



*International Civil Aviation Organization*

ICAO

**SIXTH MEETING OF SPECTRUM REVIEW WORKING GROUP (SRWG/6)**

Video Teleconference, 1 – 3 March 2022

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**Agenda Item 4:** Frequency planning requirements for the Asia/Pacific Region

**IMPLEMENTATION OF 50KHZ CHANNEL SPACING IN CHINA**

(Presented by China)

**SUMMARY**

Since the frequency band 108.000-117.975 MHz with 100kHz channel spacing falls short to satisfy the actual demand, CAAC decided to assign ILS Localizer and VOR frequency with 50 kHz channel spacing after consulting the domestic airlines and facility operators, and notified the specific requirements in 2014. Till now, the implementation of 50 kHz channels spacing are progressing steadily in China.

**1 INTRODUCTION**

1.1 With the rapid development of civil aviation industry and the substantial increase in the number of Radio Navigation Stations (RNS) in China, the current navigational frequency resources (LOC and VOR) working on the frequency band 108.000-117.975 MHz with 100kHz channel spacing fall short to satisfy the actual demand.

1.2 In order to solve this problem, in 2014, after consulting the domestic airlines and departments who took responsibility to operate and manage the RNS, Civil Aviation Administration of China (CAAC) is of the view that the industry has the conditions to support the introduction of 50 kHz channel spacing for LOC and VOR. Based on this situation, CAAC has decided to assign LOC and VOR frequency with 50 kHz channel spacing, GP with 150kHz channel spacing (in band 328.6-335.4MHz) and DME with X/Y channel(in band 960-1215MHz).

**2 DISCUSSION**

2.1 The specific requirements are notified as follows:

2.1.1 Since October 1st, 2014, all LOCs, GPs, VORs and DMEs that are newly established or changed its' station address shall meet the following requirements:

- a) The tunable frequency spacing of LOC and VOR equipment shall at least reach 50 kHz;
- b) The tunable frequency spacing of GP equipment shall at least reach 150 kHz; and
- c) Both X and Y channel mode are applicable for the DME equipment.

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2.1.2 The LOCs, GPs, VORs and DMEs that have been officially put into use before October 1st, 2014 and do not meet the above requirements can continue to be used until the equipment is retired.

2.2 To ensure safe operation of existing RNSs, CAAC adopts the mixing condition between 50 kHz and 100 kHz channel spacing when setting the protection distance of RNSs, and refers to Annex 10, Attachment C to Volume I, paragraphs 2.6, 3.4 and 3.5 for specific details.

2.3 Till now, the implementation of 50 kHz channels spacing by CAAC are progressing steadily. Many newly built RNSs applied with new channel spacing are running well.

**3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

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

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