



*International Civil Aviation Organization*

**SECOND MEETING OF SPECTRUM REVIEW WORKING GROUP  
(SRWG/2)**

Bangkok, Thailand 12 – 14 May 2015

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**Agenda Item 2: Review of relevant meetings/conferences and drafting of SRWG Terms of Reference**

**OUTCOME OF CNS SG/18 AND APANPIRG/25**

(Presented by the Secretariat)

**SUMMARY**

This paper presents outcome of CNS SG/18 and APANPIRG/25 meetings related to the SRWG scope of work.

**1. INTRODUCTION**

1.1 The Eighteenth Meeting of the Communications, Navigation and Surveillance Sub-group (CNS SG/18) of Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), was held at the ICAO Regional Sub-office (RSO), Beijing, China, from 21 – 25 July 2014 and was attended by 78 participants from 23 States/Administrations, (Australia, Bangladesh, China, Hong Kong China, Macao China, Cambodia, Democratic Peoples' Republic of Korea, India, Indonesia, Japan, Malaysia, Maldives, Mongolia, New Zealand, Nepal, Pakistan, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand, Tonga, USA, Viet Nam, 1 International Organization namely IATA and one Communication Service Provider - SITA).

1.2 The Twenty Fifth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/25) was held in Kuala Lumpur, Malaysia from 8 to 11 September 2014. And was attended by 122 participants from 23 Member States, 2 Special.

**2. DISCUSSION**

2.1 The CNS SG/18 meeting reviewed the outcome of the First Meeting of Spectrum Review Working Group (SRWG/1). The meeting reviewed the terms of reference drafted by the SRWG/1 meeting and adopted the following Decision:

***Decision 18/19 - Adoption of the Terms of Reference of SRWG***

*That, the Terms of Reference of SRWG placed at Appendix U be adopted.*

2.2 The 3 stages approach initially developed at the RPG meeting to identify VHF Voice future needs and current limitations, identify solutions and then implement in a coordinated manner was refined and adopted by the meeting.

2.3 In accordance with Stage 1a, a planning was elaborated by the SWRG meeting. The meeting noted the planning for the 3 Stages as shown in one appendix to the SRWG/1 meeting report which will be finalized during the webconference #1 of the SRWG.

2.4 The meeting discussed and commended the good practice for ANSPs to equip with mixed 25 KHz/8.33KHz radios, as they were now available at a reasonable price, and would be able to cater for any outcome of the SRWG's study.

**Use of a Refined Frequency Assignment Method in the APAC Region**

2.5 The revised frequency assignment planning material in the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation, Volume II (Doc 9718) provides for increased efficiency and flexibility in frequency assignment planning since it allows for more precisely calculating minimum separation distances between dis-similar services (stations) operating on the same frequency. In addition, non-uniform values for the designated operational coverage can be used, thus tailoring this coverage more precisely to the actual operational needs. The table provided in Appendix B contains the minimum separation distances that can be applied in these cases. More information can be found in the Handbook Volume II, § 2.7 and § 2.8.

2.6 Considering the amendment of Annex 10, Volume V Aeronautical Radio Frequency Utilization, Chapter 4 on Utilization of frequencies above 30 MHz, paragraph 4.1 Utilization of the Frequency band 117.975 – 137 MHz published in 2013 and Doc 9718 and the need for improved efficiency in managing the assignments in the VHF band stemming from increasing operational demand, the SRWG would benefit from studying the new operational needs following the “radio horizon method” as per Annex 10, Volume V, paragraph 4.1.4.1. With respect to the method for implementing frequency assignment planning criteria as contained in Doc 9718, the following applies:

- 1) The uniform designated operational coverage (DOC) as per Table 2-5 recognizing that other values for the DOC may be required to meet specific operational requirements
- 2) The separation distances (co-frequency) as per Table 2-9 are applied where appropriate
- 3) The regional allotment plan for the APAC Region, as contained in the Doc 9718 is applied except in cases where no suitable frequency can be assigned to satisfy a requirement.
- 4) There would also be great benefits to adopt Frequency Finder and the global database as the sole reliable and secured tool for managing the frequency spectrum worldwide such as improved interregional coordination of frequencies and a more efficient frequency spectrum management.

2.7 In view of the above, the meeting confirmed the relevance of the extensive guidance developed by ICAO HQ and the use of Frequency Finder tool for the simulation work of SRWG and recommended this approach to the APANPIRG as suitable for the simulation work by SRWG TF. It also recommended that ICAO HQ should secure the maintenance of the Frequency Finder tool as it would be used in the APAC region for simulation work, and probably for the purpose of radio frequency assignment management in the future.

2.8 Viet Nam informed the meeting that it would prefer to maintain 25 kHz spacing for VHF bands and had no need to introduce 8.33 kHz from its own perspective.

2.9 Pakistan expressed concerns on frequencies interference experienced between neighboring countries on co-channel assignment. States/Administrations were encouraged to use necessary planning tool to control the transmitting power for appropriate coverage of the functions. States/Administrations were also reminded of the ITU Interference Reporting Form available in the existing Basic ANP Part IV. The updated version of the form as provided in should be used for coordination on remedial action when encountering interference.

2.10 The meeting was also reminded that 8.33 kHz may not be possible for offset used at extended Remote Control Air/ground Communications (RCAG) stations.

2.11 There was a proposal for Administrations to consider replacement with 8.33 kHz capable transmission equipment when current ground VHF radio equipment is approaching its end of life cycle. However, cost of equipage of avionics should also be considered.

#### **APANPIRG/25 related outcomes**

2.12 The APANPIRG/25 meeting noted the decision 18/23 - Development of the CNS part of future e-ANP in the CNS fields and associated Proposals for Amendments (PFAs) by CNS SG/18 meeting to develop a new APAC ANP/e-ANP (CNS Part) based on the Council-approved ANP Template as part of the work programme of the APANPIRG CNS Sub-group. The APAC ANP/e-ANP (CNS Part) would be expected to be presented to APANPIRG/26 in 2015 for endorsement.

### **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

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

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