



WORKING PAPER

ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 35: The Global Air Traffic Management (ATM) System

IMPLEMENTING THE GLOBAL AIR NAVIGATION SYSTEM – THE WAY AHEAD

(Presented by CANSO)

EXECUTIVE SUMMARY

States and industry share a common vision of an integrated, globally harmonised and interoperable air navigation system, one that will be able to provide sufficient capacity to meet the world's air transport needs in a safe, efficient and environmentally-friendly manner. Much has been done in ICAO to work towards the implementation such a globally harmonised and interoperable air navigation system. However, more needs to be done.

Action: The Assembly is invited to:

- a) Urge States to ensure that the appropriate policy framework is in place and the necessary legislative and regulatory changes are adopted that will lead to the realisation of a global ATM system;
- b) Recommend a thorough review of the GANP and its GPIs to ensure it remains fit for purpose for the coming 10 years; and
- c) Agree that the Twelfth Air Navigation Conference planned for November 2012 should take stock of the goals and objectives for achieving a global air navigation system, prioritise and rationalise the work program activity at ICAO, and integrate regional and global efforts with the full involvement of the industry.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives A and D.
<i>Financial implications:</i>	Not applicable
<i>References:</i>	Doc 9902, <i>Assembly Resolutions in Force (as of 28 September 2007)</i> Doc 9883, <i>Manual on Global Performance of the Air Navigation System</i> Doc 9882, <i>Manual on Air Traffic Management System Requirements</i> Doc 9854, <i>Global Air Traffic Management Operational Concept</i> Doc 9828, <i>Report of the Eleventh Air Navigation Conference (2003)</i> Doc 9750, <i>Global Air Navigation Plan</i> www.canso.org/globalvision

¹All language versions provided by CANSO

1. INTRODUCTION

1.1 For a number of years the air navigation service (ANS) industry has been under pressure to adapt to a new operating environment characterised by improved service performance. Aircraft operators are looking for “value for money” in the air navigation charges they pay, and the implementation of more efficient routes that will save on fuel costs and deliver environmental benefits. The regulatory community likewise is seeking improved safety, economic and environmental performance from air navigation services providers (ANSPs).

1.2 Many of the solutions require a collaborative approach involving all stakeholders in air traffic management (ATM) – ANSPs, aircraft operators, airports, manufacturers, and government policy-makers and regulators. Progress requires a new approach to providing air navigation services, one that is customer-focused, user-driven and based on sound business principles. Collectively, ANSPs must meet these challenges of the twenty-first century and provide seamless air navigation services, based on a cost-effective and efficient global system, with sufficient capacity to meet the world’s future air transport needs in a safe, efficient and environmentally-responsible manner.

2. DISCUSSION

2.1 As the global voice of ATM, one of CANSO’s main objectives is to improve global ANS performance. This is achieved through close cooperation between members across different fields of ANSP business operations. In order to support the development and promotion of best practices, CANSO unites ANSP experts to stimulate exchange of information and the development of global policies. Regular work group meetings, workshops and conferences ensure that all member ANSPs are fully aware of current industry trends and developments.

2.2 CANSO’s Global Vision on the Future of Air Navigation Services supports the creation of an integrated, globally harmonised and interoperable air navigation system, much in line with ICAO’s *Global ATM Operational Concept* (Doc 9854). The Global Vision (available at www.canso.org/globalvision) was completed in May 2007 with input from all CANSO members and relevant stakeholders, and identifies areas of change needed within the regulatory and operational domains in order to achieve a truly global ATM system that is:

- a) customer focused;
- b) people oriented;
- c) managed safely;
- d) secure;
- e) environmentally responsible; and
- f) appropriately regulated.

and, that is characterised by:

- a) a business approach;
- b) optimised ATM systems; and
- c) collaboration and cooperation.

2.3 Importantly, the CANSO Global Vision provides additional thinking on the institutional and operational changes that must be accommodated by all stakeholders – government and industry alike. States play an essential role in ensuring the appropriate policy framework is in place and the necessary legislative and regulatory changes are adopted that will lead to the realisation of a globally harmonised and interoperable air navigation system.

2.4 At an operational level, the goal is to assist ANSPs to provide services that are technically interoperable, procedurally harmonized, universally safe, and affordable. CANSO seeks an environment in which the majority of activities are performance-oriented, and in which the aircraft operator seamlessly transitions between Flight Information Regions (FIRs), or other vertical or horizontal airspace boundaries. Operating in this new environment should not require a considered action by airspace users as they transition airspace boundaries, nor present a noticeable change in: type or quality of service received; air navigation and communications performance standards; and standard practices to be followed.²

2.5 Today, there is a growing number of initiatives destined to revolutionize the way air traffic management will be conducted – ATM modernisation planning is underway in a number of States and includes programmes such as Single European Sky ATM Research (SESAR) in Europe and the Next Generation Air Transportation System (NextGen) in the United States and other regional initiatives. This current ATM modernisation effort will set the stage for operations and system development for the coming decades, and will impact ANSPs around the globe. As such, it is ever more critical today that the community come together to work collaboratively toward global harmonization and seamless ATM operations.

2.6 Much has been done in ICAO to work towards the implementation of a global air navigation system. The *Global ATM Operational Concept* was endorsed by the Eleventh Air Navigation Conference in 2003 (Doc 9828) , and provides a description of an integrated and global air navigation system and how it should operate, based on clearly established operational requirements. The *Global Air Navigation Plan* (Doc 9750) (GANP) was subsequently revised in consideration of the *Operational Concept* and the industry roadmap. It includes a set of twenty-three Global Plan Initiatives (GPIs) that provides a global performance framework for the implementation of the global air navigation system, which has since been adopted by the planning and implementation regional groups (PIRGs). A considerable amount of guidance material has been produced and regional workshops have been held to assist in the implementation efforts.

2.6.1 However, more needs to be done and a lot of what needs doing is in the institutional domain. Progress on a number of the GANP GPIs requires State attention to ensure appropriate policy, legislative and regulatory actions are taken for improved e.g. airspace procedures, civil/military cooperation and flexible use of airspace, airspace design and management, etc. Without such State action, the necessary improvements in service delivery may not materialize. In short, a global air navigation system cannot be achieved.

2.7 It is therefore time for the GANP and its GPIs to be solidly reviewed to ensure they are aligned with the realities on the ground and the institutional hurdles experienced to implementation. We need to improve our capability in implementation. To remain fit for purpose in guiding the international civil aviation community over the next ten years, the GANP needs to include a process to prioritize actions, and address on the roadblocks to implementation.

² CANSO's Seamless Airspace Workgroup has defined the characteristics of seamless airspace and its functional areas (Seamless Airspace Guidance Document)

2.8 The Twelfth Air Navigation Conference (AN-Conf/12) planned for November 2012 provides the international civil aviation community with a unique opportunity to take stock of its goals and objectives and prioritise work activities. There has been a proliferation of air navigation development and implementation activity, and there is a great need to prioritise and rationalise work program activity at ICAO and integrate regional and global efforts. The high-level objective must remain the creation of a global air navigation system, and this will require institutional action and operational change. The AN-Conf/12 event needs to bring together the leadership and decision-making authority to agree the goals and objectives and concrete steps to be taken over the next ten years, both by States and industry.

3. CONCLUSION

3.1 States and industry share a common vision of an integrated, globally harmonised and interoperable air navigation system, one that will be able to provide sufficient capacity to meet the world's air transport needs in a safe, efficient and environmentally-friendly manner. Much has been done in ICAO to work towards the implementation such a globally harmonised and interoperable air navigation system. However, more needs to be done:

- a) states should ensure the appropriate policy framework is in place and the necessary legislative and regulatory changes are adopted that will lead to the realisation of such a global ATM system;
- b) the GANP and its GPIs should be subject to a thorough review to ensure it remains fit for purpose for the coming 10 years; and
- c) the Twelfth Air Navigation Conference planned for November 2012 should take stock of the goals and objectives for achieving a global air navigation system, prioritise and rationalise work program activity at ICAO, and integrate regional and global efforts with the full involvement of industry.