International Civil Aviation Organization

FIRST MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/1)

Bangkok, Thailand, 26 – 27 June 2014

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

OUTCOME OF CNS SG/17 AND RPG MEETING FOR WRC-2015

(Presented by Secretariat)

SUMMARY

This paper presents outcome of CNS SG/17 and RPG Meeting for WRC-2015 regarding the need of study on VHF bands management and provides background information for this meeting.

1. INTRODUCTION

1.1 CNS SG/17 meeting held in May 2013 in Bangkok discussed the issue of proposed deployment of 8.33 kHz channel spacing in the band 117.975-137 MHz in APAC Region (WP/24).

1.2 India proposed to use a 8.33 kHz Channel Spacing in the band 117.975 – 137 MHz for desirous States in the APAC Region, while VHF channels using 25 kHz spacing are currently assigned according to the Asia Pacific regional scheme. Recently, India had unfolded an ambitious plan of Upper Area Sectorization to provide seamless, enhanced and continuous VHF coverage over the entire Indian airspace. Frequency congestion was identified by India on account of acute shortage of VHF frequencies with current 25 kHz channel spacing.

1.3 India further proposed to consider a smooth implementation of 8.33 kHz channel spacing for upper airspace services under the guidance of the ICAO. India explained that airborne equipment would need to be backward compatible. The meeting discussed the proposal. The Secretariat informed that for implementation of 8.33 kHz channel spacing, following factors should be taken into consideration:

- the need for a regional air navigation agreement on the implementation of 8.33 kHz channel spacing;
- the need to identify the airspace within which 8.33 kHz channel spacing requires to be introduced ; and

– an appropriate lead time. Such lead time had to be agreed regionally and was typically not shorter than 2-3 years.

1.4 The CNS SG/17 meeting agreed to a proposal to establish a small working group to investigate the need for an increase in available VHF COM channels and on the basis of result of analysis make a recommendation for further consideration by the Sub-group. Accordingly, the meeting developed following Decision:

Decision 17/6 – Establishment of Spectrum Review Working Group on 8.33 kHz channel spacing

That, ICAO Regional Office is requested to issue a letter to the States/Administrations concerned for nomination of spectrum management expert members of the spectrum review working group to study the requirement of 8.33 kHz channel spacing.

1.5 APANPIRG/24 meeting held in June 2013, noted above decision and the establishment of a small working group to investigate the need for an increase in available VHF COM channels and, on the basis of the outcome, to develop recommendations for further consideration by the CNS SG.

1.6 As a follow-up to this decision, a letter AP-CNS0009/14 dated 20 January 2014 was issued. Australia, China, Hong Kong China, India, Japan, New Zealand, Singapore and Thailand were requested to nominate qualified SME(s) to participate in the study. Hong Kong China nominated experts but expressed regrets for unable to participate the meeting due current situation in Bangkok. New Zealand also sent regrets for unable to participate the meeting.

2. DISCUSSION

2.1 Initial discussion on the proposed approach for taking care of new VHF communications needs and potential introduction of 8.33 kHz spacing channel in the APAC Region was held with experts of Aeronautical Communication Panel WG-F and regional spectrum experts at the Regional Preparatory Group (RPG) meeting for ITU World Radiocommunication Conference 2015 (WRC-2015) from 11 to 12 March 2014.

2.2 The meeting considered 25 kHz spacing could be maintained for a period of time by relying on a more efficient coordination of the VHF bands (assignment and release) and by removing restriction of frequency pools for associated functions. It was informed that in Europe definite frequencies group associated with communication service function had been removed. Some lessons learnt from the introduction of 8.33 kHz in the European Region were introduced.

2.3 The meeting identified the need to investigate the capability of ground VHF equipment employed by the States/Administration in the APAC Region whether capable to support 8.33 kHz spacing and requirement for retrofit of avionics including leading time for transition to 8.33 kHz spacing. It was observed that new aircraft from production line had already been equipped for such capability. However, as 8.33 KHz capability may come as an option on some new aircraft, early advance notice to minimize retrofit cost would be beneficial to the airspace users of APAC Region. Significant cost for older generation aircraft retrofit would be required in particular for those GA aircraft.

2.4 The meeting was also reminded that in the foreseeable future there appears to be no requirement in USA for transitioning to 8.33 kHz, although traffic density is similar to that in Europe. Therefore, it would be a surprise if this would be required in APAC region in the near future. Considering that the new frequency separation criteria and ICAO global database being introduced would result in more efficiency in management of VHF bands and that the approach proposed was appropriate, the meeting developed the following recommendation for consideration by the Spectrum Management Review Task Force (8.33 kHz) established by CNS SG of APANPIRG.

Recommendation/3 – Spectrum Management Review Task Force to adopt the proposed approach and streamline the current assignment process, aiming at avoiding introduction of 8.33 kHz spacing in the APAC Region

That, the Spectrum Management Review Task Force follows the proposed 3 stages approach relying on new criteria being introduced at ICAO global level, since it is likely to bring enough possibilities of VHF frequencies assignments. The 8.33 Study group should also propose improvements to the existing regional VHF frequency assignment process based on the new tool, aiming at avoiding introduction of 8.33 kHz spacing in the APAC Region in the near future.

2.5 The meeting was informed that some Civil Aviation Administrations had requested airlines to be equipped with 8.33 kHz channel spacing capable avionics. However, general concern remains for retrofit to General Aviation and ageing aircraft.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper;

b) discuss any other relevant matters as appropriate

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