

# **HANDBOOK ON RADIO FREQUENCY SPECTRUM REQUIREMENTS FOR CIVIL AVIATION**

**INCLUDING STATEMENT OF  
APPROVED ICAO POLICIES**

FIFTH EDITION — 2010



*Approved by the Secretary General  
and published under his authority*

INTERNATIONAL CIVIL AVIATION ORGANIZATION



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## AMENDMENTS

The issue of amendments is announced regularly in the *ICAO Journal* and in the monthly *Supplement to the Catalogue of ICAO Publications and Audio-visual Training Aids*, which holders of this publication should consult. The space below is provided to keep a record of such amendments.

## RECORD OF AMENDMENTS AND CORRIGENDA

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# FOREWORD

## Historical background

ICAO's Special Communications/Operations Divisional Meeting held in 1995 (Special COM/OPS/95) noted that the International Telecommunication Union (ITU) had begun to convene its World Radiocommunication Conferences (WRCs) every two to three years. While divisional-type ICAO meetings had traditionally developed positions on WRC agenda items related to aviation, it was evident that it was not feasible to convene such meetings frequently enough to keep pace with the current holding of WRCs. The Special COM/OPS/95 meeting recognized the importance of keeping up with the rapid development in telecommunications, however, and it consequently recommended that a new mechanism be developed so that civil aviation could record its agreed requirements for aeronautical radio frequency spectrum in an adequate and timely manner.

The meeting accordingly recommended that an ICAO radio frequency (RF) document be developed and maintained (Recommendation 7/1). The Air Navigation Commission, at its meeting on 19 June 1995 (ANC 139-10), approved the recommendation for action.

## Status of the handbook

This handbook contains ICAO policy statements relevant to the aviation requirements for radio frequency spectrum, as approved and amended by the ICAO Council.

The handbook is intended to assist States and ICAO in preparing for ITU conferences. In addition, the ICAO position on matters of interest to aviation on the agenda of ITU WRC-12 is included in Attachment F. The strategy for establishing and promoting the ICAO position for future ITU WRCs is in Attachment E.

The civil aviation material in this handbook is supplementary to the Standards and Recommended Practices (SARPs) contained in Annex 10 to the Convention on International Civil Aviation — *Aeronautical Telecommunications*, which continue to have precedence and applicability for those aspects covered by their provisions.

Amendments to this handbook will be made on a regular basis so that the material will represent the latest position on the subject matter contained herein. Towards

this end, the recommendations of divisional-type meetings and the findings and recommendations of ICAO panels and other bodies, as approved by the Air Navigation Commission and Council as appropriate, are expected to be among the main sources of information. Changes may also be necessary as a result of decisions taken at ITU WRCs.

Results of ongoing activities in ICAO on spectrum management are available on the web site for the Aeronautical Communications Panel (ACP) at [www.icao.int/anb/panels/ACP](http://www.icao.int/anb/panels/ACP). ACP Working Group F is undertaking the activities on preparation and coordination of material, including the development of the draft ICAO position, in particular for ITU WRCs, ITU-R study group meetings and meetings of regional telecommunication organizations.

### **Organization of the handbook**

The handbook is laid out in the following way:

- Chapter 1 introduces the subject of radio frequency spectrum management.
- Chapter 2 defines the objectives and purpose of the handbook.
- Chapters 3 to 5 describe the institutional aspects and the relationships between the main participants (ITU, ICAO, national authorities, etc.).
- Chapter 6 contains an overview of the spectrum management process.
- Chapter 7, which is divided into four sections, contains the principal elements of the handbook. Each frequency band and its uses are described in detail, together with the approved ICAO policy statements for the civil aviation spectrum requirements in that band. Also included are relevant provisions (Regulations), Resolutions and Recommendations which are contained in the ITU Radio Regulations.
- Chapter 8 addresses future requirements of frequencies for civil aviation.
- Chapter 9 describes the elements of a framework of rules and preventative measures for the regulation and control of interference.
- Attachment A provides a selection of relevant ITU definitions.
- Attachment B contains acronyms and abbreviations used in the handbook.



- Attachment C gives an overview of the regulatory aspects of radio equipment in aircraft.
- Attachment D addresses the processes and sequence of actions for the review and updating of the handbook.
- Attachment E contains the ICAO strategy for improving support for the ICAO position.
- Attachment F contains the ICAO position for ITU WRC-12, as approved by the Council on 12 September 2011.
- Attachment G contains technical information and frequency sharing criteria.
- Attachment H references relevant ITU Resolutions and Recommendations as listed in the ITU Radio Regulations.

### **Action by Member States and ICAO**

States are requested to use the material in this policy document, as it is necessary and opportune, in their national discussions on matters relating to the use of the radio frequency spectrum by international civil aviation. In particular, the statements of ICAO policy should be incorporated in proposals from States and utilized in their preparations for ITU WRCs as the up-to-date agreement within ICAO on the reference subject. ICAO observers at ITU conferences may also, as necessary and when requested, quote from the document as the agreed statement for international civil aviation purposes.

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*Note 1.— Although this handbook includes relevant provisions from the ITU Radio Regulations, these extracts are not complete and the handbook should therefore be used in conjunction with the full text of the ITU Radio Regulations and the relevant ITU-R Recommendations.*

*Note 2.— Throughout this handbook, extracts from the ITU Radio Regulations are presented against a shaded background.*