

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

IMPROVING ICAO'S SPECTRUM PLANNING PROCESS

(Presented by the United States)

SUMMARY

ICAO lacks a single mechanism to consolidate efforts related to spectrum planning. This approach results in fragmentation of planning activities and requires Member States to participate in multiple ICAO groups. This working paper proposes a staged approach for creating a single frequency spectrum planning mechanism in ICAO as a means to integrate all CNS spectrum efforts.

Action by the conference is in paragraph 3.

1. INTRODUCTION

1.1 The International Civil Aviation Organization (ICAO) is working towards one global air navigation plan for communications, navigation, and surveillance/air traffic management (CNS/ATM) systems, which in turn will require the development of one global CNS spectrum plan to efficiently protect these systems. The structure within ICAO is evolving to meet the future needs of the global aviation community. As an example, the Air Navigation Commission (ANC) recently combined all of the communication-related panels and study groups into one communications panel. In contrast, spectrum planning is being worked separately in the Spectrum Sub-Group of the Global Navigation Satellite System Panel (GNSSP), and the Aeronautical Communications Panel (ACP) Working Groups B, F, and M.

2. DISCUSSION

2.1 The future vision is to have one aviation frequency spectrum mechanism in ICAO that would be on an equivalent level with the communications and navigation panels. This new mechanism would consolidate and integrate all CNS spectrum efforts for all ICAO panels. The terms of reference for this new mechanism would include:

- a) to develop one ICAO CNS spectrum plan to align with the CNS/ATM global plan;
- b) to undertake specific studies, as approved by the Air Navigation Commission and reflected in the work program, with a view to advising the ANC on technically practical and operationally feasible ICAO provisions, as necessary, to meet the objectives specified in the work programme;
- c) to develop, as necessary, material to protect aeronautical electromagnetic spectrum, from interference and incursion by non-aeronautical interests, required to support present and future aeronautical applications of communication, navigation, and surveillance;
- d) to develop, ICAO positions for agenda items of World Radiocommunication Conferences impacting CNS spectrum requirements;
- e) to ensure all spectrum issues are comprehensively addressed, and ensure compatibility and interoperability with communications, navigation and surveillance concepts as required; and
- f) to develop, as necessary, spectrum criteria to support the development of CNS-related equipment Standards.

2.2 A smooth transition to this new spectrum mechanism should have minimum economic impact. This can be most easily achieved by developing a plan that is implemented in stages so that the process can evolve and be adjusted to meet the needs of the organization. By identifying and consolidating the current spectrum work in the various panels, the amount of resources required by participating Member States should decrease.

2.3 A recommended first step for this conference to consider would be to transfer the work of the GNSSP Spectrum Sub-Group to ACP Working Group F. This would create the first link between the spectrum system requirements developed in the sub-group with the policy decisions to ensure protection of those requirements.

3. **ACTION BY THE CONFERENCE**

3.1 The conference is invited to agree on the following recommendation:

Recommendation 5/x — Improving ICAO's spectrum planning process

That ICAO:

- a) create a single mechanism for all spectrum efforts in ICAO; and
- b) as an initial step, move the work of the GNSSP Spectrum Sub-Group to ACP Working Group F.

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