



# ICAO

*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

#### 4.1 VHF COM Frequency Allotment Plan for APAC

### PROPOSAL TO FREQUENCY BAND REDUCTION FOR AOC SERVICE

(Presented by China)

#### SUMMARY

This paper presents the actions taken for improving the utilization of frequency band 117.975 - 137 MHz.

Based on the statistical analysis of frequency assignments in AOC band in APAC Region, this paper suggests to prioritize the use of the 128.900 - 129.675 MHz and 130.900 - 132.025 MHz bands (International and National services) and to suspend the assignment of the 129.700 - 130.875 MHz band, in order to further improve the utilization efficiency of this band in the future.

## 1. INTRODUCTION

1.1 Annex 10, Volume V, Chapter 4 contains a general allotment of the frequency band 117.975–137 MHz, which is allocated by the ITU to the Aeronautical Mobile (R) Service. The main subdivisions of this band are the frequency bands allocated to both international and national services and frequency bands solely allocated to national services. Specific allotments to services are to be determined regionally.

1.2 For all ICAO Regions allotment plans have been developed. These allotment plans sub-divide the frequency band 117.975 – 137 MHz into sub bands that are to be used for certain aeronautical applications or services such as TWR, ACC, APP, VOLMET etc. These allotment plans are part of the ICAO Regional Air Navigation Plan.

1.3 Simulations of future spectrum requirements have shown that certain allotments in the current allotment plan are prone to becoming saturated while other allotments are under-utilized and can provide space for accommodating new requirements.

1.4 SRWG/7 invited the Meeting to review the various efforts on improving the utilization of frequency band 117.975 - 137 MHz. Subsequently the SRWG/7 agreed to form an ad-hoc expert group with China as the rapporteur and Mr. Robert Witzel as advisor, to study the allotment plan, analyze the actual usage of allotment registered in FF, identify areas for improvement and propose solutions (technical and administrative), explore the potential in reallocating sub-bands/pools, survey the use of TIBA.

1.4.1 The ad-hoc expert group worked with the ICAO Secretariat and published a questionnaire through the ICAO APAC State Letter Ref.: T 8/8.6 – AP066/23(CNS). A total of eighteen (18) responses

from States/Administrations have been received and analyzed. SRWG/8 agreed that any assignment for 128.950 MHz to other services by States shall not impact the airspace that has been allotted or plan to use 128.950 MHz for TIBA, States/Administrations were also encouraged to move forward to the global frequency for air-to-air service at 123.450 MHz, and further study the utilization and protection of 128.950MHz in the future.

1.4.2 On the basis of FF database, the Chinese team analyzed what services each frequency was used for and how many times it was reused in band 117.975–137 MHz. It was noticed that each frequency was being used by other services besides the service of the VHF COM Frequency Allotment Plan. It was also noted that the allotment of twelve (12) frequencies, belonging to International and National Aeronautical Mobile Services band, have not been included in any of Asia-Pacific conference outcomes. SRWG/8 was invited to endorse the simplification of the VHF COM Frequency Allotment Plan by converging the various allotments of “sub services” to the main service, and clarification of the service of these twelve frequencies as ACC.

1.4.3 APANPIRG/35 (2024) adopted the revised VHF COM Frequency Allotment Plan for the APAC Region, which contains above-mentioned simplification and clarification and preserving 128.950MHz for TIBA. This VHF COM Frequency Allotment Plan for the APAC Region is being incorporated into the Frequency Finder. The conclusion is as follows:

**Conclusion APANPIRG/35/8 (Conclusion CNS SG/28/06 (SRWG/8/2) VHF COM Frequency Allotment Plan for APAC Region**

## **2. DISCUSSION**

2.1 SRWG/2 had discussed different measures to increase the efficiency of frequency management for the APAC Region, reduction of the band for AOC had been mentioned. The meeting agreed that a proposal could be circulated to the APAC States to reduce the band for AOC: A-Proposed new sub band for ATS services in APAC 128.900 - 131.375 MHz; B-Existing assigned AOC frequencies in this sub-band are subject to coordination, if required, between the Member State and ICAO regional office. However, the State letter AP087/15 (CNS) was published to survey the view of the proposal, and objections were received from several States. This work could not be sustained.

2.2 Another discussion about re-allotment of AOC band was raised during SRWG/7 by WP16, which is the reduction of 128.825-132.025 MHz to 129.700-130.875 MHz for AOC, 128.825-129.700 MHz can be re-allotted to VOLMET, ATIS and ACC-L, and 130.875-132.025 MHz can be re-allotted to ACC-U and FIS.

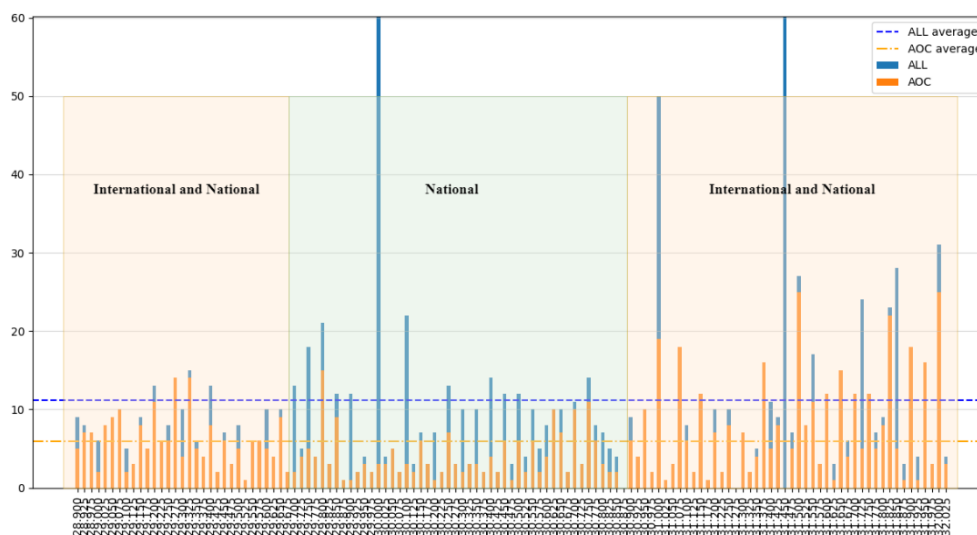
2.3 The details of the VHF COM frequency utilization in APAC region were provided in the Seminar on Frequency Use, held at the APAC Regional Office in Bangkok, Thailand, from 16 to 18 September 2024. The following is about the usage of the AOC service:

2.3.1 AOC Assignments until July 2024.

Total assignments: 831

- 740 assignments in AOC service
- 91 Assignments in non-AOC services

2.3.2 128.900 – 132.025 MHz (AOC) usage in APAC Region



- 128.900 – 129.675 MHz (International and National): Total number of assigned frequencies in this band was 227, of which 187 times used for AOC services.
- 129.700 – 130.875 MHz (National): Total number of assigned frequencies in this band was 555, of which 190 times used for AOC services.
- 130.900 – 132.025 MHz (International and National): Total number of assigned frequencies in this band was 619, of which 363 times used for AOC services.

2.3.3 Comparing with the number of frequency assignments for AOC in Europe which in a smaller frequency band (131.400 – 131.975 MHz) accommodates 2919 frequency assignments, the frequencies usage of AOC band in APAC Region is inefficient.

2.3.4 It is suggested to prioritize the use of the 128.900 - 129.675 MHz and 130.900 - 132.025 MHz bands (International and National services) when adding or modifying frequency assignment for AOC service. The frequency bands of 129.700 - 130.875 MHz, without changing its allotment now, can be reserved for other services in future, which may encounter congestion problems.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper;
- b) discuss the suggestion of frequency band reduction of AOC, and add an item in the Action list; and
- c) discuss any relevant matter as appropriate

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