ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 36: Air Navigation — Emerging Issues

DESIGN OF GUIDANCE DOCUMENT FOR THE CERTIFICATION OF AIR NAVIGATION SERVICES

(Presented by the Bolivarian Republic of Venezuela)

EXECUTIVE SUMMARY

In response to Assembly Resolution A35-15, a consolidated statement of continuing ICAO policies and practices related to a global air traffic management (ATM) system and communications, navigation and surveillance/air traffic management (CNS/ATM) systems, for the optimal configuration of Air Navigation Services and to improve the processes involved in guaranteeing operational safety and continuous monitoring by the Aeronautical Authorities of the States, it is essential that air navigation services be certified on the basis of a technical assessment of all the processes established for the ATM and CNS/ATM to ensure compliance with the standards issued by the ICAO in terms of operational safety, from the service planning process itself to implementation and subsequent operation, with a universal approach to these guidelines, which should be set out in a guidance document structured according to the certification for each process and for all services.

Action: The Assembly is invited to:

- a) take note of the information presented in this working paper;
- b) urge the Council to take the necessary actions to:
 - 1) draft a guidance document for the certification of air navigation services covering the process in a schematic form and practical manner; and
 - 2) consolidate the Assembly resolutions pertaining to the policies and practices of the Organization in relation to CNS/ATM systems.

Strategic Objectives:	This working paper relates to the Safety Strategic Objective.
Financial implications:	Not applicable.
References:	Doc 9958, Assembly Resolutions in Force (As of October 2010) Doc 9426, Air Traffic Services Planning Manual Doc 9750, Global Air Navigation Plan for CNS/ATM Systems Doc 9734, Safety Oversight Manual Doc 9735, Universal Safety Oversight Audit Programme Continuous Monitoring Manual Doc 9859, Safety Management Manual Doc 8335, Manual of Procedures for Operations Inspection, Certification and Continued Surveillance Doc 9082, ICAO's Policies on Charges for Airports and Air Navigation Services

(3 pages)

¹ Spanish version provided by the Bolivarian Republic of Venezuela.

Doc 7192, Training Manual Part E-2 Air Traffic Safety Electronics Personnel (ATSEP)

Doc 9161, Manual on Air Navigation Services Economics

Doc 4444, Procedures for Air Navigation Services, Air Traffic Management

Doc 8071, Manual on Testing of Radio Navigation Aids

Doc 8168, Procedures for Air Navigation Services

Doc 9774, Manual on Certification of Aerodromes

Certification of the air navigation services of AENA

Annexes 1, 2, 3, 4, 5, 6, 10, 11, 12, 13, 15 and 17

1. **INTRODUCTION**

The 37th session of the Assembly endorsed Resolution A35-15: Consolidated statement of continuing ICAO policies and practices related to a global air traffic management (ATM) system and communications, navigation and surveillance/air traffic management (CNS/ATM) systems, in order to establish improved operational safety checks through audits and continuous monitoring by the Civil Aviation Authorities (CAAs), which entails the certification of air navigation services, in order to implement a new mechanism to stimulate, recognize and motivate air navigation service providers, thereby guaranteeing the quality of the services within the regulatory framework of operational safety standards.

2. ANALYSIS

- At the 37th Session of the ICAO Assembly, a decision was taken regarding the need to consolidate the resolutions pertaining to the policies and practices of the Organization in relation to CNS/ATM systems, in order to facilitate their implementation and practical application, by making the texts more accessible and logically organized, taking into consideration the existing requirements of the regions of the aeronautical world and the CAAs of the States, in terms of providing effective checks to monitor the various CNS/ATM systems used in the operation and management of ATM and for the inherent processes of CNS/ATM systems and air navigation services.
- 2.2 The purpose of this working paper is therefore to propose the creation of a guideline document to be used for the certification of air navigation services. This document will outline and offer a systematic structure for the certification of each engineering phase, taking as reference Annex 10 of the ICAO, technical documents and standards relating to the various CNS/ATM equipment and systems, as well as the planning, acquisition, implementation and commissioning phases of CNS/ATM systems.
- Regarding ATM, a unified overview of the operational processes is proposed, through guidance for procedural monitoring and checking of each of the processes to be followed at each operational phase involved in air navigation services, based on the requirements set out in Doc 4444, as well as in ICAO Annexes 1, 2, 3, 4, 5, 6, 11, 12, 13, 15 and 17 and all operational documents and recommendations related to air navigation services.
- 2.4 The above-mentioned document must also include a highly detailed monitoring system assessed at the various phases of the process. This will involve provisionally certified acceptance tests for each process, up to the final acceptance test, which will guarantee permanent surveillance and continuous monitoring, thereby ensuring that the system functions perfectly until the end of the warranty.

- 2.5 It is suggested that the above-mentioned guidance document should contain two chapters: one for the global air traffic management (ATM) system and a second chapter for communications, navigation and surveillance/air traffic management (CNS/ATM) systems, based on the standards and recommended practices issued by the ICAO in relation to licensing personnel, training, and technical and operational assessments. These standards and practices have been used by CAAs for internal audits, ICAO audits, monitoring and continuous surveillance as they strive for the highest operational safety standards, which will facilitate the subsequent drafting of a Support Manual for Global Standardization.
- 2.6 Furthermore, it is recommended that the methodology the Organization uses for its technical assistance contracts with the States should be taken into account, as these contracts set out the steps required for effective monitoring through continuous surveillance by the authorities and technical experts from the ICAO, which has allowed the States to achieve greater efficiency and control of the CNS/ATM systems acquired as air navigation services.

3. **CONCLUSION**

3.1 On the basis of the foregoing, it is proposed that the Assembly should urge the Council to draft a guidance document for the certification of air navigation services that will systematically cover the certification of each of the processes, in accordance with the procedures manuals, standards and recommended practices issued by the International Civil Aviation Organization, and a study of the recommendations of other specialized international institutions adopted by CAAs, within the regulatory framework of the ICAO. The document should contain two chapters: one for the global air traffic management (ATM) system and a second chapter for the communications, navigation and surveillance/air traffic management (CNS/ATM) systems, in accordance with the information set out in this working paper.