ASSEMBLY — 36TH SESSION

TECHNICAL COMMISSION

Agenda Item 34: Support of the ICAO policy on radio frequency spectrum matters

SUPPORT OF THE ICAO POLICY ON RADIO FREQUENCY SPECTRUM MATTERS

(Presented by the Council of ICAO)

EXECUTIVE SUMMARY

This paper presents a proposal for updating the policies in Assembly Resolution A32-13 which was developed in 1998. The proposed new resolution is up to date with current and foreseen future activities to support aviation radio frequency (RF) spectrum requirements within the scope of the International Telecommunication Union (ITU) World Radiocommunication Conferences (WRC).

Action: The Assembly is invited to adopt the draft resolution to supersede Resolution A32-13, as contained in the appendix to this paper.

Strategic Objectives:	This working paper relates to Strategic Objective A and D in support of safety, regularity and efficiency of international civil aviation.
Financial implications:	Adequate financial support is essential to guarantee that aviation requirements are consistently met.
References:	Doc 9848, Assembly Resolutions in Force (as of 8 October 2004) Doc 9828, Report of the Eleventh Air Navigation Conference (2003) Doc 9650, Report of the Special Communications/Operations Divisional Meeting (1995) (SP COM/OPS/95) Doc 9718, Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including Statement of Approved ICAO Policies

1. **INTRODUCTION**

1.1 ICAO policies and practices related to the radio frequency spectrum matters are laid out in Assembly Resolution A32-13 "Support of the ICAO policy on radio frequency spectrum matters", which

was developed in 1998. This paper addresses updates to these policies and proposes a draft new resolution A36-xx to supersede Resolution A32-13.

1.2 The emphasis of the resolution is unchanged, urging ICAO Contracting States to support aviation requirements for spectrum and instructing ICAO to make sufficient resources available to enable increased participation in spectrum management activities.

2. THE INTERNATIONAL TELECOMMUNICATION UNION (ITU) AND THE WORLD RADIOCOMMUNICATION CONFERENCE

- 2.1 The International Telecommunication Union (ITU) is the specialized agency of the United Nations for telecommunications matters. International agreements on the allocation and use of the radio frequency spectrum are made within the framework of ITU at World Radiocommunication Conferences (WRCs) which are held every three or four years, and are laid out in the ITU Radio Regulations, which specify the allocation of radio frequency spectrum to user services.
- 2.2 ICAO is recognized by both States and the ITU as the international body with the competence to coordinate the aeronautical input to ITU discussions on radio frequency spectrum matters. The ICAO position at WRCs, where ICAO is accorded observer status in an advisory capacity, reflects the coordinated requirements of the international civil aviation community and is approved by the ICAO Council.

3. REQUIRED SUPPORT TO THE ICAO POSITION AT WRCS

- 3.1 Availability of the necessary radio frequency spectrum continues to be a prerequisite for the safety of civil aviation and the effective implementation of the communications, navigation, and surveillance/air traffic management (CNS/ATM) systems. However, as demand for spectrum from non-aviation users is constantly growing, aviation faces increasing competition for the limited available spectrum, in particular from commercial telecommunications services. It is therefore essential that aviation's requirements for radio frequency spectrum be strongly supported by all ICAO Contracting States in all international fora where spectrum allocations are addressed, so as to ensure that aviation requirements for safety of life services are duly presented and understood.
- 3.2 For the ICAO position to be duly considered by WRCs when deliberating on matters of interest to the aviation community, an increased level of support by ITU Member Administrations is essential. The current level of support has proven insufficient to guarantee that aviation requirements are consistently met.

- 3.3 This is mainly due to the growing competition from non-aviation users, supported by commercial telecommunications interests. Within many ITU Member States, the telecommunications authorities largely control the process leading to development of proposals for presentation to the ITU WRCs, and aviation authorities' inputs to the process seem to fail to influence adequately the national position. Additionally, the dominant role gained by regional organizations in ITU activities have substantially increased the resource requirements to support the associated intensive schedule of WRC preparation meetings at various levels.
- An inadequate level of support of the international civil aviation position at WRCs may lead to WRC decisions which do not address adequately the aeronautical radio frequency (RF) spectrum bandwidth requirements. In the long run, aeronautical services may be jeopardized, with potentially serious consequences.
- 3.5 Such consequences could include harmful interference from non-aeronautical services to existing aeronautical services, requiring expensive re-equipping of aircraft to preserve the current level of safety; failure of certain systems to satisfy operational requirements (such as in the case of global navigation satellite system/global positioning system (GNSS/GPS) interference); and inability to satisfy the growing need for aeronautical spectrum to support new CNS/ATM systems and enhance safety and regularity of flight.
- 3.6 In order to improve the current situation, it is recommended that Contracting States should commit to support the ICAO position at WRCs and in regional and international activities conducted in preparation to WRCs. To do so, they should include in their proposals to the WRC, to the extent possible, material consistent with the ICAO position; and also they should undertake to provide for aviation interests to be fully integrated into States' positions for WRCs.
- Recommendations to that effect were made by the Special Communications/Operations Divisional Meeting (1995) (SP COM/OPS/95, Recommendations 7/3 and 7/6 refer). Those recommendations specifically addressed support to WRC-95 activities. However, those recommendations have been equally applicable since and are expected to be equally applicable to all future WRCs and, therefore, should be incorporated in a general statement on support to ICAO policy on spectrum matters. The current resolution (A32-13), including the proposed amendments, reflects the recommendations and extends them to all future WRCs and related activities.

4. PROPOSED UPDATES TO THE POLICIES IN RESOLUTION A32-13

- 4.1 The proposed updates to the policies in Resolution A32-13 reflect the current aeronautical developments and will guide the preparation for and participation in future WRCs.
- 4.2 The following amendments are proposed:

- a) Reference to biennial WRC conferences has been removed. These conferences are currently organized to take place with intervals of about four years. Additional text emphasizing the "growing demand for bandwidth from all users of the RF spectrum, as well as the increased importance of the development of regional positions by bodies such as APT, ASMG, ATU, CEPT, CITEL and RCC" is included.
- b) The reference to Recommendation 7/5 has been removed as it was specific to WRC-95. A new reference to Recommendation 5/2 of the Eleventh Air Navigation Conference (2003) on "ICAO activities on interference" has been added.
- c) Operative clause, sub-paragraph c), the reference to the frequency band 1 559 1 610 MHz has been removed as this issue was dealt with in WRC-2000. A new reference points to the ICAO policy statements to ITU WRCs, contained in the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation including Statement of Approved ICAO Policies (Doc 9718).

5. **CONCLUSION**

Assembly Resolution A32-13, approved in 1998, has since served its purpose in providing guidance to ICAO and States on the importance of protecting the frequency resources available to international civil aviation. Protecting these spectrum resources becomes increasingly important as the pressure for higher bandwidth for aviation as well as other uses continues to grow. There is a need to update the policies in Assembly Resolution A32-13, in order to increase awareness of the role of regional telecommunication organizations and obtain the necessary support to the ICAO position in the work of these organizations, both by Contracting States and by ICAO.

¹ APT: Asia-Pacific Telecommunity; ASMG: Arab Spectrum Management Group; ATU: African Telecommunications Union; CEPT: the European Conference for Posts and Telecommunications; CITEL: Comisión Interamericana de Telecomunicaciones; RCC: Regional Commonwealth in the field of Communication.

APPENDIX

DRAFT RESOLUTION A36-XX TO SUPERSEDE RESOLUTION A32-13

A36-xx: Support of the ICAO policy on radio frequency spectrum matters

Whereas ICAO is the specialized agency of the United Nations responsible for the safety, regularity and efficiency of international civil aviation;

Whereas ICAO adopts international Standards and Recommended Practices (SARPs) for aeronautical communications systems and radio navigation aids;

Whereas the International Telecommunication Union (ITU) is the specialized agency of the United Nations regulating the use of the radio frequency spectrum;

Whereas the ICAO position, as approved by the Council, for ITU World Radiocommunication Conferences (WRCs) is the result of the coordination of international aviation requirements for radio frequency spectrum;

Recognizing that the development and the implementation of the communications, navigation, and surveillance/air traffic management (CNS/ATM) systems and the safety of international civil aviation could be seriously jeopardized unless aviation requirements for allocations of radio frequency spectrum are satisfied and protection of those allocations is achieved;

Recognizing that support from ITU member administrations is required to ensure that the ICAO position is supported by the WRC and that aviation requirements are met;

Considering the urgent need to increase such support due to the growing demand for spectrum and aggressive competition from commercial telecommunications services;

Considering the increased level of ITU WRC preparation activities associated with the growing demand for bandwidth from all users of the radio frequency (RF) spectrum, as well as the increased importance of the development of regional positions by regional telecommunication bodies such as APT, ASMG, ATU, CEPT, CITEL and RCC¹;

Considering Recommendations 7/3 and 7/6 of the Special Communications/Operations Divisional Meeting (1995) (SP COM/OPS/95) as well as Recommendation 5/2 of the Eleventh Air Navigation Conference (2003);

The Assembly:

¹ APT: Asia-Pacific Telecommunity; ASMG: Arab Spectrum Management Group; ATU: African Telecommunications Union; CEPT: the European Conference for Posts and Telecommunications; CITEL: Comisión Interamericana de Telecomunicaciones; RCC: Regional Commonwealth in the field of Communication.

- 1. *Urges* Contracting States and international organizations to support firmly the ICAO position at WRCs and in regional and other international activities conducted in preparation for WRCs by the following means:
 - a) undertaking to provide for aviation interests to be fully integrated in the development of their positions presented to regional telecommunications for involved in the preparation of joint proposals to the WRC;
 - b) including in their proposals to the WRC, to the extent possible, material consistent with the ICAO position;
 - supporting the ICAO position and the ICAO policy statements at ITU WRC's as approved by Council and incorporated in the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (Doc 9718);
 - d) undertaking to provide aviation authorities to fully participate in the development of States' positions; and
 - e) ensuring, to the maximum extent possible, that their delegations to WRCs include representatives of their civil aviation administrations or other officials who are fully prepared to represent aviation interests;
- 2. *Requests* the Secretary General to bring to the attention of ITU the importance of adequate radio frequency spectrum allocation and protection for the safety of aviation; and
- 3. *Instructs* the Council and the Secretary General, as a matter of high priority within the budget adopted by the Assembly, to ensure that the resources necessary to support increased participation by ICAO to international and regional spectrum management activities are made available.
 - 4. *Declares* that this resolution supersedes Resolution A32-13.