



International Civil Aviation Organization

**NINTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP OF APANPIRG
(CNS/MET SG/9)**

Bangkok, Thailand, 11–15 July 2005

Agenda Item 7: Aeronautical electromagnetic spectrum utilization

1) review preparation for WRC-2007

**FUTURE SPECTRUM NEEDS AND PROPOSED
WRC-2007 ACTIONS**

(Presented by USA)

SUMMARY

The International Telecommunication Union (ITU) 2003 World Radiocommunication Conference (WRC) developed the draft agenda for the WRC-2007. This paper includes select areas of critical concern to civil aviation and provides a general framework for future work to prepare for WRC-2007.

1. INTRODUCTION

1.1. The ITU WRC-03 developed the final agenda for the WRC-2007. Areas of critical concern to aviation on this agenda are identified in this paper. For various agenda items relevant to international civil aviation, the ITU Radiocommunication Bureau has been requested by the WRC-2003 to undertake specific studies for WRC-2007.

2. DISCUSSION

1.2. WRC-07 Agenda Item topics relevant to international civil aviation are as follows:

1.2.1. 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. Among other things, deletion of footnotes such as footnote RR 5.362B, which limits Global Navigation Satellite Service (GNSS) implementation in some countries, are encouraged by ICAO.

1.2.2. Agenda Item 1.2 considers allocations and regulatory issues related to the earth exploration-satellite (passive) service, space research (passive) service and the meteorological satellite service. Civil aviation will need to insure that such allocations do not limit current aeronautical usage or future enhancements to aviation systems.

1.2.3. Agenda Item 1.3 considers the upgrade of the radiolocation service to a primary allocation in the bands 9000-9200 MHz and 9300-9500 MHz, and considers the extension of the existing primary allocations to the Earth exploration-satellite service (active) and the space research service (active) from 9500-9800 MHz by up to 200 MHz. The band 9000-9200 MHz is also allocated to the aeronautical radionavigation service and is used in some countries for maritime radionavigation service for shore-based radars. The band 9300-9500 MHz is also allocated to the aeronautical radionavigation service and is used in some countries for maritime radionavigation service, ground-based radar beacons, and ground-based meteorological radars. International civil aviation will need to insure that this upgrade is made in such a manner that current and future aeronautical operations are fully protected.

1.2.4. Agenda Item 1.6 considers additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, and to study current satellite frequency allocations that will support the modernization of civil aviation telecommunication systems. Among other things, this agenda item may be used to study the spectrum needs of the universal access transceiver (UAT), the potential for Airport Network and Location Equipment, aeronautical fixed links in the 5091-5150 MHz band, and allocations for new technologies to support aeronautical mobile communications requirements.

1.2.5. Agenda Item 7.2 incorporated a proposal from Kenya and Uganda that considers some developing countries still lack an appropriate communication infrastructure that meets the evolving requirements of modern civil aviation, and the cost of providing and maintaining such an infrastructure, in particular a terrestrial infrastructure, is increasingly expensive, particularly in remote regions. The proposal also noted that Resolution 20 (Rev.WRC-2000) *resolves to instruct the Secretary-General* “to encourage ICAO to continue its assistance to developing countries which are endeavouring to improve their aeronautical telecommunications.” And finally, the proposal resolved to study as a matter of urgency, the current satellite frequency allocations that could meet aeronautical requirements to support the modernization of civil aviation telecommunication systems, especially those in developing countries, and to study in particular those radio frequencies that could be used to support both ICAO CNS/ATM systems and other non-aeronautical telecommunication services.

3. CONCLUSION

3.1 The meeting is invited to recommend that all States participate in ICAO groups such as ACP WG-F, when possible, in the development of a common aviation position for WRC-2007.
