International Civil Aviation Organization

REGIONAL PREPARATORY GROUP (RPG) MEETING FOR ITU WORLDRADIOCOMMUNICATION CONFERENCE 2015 (WRC-2015)

Pattaya, Thailand, 11 – 12 March 2014

Agenda Item 3: **The reality of frequency management in APAC: current practices and new challenges**

APPROACH TO ADDRESS THE NEW OPERATIONAL NEEDS FOR FREQUENCIES SUCH AS 8.33 KHZ SPACING IN THE VHF BANDS

(Presented by Secretariat)

SUMMARY

This paper presents an approach to address the new operational needs for frequencies such as 8.33 kHz spacing in the VHF bands for discussion and refinement during the Regional Preparatory Group, which should allow to make the optimal use of the current VHF frequency provisions and minimize the impact on airspace users.

1.   Introduction

1.1   APANPIRG/24 noted that the CNS SG had made a decision (17/6) to establish 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.

1.2   As a result, a letter AP-CNS0009/14 dated 20 January 2014 was sent out to Australia, China, Hong Kong China, India, Japan, New Zealand, Singapore and Thailand in order to establish the Spectrum Review Working Group on 8.33 kHz channel spacing and nominate the qualified SME(s) to participate in the study. As of 26 Feb.14, 5 States have nominated their SME.

1.3   A shared and detailed approach needs to be built to conduct the study which should target an optimal use of the Handbook volume II provisions and minimize the impact on airspace users.

2.   Discussion

2.1   The proposed approach is phased in 3 stages:

Stage 1: Identify VHF voice communications new needs and current limitations

        a)   Draft a project planning for stages 1, 2 and 3;

b)   Gather new operational needs from Member States in terms of frequencies (and associated context: airspace or routes restructuration, new facilities etc.) in the short, mid and long terms; and

c)   Identify current limitations.

Stage 2: Identify Solutions

a)   Simulate with the global database how this could be done based on 25 KHz spacing, new ICAO frequency manager software tool and Handbook volume II provisions;

b)   For limitations (potential interferences detected through the tool) with neighboring States, identify solutions with neighboring States, based on the new ICAO frequency manager software tool and Handbook volume II provisions,

c)   If 8.33 KHz spacing is needed, study impacts on operations (airspace users and ground installations) in the considered airspace and outside;

d)   Consult relevant national frequency authorities for feasibility; and

e)   Draft a high level implementation plan;

If 8.33 KHz spacing is needed, the draft implementation plan should focus on a detailed description of airspaces within which 8.33 kHz channel spacing requires to be introduced and transition provisions needed for airlines, ANSP and CAA as necessary, both at regulatory and operational levels.

Lessons learnt from Europe 8.33Khz transition may be beneficial in that regard.

f)   Review the project planning in view of proposed solutions; and

g)   Develop recommendations for CNS SG.

Stage 3: Implement in a coordinated manner

a)   Refine the implementation plan taking into account CNS SG/other groups considerations;

b)   If no 8.33 KHz spacing is needed, States implement the new assignments in a coordinated manner (ANSP, CAA, national frequency Authorities) and VHF new assignments are reflected in the global database; and

c)   If 8.33 KHz spacing is needed, States implement the new assignments according to the implementation plan, including transition provisions needed for airlines, ANSP and CAA as necessary.

2.2   A report should be delivered after Stages 1 and 2 are completed for consideration by the CNS Sub Group, and before proceeding to the stage 3.

3.   Action by the Meeting

3.1   The meeting is invited to:

    a) note the information contained in this paper;

    b) discuss and refine the phased approach; and

    c) discuss any other relevant matters as appropriate.

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