of an aircraft in emergency should, pursuant to the guidelines in Annex 14 Attachment A and DOC 9137 Part 1, utilize frequencies from the Aerodrome Surface allotment to optimize frequency usage by establishing this communication channel.