



International Civil Aviation Organization

**Eight Meeting of the Communications/Navigation/Surveillance and
Meteorology Sub-Group (CNS/MET SG/8) of APANPIRG**

Bangkok, Thailand, 12-16 July 2004

Agenda Item 7: Aeronautical electromagnetic spectrum utilization

2) review preparations for WRC-2007

**AREAS OF CRITICAL CONCERN TO AVIATION THAT WILL BE
ADDRESSED AT THE ITU WORLD RADIOCOMMUNICATION
CONFERENCE 2007 (WRC-07)**

(Presented by the Secretariat)

SUMMARY

This paper presents the agenda for the ITU World Radiocommunication Conference 2007 (WRC-07) of interest to the aviation community. It includes areas of critical concern to aviation that will be addressed at the conference and presents information on a preliminary timetable for the development of the ICAO position for WRC-07, and actions taken by APANPIRG/14 and DGCA Conference to provide necessary support to ICAO Position.

1. Introduction

1.1 The ITU World Radiocommunication Conference WRC-2007 is foreseen to be held from 8 October to 2 November 2007 in Geneva, Switzerland.

1.2 Aeronautical radio services are recognized internationally a prime user of radio frequencies spectrum, the safety-of-life elements of which are accorded special treatment internationally through the ITU Radio Regulations.

1.3 The framework for the development of and support to the ICAO position is contained in Assembly Resolution A32-13. The long-term strategy (Global Plan) on implementation of current and new communication, navigation and surveillance systems forms the basis for the spectrum requirements. The long term ICAO policy on radio frequency spectrum requirements, as approved by the Council, is contained in the ICAO Handbook on radio frequency spectrum requirements (Doc 9718-AN/957).

1.4 Since the mid-nineties, the involvement of the various Regional Telecommunication Organizations in the coordination and development of regional positions for ITU Conferences became an important factor. To the maximum extent possible, regional offices are involved in the development of the ICAO position with a view to incorporating specific regional requirements. Regional involvement is also essential to support the ICAO position in the regional telecommunication forums.

2. Agenda of WRC-07

2.1 The agenda for the WRC-07 includes the following items, which are of relevance to aviation:

a) **WRC-07 Agenda Item 1.1:**

Requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, in accordance with Resolution **26 (Rev. WRC-97)**;

b) **WRC-07 Agenda Item 1.2:**

To consider allocations and regulatory issues related to the Earth exploration-satellite (passive) service, space research (passive) service and the meteorological satellite service in accordance with Resolutions **746 (WRC-03)** and **742[COM5/3] (WRC-03)**;

c) **WRC-07 Agenda Item 1.3:**

In accordance with Resolution **747 (WRC-03)**, consider upgrading of the radiolocation service to primary allocation status in the bands 9 000 - 9 200 MHz and 9 300 - 9 500 MHz, and extending by up to 200 MHz the existing primary allocations to the Earth exploration-satellite service (active) and the space research service (active) in the band 9 500 - 9 800 MHz without placing undue constraints on the services to which the bands are allocated;

d) **WRC-07 Agenda Item 1.6:**

To consider additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution **414 (WRC-03)** and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution **415 (WRC-03)**;

e) **WRC-07 Agenda Item 1.17:**

To consider the results of ITU-R studies on compatibility between the fixed-satellite service and other services around 1.4 GHz in accordance with Resolution **745 (WRC-03)**; and

f) **WRC-07 Agenda Item 4:**

In accordance with Resolution **95 (Rev. WRC-03)**, to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation.

2.2 Other agenda items that can affect the availability of radio frequency (RF) spectrum for aviation are:

WRC-07 Agenda Item 1.4: frequency related matters for IMT-2000

WRC-07 Agenda Item 1.5: spectrum for aeronautical telemetry between 3 and 30 GHz

WRC-07 Agenda Item 1.7: MSS in 1 668 - 1 675 MHz

WRC-07 Agenda Item 1.13: review of allocations in HF bands (excluding Appendices 25, 26 and 27)

WRC-07 Agenda Item 6: identify items for urgent action by ITU Radiocommunication Study Groups in preparation for WRC-10

WRC-07 Agenda Item 7.2: develop draft agenda for future WRCs

3. Course of Action for the Development of the ICAO Position for WRC-07

3.1 The current schedule for the development of the ICAO position for the WRC-07 is as follows:

- a) February 2004 Aeronautical Communications Panel (ACP) Working Group F develops a draft ICAO position for WRC-07.
- b) August 2004 Aeronautical Communications Panel (ACP) Working Group F completes draft ICAO position for WRC-07.
- c) fourth quarter 2004: ANC reviews the draft ICAO position. Draft ICAO position will be sent to States and international organizations for comments.
- d) First quarter 2005P: ANC undertakes final review of the draft ICAO position in the light of the comments received and transmits it to Council for review and approval.
- e) Second quarter 2005: Council reviews and approves ICAO position for transmittal to States.
- f) During 2004 - 2006 ICAO and States participate in the preparatory activities for WRC-07 in the ITU and the regional telecommunication organizations.
- g) First quarter 2007 ACP Working Group F develops proposals to update the ICAO position, as required, considering the progress of the preparatory activities in ITU-R and regional telecommunication organizations.
- h) Second quarter 2007 ANC reviews the proposed updates.
- i) Second quarter 2007 Council reviews and approves the updates for transmittal to States. The ICAO position will be submitted to the WRC-07 as an information paper.

4. Further Work

4.1 Further work in ICAO as a result of the outcome of WRC-03 includes:

- a) in relation to the protection of radar systems in the band 1 215 - 1 300 MHz will continue in ITU-R, with a view to developing relevant recommendations regarding the compatibility between the radio navigation satellite service (RNSS) and the radionavigation service (RNS), including primary radars used for civil aviation applications (RR 5.331, 5.329 and Resolution 608 refer).
- b) The introduction of the ICAO ground-based augmentation system (GBAS) and VHF digital link (VDL) Mode 4 systems in the band 108 - 117.975 MHz requires ICAO to develop the necessary material for presentation and review by the ITU-R on any compatibility issues that may arise between broadcasting and aeronautical services (RR 5.197A and Resolution 413).

4.2 For the introduction of new aeronautical applications in currently available aeronautical bands, it is essential to develop globally harmonized proposals for relevant SARPs, in order to secure the future availability of adequate spectrum for aviation. If necessary, proposals for new aeronautical applications in these bands can be considered at WRC-07. In accordance with the agenda for WRC-07, new aeronautical allocations in bands that are currently not available for aviation can also be considered.

4.3 As mentioned above, one of the main reasons of the overall satisfactory outcome of WRC-2003 was that ICAO Contracting States and international organizations had implemented Assembly Resolution A32-13, Conclusion of APANPIRG and Action Item of DGCA Conference resulting in a substantive participation of experts from States in the preparatory activities for the WRC-03 in the ITU and in regional telecommunication organizations (APT). Accordingly, continued implementation of recommendations of the above mentioned bodies will be essential as a follow-up of the WRC-2003 outcome and in preparation for WRC-2007.

5. Action taken by APANPIRG and DGCA Conference for preparation of WRC 2007

5.1 States were urged to assign high priority to the aeronautical spectrum management activities. Conclusion 14/24 formulated by the Fourteenth Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) held in Bangkok from 4 to 8 August 2003 has identified actions to be taken by States for preparation for WRC-2007.

5.2 The Air Navigation Commission, while reviewing the report of APANPIRG/14, noted the Conclusion and requested the Secretary General to continue encouraging States to participate at various levels, in different fora to provide support for the ICAO position for WRC-2007 so as to protect aeronautical frequency spectrum. .

5.3 The 40th DGCA Conference held in September 2003 noted the above Conclusion of APANPIRG and formulated the following Action Item.

Action Item 40/5

The Conference strongly urged States to:

- a) nominate a focal point of contact responsible for preparation for WRC-2007 and provide the details to ICAO; and
- b) ensure active participation by aviation representatives at national and regional level discussions and to the extent possible incorporate ICAO position in the States position paper to APT preparatory meetings and at WRC-2007.

5.4 A State letter was issued urging States to designate a focal point or a contact person responsible for preparation for WRC-2007 in accordance with Conclusion 14/24 of APANPIRG/14 and Action Item 40/5 of the DGCA Conference and notify the ASIA/PAC Regional Office detail **of designated focal point or contact person** in each Administration responsible for preparation for WRC 2007.

6. Regional Preparatory Meetings

6.1 It was reorganized that the two Regional Preparatory Meetings conducted for WRC 2003 at the ASIA/PAC Regional Office in conjunction with the WG F Meetings of the ACP were found to be very helpful and productive. It is expected that the First Preparatory Meeting for WRC 2007 will be held in Bangkok in conjunction with ACP WG F Meeting during February 2005.

7. Action by the meeting

7.1 The meeting is invited to note the:

- a) areas of critical concern to aviation community to be addressed by WRC 2007;
- b) planned course of action for the development of ICAO Position; and
- c) need to designate a focal point or contact person in each administration responsible for preparation for WRC-2007.
