

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
**EIGHTH MEETING OF CIVIL AVIATION AUTHORITIES OF THE SAM REGION**  
**(RAAC/8)**

(Buenos Aires, Argentina, 23 – 25 April 2003)

**Agenda Item 4:** Regional Air Navigation Plan – Transition to the CNS/ATM Systems

**ACTIVITIES IN PREPARATION FOR THE ITU WRC-2003, WITH A VIEW TO  
PROTECTING THE AERONAUTICAL RADIO FREQUENCY SPECTRUM**

(Presented by the Secretariat)

**Summary**

In view of the importance of protecting the aeronautical radio frequency spectrum, this working paper suggests the States in the Region to take action to support the ICAO position at the ITU WRC-2003 on matters of critical interest to civil aviation.

**References:**

- Handbook on radio frequency spectrum requirements for civil aviation including statement of approved ICAO policies (Doc 9718);
- Final proceedings of the Conference of Plenipotentiaries (Marrakesh, Morocco, 2002);
- State Letter E 3/5-00/101 of 8 December 2000; and
- Report of the GREPECAS /11 meeting (Manaos, Brazil, 3-7 December 2002).

**1. Introduction**

1.1 World radio navigation conferences (WRC), organised by the International Telecommunications Union (ITU), are held about every three years in order to discuss and approve changes in the radio frequency spectrum bands, and their assignment to users.

1.2 ICAO, in order to protect the radio frequency spectrum assigned for aeronautical applications, both current and future, takes all the necessary steps to make sure that it remains assigned and free of other applications which might affect the safety required by air navigation aid systems. To that end, it is preparing a position that reflects all of the aeronautical regulatory aspects contained in the WRC agenda.

1.3 ICAO participates as an observer at the ITU conferences, and thus requires the support of the States, through the radioelectric space management bodies, so that the positions proposed by this international organisation can be accepted and approved.

1.4 At the last ITU Meeting of Plenipotentiaries (Morocco, September 2002), where strategic and financial plans are adopted for the following five years, the proposal submitted by several ITU member States to increase the role of the observers at the WRC was examined. As a result, it was agreed that the observers from United Nations organisations and agencies should present information documents and provide advice to world conferences on matters of their competence. Information documents and advice do not include proposals nor will they be treated as such. The right to submit written or oral proposals at such conferences is reserved exclusively to member States.

1.5 Once aware of the position to be adopted by ICAO at the upcoming ITU World Radio Communication Conference (WRC-2003), aeronautical administrations would need to support such position through the respective competent state bodies.

1.6 The upcoming ITU World Radio Communication Conference (WRC-2003) will be held on 9-14 July 2003, in Geneva, Switzerland. The agenda for the WRC-2003 is shown in **Appendix A** to this working paper. The position to be adopted by ICAO at this meeting was developed at the third meeting of the aeronautical communications panel (AMCP), in coordination with the tasks of another working group, the one on the GNSS. The ICAO Air Navigation Commission reviewed and approved such study and circulated it to the States through letter E 3/5-00/101 of 8 December 2000 "*ICAO position on matters of critical interest to the international civil aviation to be discussed at the 2003 World Radio Communications Conference (WRC-2003) of the International Telecommunications Union*". Following the comments made by the States and the subsequent review by ICAO, the Council approved the proposal during its 163th session.

1.7 ICAO will submit the final information paper to the ITU body on the first week of May 2003 for inclusion in the material that the States will receive at the conference.

1.8 In order for the States to learn about the radio frequency spectrum requirements of civil aviation, ICAO has developed a document that summarises everything. This document is Doc 9718 and is entitled "*Handbook on radio frequency spectrum requirements for civil aviation*".

## 2. Discussion

2.1 The ICAO position covers all of the aeronautical regulatory aspects contained in the WRC-2003 agenda, underlining the need to preserve current spectrum allocations for aeronautical services, in view of the increasing number of attempts to re-allocate the aeronautical spectrum to non-aeronautical services or to introduce the sharing of bands allocated to aeronautical services with non-aeronautical services, which are frequently incompatible. The latter may result in higher levels of radioelectric interference in aeronautical services.

2.2 Some of the items in the ICAO proposal to the WRC 2003 that are of greatest significance to civil aviation are the following:

- a) Ensure the availability of the adequate spectrum for the future MLS system (Use of the 5 091 – 5 150 MHz band) Agenda Item 1.4 of the WRC 2003;
- b) Harmful interference to aeronautical mobile services - Agenda Item 1.14 of the WRC 2003;

- c) Ensure the protection of DME and radar systems from interference by radio navigation satellite systems (RNSS) in the 1215-1400 Mhz band and the protection of the radar system operating in the 2700-2900 MHZ band from interference by non-aeronautical mobile communication systems - Agenda Item 1.15 of the WRC 2003; and
- d) Use of GNSS differential correction in the 108-117.975 Mhz band - Agenda Item 1.28.

2.3 It should be noted that it is very important for aeronautical authorities to begin, as soon as possible, coordinations with their respective telecommunication authorities and to use the ICAO position to develop national positions that include the protection of the aeronautical radio frequency spectrum. With respect to regional actions to support the ICAO position at the WRC 2003 on matters of critical interest to civil aviation, the GREPECAS/10 meeting formulated Conclusion 10/19.

2.4 Likewise, aeronautical administrations need to participate, together with national spectrum management authorities and ICAO experts, in the activities of the PCC III of CITELE, so as to bear upon the CITELE mechanism. The Inter-American Telecommunications Commission (CITELE) of the Organization of American States (OAS) is in charge of promoting the continued development of telecommunications in the western hemisphere, which corresponds to ITU Region 2. In this sense, one of the three permanent committees, the Permanent Consultative Committee III (PCC), Radio Communications, acts, *inter alia*, as a technical advisory body for regional coordination and preparation of ITU conferences and meetings, including the preparation of common proposals and positions for the ITU WRCs.

2.5 The civil aviation administrations of the CAR/SAM States, during their preparatory activities and at the ITU WRC-2003, should support the ICAO position on matters of critical interest to civil aviation related to the radio frequency spectrum, through the following action:

- take into account the ICAO position on matters of critical interest to international civil aviation to be addressed at the 2003 World Radio Communications Conference (WRC – 2003) of the International Telecommunications Union (ITU);
- aeronautical telecommunication experts should work together with national radio frequency spectrum management authorities in order to support and include the ICAO position in their national positions at the WRC – 2003;
- obtain support through national government bodies;
- participation of aeronautical telecommunication experts at regional CITELE fora;
- submit to ICAO any proposal for updating and improving the ICAO position;
- include in the respective State delegations to the WRC–2003, aeronautical communication experts who can act in coordination with the experts from other States and ICAO at the conference, pursuant to the ICAO position, to defend the interests of civil aviation.

2.6 Likewise, in order to take additional steps to optimise coordination and maximise support to the ICAO position en defence of radio frequency spectrum requirements of civil aviation at the WRC 2003, the GREPECAS/11 meeting (Manaus, Brazil, 3-7 December 2002) formulated Conclusion 11/30, urging CAR/SAM States to designate contacts for the preparatory work to be carried out at national level and to coordinate such activities with the Regional Offices and Headquarters.

3. **Suggested action**

3.1 The meeting is invited to:

- a) take note of the information contained in this paper; and
- b) support the ICAO position on matters of critical interest to civil aviation at the ITU WRC-2003, through the action described in paragraph 2.6 above.

-----

**APPENDIX A**