



International Civil Aviation Organization

WORKING PAPER

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ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 41: Support of the ICAO policy on radio frequency spectrum matters

**ISSUES AFFECTING CIVIL AVIATION INTERESTS WITH REGARD TO CLARIFYING
ICAO'S POSITION IN RELATION TO AGENDA ITEM 1.25 OF THE WRC-12**

(Presented by the Russian Federation)

EXECUTIVE SUMMARY

This document outlines the preparations by the Russian Federation for the 2012 World Radiocommunication Conference (WRC-12) and proposes that ICAO clarify its position regarding agenda item 1.25 of the conference as regards protecting the 13.25 - 13.4 GHz frequency band, allocated as the fundamental basis for the aeronautical radionavigation service (ARNS).

Action: The Assembly is invited to support the proposal to clarify ICAO's position with regard to agenda item 1.25 of the WRC-12 regarding the 13.25 - 13.4 GHz frequency band.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives A and D on safety and efficiency.
<i>Financial implications:</i>	No additional resources will be required.
<i>References:</i>	Doc 9718, <i>Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including Statement of Approved ICAO Policies</i> ; Doc 9902, <i>Assembly Resolutions in Force</i> (as of 28 September 2007); and State letter dated 30 June 2009, reference E 3/5-09/61

¹ Russian version provided by the Russian Federation.

1. INTRODUCTION

1.1 The ICAO policy on the radio frequency spectrum is set out in Resolution A36-25, adopted at the 36th Session of the Assembly in 2007, as well as in the *Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including Statement of Approved ICAO Policies* (Doc 9718).

1.2 In accordance with the decision of the Russian State Committee for Radio Frequencies, the Federal Agency for Air Transport (Rosaviatsia) is actively involved in the work of the Preparatory Committee to establish the Russian Communications Administration's position for WRC-12. In the course of this work, the Federal Agency for Air Transport has proposed measures to ensure that the position of ICAO on matters of interest to international civil aviation is taken into consideration as much as possible.

1.3 ICAO's position on matters included in the WRC-12 agenda is set out in State letter dated 30 June 2009, reference E 3/5-09/61.

1.4 This document outlines information about the work undertaken by Rosaviatsia to prepare for WRC-12 and contains a proposal to clarify ICAO's position with regard to agenda item 1.25 of the WRC-12.

2. BACKGROUND INFORMATION

2.1 ICAO's position assumes that changes can be made during the work to prepare for WRC-12.

2.2 The above-mentioned State letter underlines the need for full-scale participation of civil aviation experts in determining the position of the States for WRC-12.

3. EXAMINING THE ISSUE

3.1 The issues which affect civil aviation interests concern the above-mentioned agenda item 1.25 of the WRC-12, and examines possible additional allocations of the mobile satellite service (MSS). This point of the agenda examines several frequency bands and, in particular, the 13.25 - 13.4 GHz frequency band, which is allocated as the fundamental basis for the aeronautical radionavigation service (ARNS). According to Note 5497 to the Radio Regulations (RR), the use of this band restricts Doppler navigation aids, which are widely used in helicopters and also in a number of types of aeroplanes as one of the on-board sensors for the flight management system (FMS).

3.2 As stated in Doc 9718, the aviation requirements with regard to the 13.25 – 13.4 GHz frequency band will remain unchanged and Doppler navigation aids will continue to be used for this reason there is no need to make any changes to the existing frequency distribution or to Note 5497 of the RR.

3.3 In State letter E 3/5-09/61, the description of ICAO's position on this agenda item is too general and needs clarifying.

3.4 The research carried out for typical Doppler navigation aids images used in the Russian Federation showed that significant interference is possible on the receiving customer terminals of the MSS system from Doppler navigation aids for aeroplanes and helicopters. The relevant materials, which serve as grounds for the inadvisability of allocating the 13.25 - 13.4 GHz frequency band for MSS were set out by the Russian Communications Administration at Working Group 4C of the International Telecommunication Union (ITU).

3.5 The results, which will be sent to the international aviation union concerning the protection of the frequency band allocated for air services, will depend significantly on the extent to which States are coordinated in their positions regarding WRC-12.

3.6 To protect the existing allocation of the 13.25 - 13.4 GHz frequency bands, ICAO should:

- a) clarify the position of ICAO regarding agenda item 1.25 of the WRC-12, indicating the inadvisability of accepting the additional allocation of the 13.25 - 13.4 GHz band for MSS, taking into consideration the aviation need for this band, including for the use of Doppler navigation aids; and
- b) bring this clarified position to the attention of other States.

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