

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

**Agenda Item 5 Review of the outcome of the ITU World Radio Conference (2003)
: (WRC-2003) and its impact on aeronautical electromagnetic spectrum
utilization**

EUROPEAN SPECTRUM MANAGEMENT

(Presented by EUROCONTROL, on behalf of its
Member States and those of ECAC²)

SUMMARY

A new mechanism for spectrum and frequency management in Europe has been developed by EUROCONTROL, in close cooperation with ICAO, as a result of an ECAC ministerial requirement. It is progressively being implemented. An early deliverable was the draft Aeronautical European Common Position that was used to argue the European aviation case for radio spectrum.

Suggested action by the conference is in paragraph 4.

¹ English, French, Russian and Spanish versions provided by EUROCONTROL.

² The ECAC Member States are: **Albania**, Armenia, **Austria**, Azerbaijan, **Belgium**, Bosnia and Herzegovina, **Bulgaria**, **Croatia**, **Cyprus**, **the Czech Republic**, **Denmark**, Estonia, **Finland**, **France**, **Germany**, **Greece**, **Hungary**, Iceland, **Ireland**, **Italy**, Latvia, Lithuania, **Luxembourg**, **Malta**, **Moldova**, **Monaco**, **the Netherlands**, **Norway**, Poland, **Portugal**, **Romania**, Serbia and Montenegro, **the Slovak Republic**, **Slovenia**, **Spain**, **Sweden**, **Switzerland**, **the former Yugoslav Republic of Macedonia**, **Turkey**, Ukraine and the **United Kingdom**).

The 31 Member States of EUROCONTROL appear in **bold**.

1. INTRODUCTION

1.1 The availability of radio spectrum is vital for efficient and safe air navigation services. Failure to be able to meet the demand for radio spectrum reduces the potential air traffic capacity thereby causing increased delays. Radio spectrum is of additional vital importance for military aviation users to ensure that national Security and Defence responsibilities can be executed efficiently, effectively and safely.

1.2 Spectrum management is a strategic function dealing with all radio spectrum band allocations, ensuring adequate radio spectrum free from harmful interference for aviation.

2. NEW MECHANISM

2.1 During the sixth ECAC Transport Ministers' meeting on the Air Traffic System in Europe — MATSE/6, the ECAC Ministers of Transport recognized that radio frequency spectrum is a scarce resource with finite capacity limits and for which demand is constantly increasing. They called on EUROCONTROL to address the need for a strong mechanism for the management, assignment and audit of the use of aviation spectrum within the airspace of ECAC States, in close cooperation with States and ICAO.

2.2 The resultant new mechanism, detailed in the attachment, streamlines the management of both spectrum and frequency management. A set of new processes has been developed. This will achieve a greatly improved efficiency and ensure a pan-European coordinated activity.

2.3 A key requirement is the preparation, and maintenance, of a spectrum strategy and the draft Aeronautical European Common Position.

3. AERONAUTICAL EUROPEAN COMMON POSITION

3.1 Continuing close coordination with ICAO and the "United States" Federal Aviation Administration (FAA) has ensured a harmonized position. Immediately before WRC 2003, the key European issues were as described below:

3.1.1 Aeronautical radio-navigation service (ARNS) including microwave landing system (MLS) in the band 5 091 - 5 150 MHz (Item 1.4). The objective was to preserve the use of the band 5 091 - 5 150 MHz for future deployment of ARNS and study the potential use of the band for other types of aeronautical applications. The latter includes the introduction of new airport systems planned for guiding and monitoring surface movements.

3.1.2 Band 5 150 - 5 750 MHz (Items 1.5 and 1.6). Ensure protection to ARNS allocation in sub-band 5 350 - 5 470 MHz. Support the development of future aeronautical systems in the sub-band 5 150 - 5 250 MHz.

3.1.3 Radio-navigation satellite service (RNSS) shared with aviation applications (Item 1.15). Protect distance measuring equipment (DME) band through the aggregate pfd mechanism with the value agreed within international aviation. Avoid unacceptable risk to air traffic control (ATC) radar operation.

3.1.4 Allocation of new aviation services in the 108 - 118 MHz band (Item 1.28). Ensure allocation for data links used for air navigation purposes.

3.1.5 Consideration of new aviation spectrum requirements at WRC-2007, under WRC-2003, Agenda Item 7.2. Make provisions for additional band allocations to aeronautical radiocommunication services to enable the needed increase of ATC infrastructure capacity while safeguarding existing aeronautical allocations.

4. ACTION BY THE CONFERENCE

4.1 The conference is invited to:

- a) note the EUROCONTROL new mechanism for spectrum and frequency management that was developed in close cooperation with ICAO;
- b) note the Aeronautical European Common Position as presented to WRC-2003; and
- c) encourage States, following WRC-2003, to actively participate in the ongoing work associated with the WRC-2007 agenda items that will impact the aviation sector.

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