

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 1 Introduction and assessment of a global air traffic management (ATM) : operational concept

IATA POSITION ON THE GLOBAL AIR TRAFFIC MANAGEMENT (ATM) OPERATIONAL CONCEPT AND THE NEED FOR AN ATM GLOBAL IMPLEMENTATION ROADMAP

(Presented by IATA)

SUMMARY

IATA Member airlines recommend that ICAO coordinate the Air Traffic Management (ATM) Operational Concept with the Global Air Navigation Plan and ensure that the Regional Implementation Plans are consistent with both. The operational concept should guide development of ICAO provisions and the implementation of specific ATM technology solutions.

IATA Member airlines also believe that a worldwide transition strategy is required and IATA has prepared a Global ATM Implementation Roadmap which the conference is invited to consider for incorporation into the global air navigation planning process.

For immediate operational benefits that take advantage of aircraft equipage, IATA Member airlines support the implementation of currently available ATM improvements.

IATA Member airlines consider that an essential element of the future ATM concept should be increasing aircraft autonomy by the transfer of certain procedures and responsibilities from ground-based to airborne separation assurance.

¹ Arabic, French and Spanish versions provided by IATA.

1. INTRODUCTION

1.1 The global aviation environment will be driven by the need to accommodate aviation's continued contribution to global economic development. The entire aviation community, inter alia, ICAO, Contracting States, airlines and other airspace users, share many expectations of the emerging air traffic management system.

1.2 The formulation of a clearly articulated air traffic management (ATM) operational concept by ICAO and its acceptance by the ICAO Contracting States are critical to global harmonization, compatibility and interoperability leading to improvements in safety, capacity, efficiency, environmental and other expectations of the ATM community.

2. ICAO OPERATIONAL CONCEPT

2.1 IATA Member airlines endorse the ATM Operational Concept and commend ICAO for its vision and commitment. The concept presented in AN-Conf/11-WP/4 describes a visionary, global, and seamless ATM system that effectively addresses the expectations of IATA Member airlines as expressed during development of the concept. The following are regarded by airlines as key elements of this concept:

- 1) gate-to-gate concept of operations;
- 2) four dimensional flight trajectory management;
- 3) minimal deviation from the user-requested flight trajectory;
- 4) establishment of a comprehensive safety management process;
- 5) strategic and tactical collaboration between members of the ATM community; and
- 6) increasing aircraft autonomy by the transfer of certain procedures and responsibilities from ground-based to airborne separation assurance.

2.2 The operational concept must guide global and regional ATM and CNS planning and the development of relevant ICAO provisions. It is crucial that the evolution to the global ATM system be driven by the need to meet the expectations of the airlines and the other members of the ATM community for continuous improvements in safety, capacity and efficiency, enabled by the appropriate technologies and processes. IATA Member airlines therefore emphasise the crucial importance of consultation with users, as the foundation for future investment and business decisions by the ATM community.

2.3 IATA Member airlines support ATM and CNS implementation following a stepwise, evolutionary, long-term implementation strategy accommodating air traffic and air traffic growth, efficiently and cost effectively, in accordance with market forecasts and airspace user needs.

3. GLOBAL ATM IMPLEMENTATION ROADMAP

3.1 Essential to achieving the future vision is a comprehensive transition strategy based on a roadmap detailing the migratory path necessary for all members of the ATM community to manage, in parallel, their activities. IATA Member airlines believe that a phased approach helps mitigate risk and ensures early availability of benefits.

3.2 With the objective of contributing to this transition strategy, IATA Member airlines have developed a Global ATM Implementation Roadmap (Appendix). It incorporates key elements of the ICAO ATM Operational Concept — collaborative decision making, dynamic airspace management, preference for strategic conflict management rather than tactical separation, flexible use airspace and all weather performance. This strategy includes the need to rationalize FIRs and the ATS organizations who manage the airspace. The Roadmap details a sequence of implementation steps rather than absolute implementation dates recognizing that regions will progress at different speeds depending upon user demands.

3.3 ICAO should coordinate the ATM Operational Concept with the Global Air Navigation Plan and ensure that the Regional Implementation Plans are consistent with both. States should implement the Regional Implementation Plans recognizing the longer-term vision of the ATM Operational Concept and the Global Air Navigation Plan to secure convergence towards a uniform gate-to-gate ATM system. The plans must include the airspace users. States must establish a performance driven planning process, including performance targets, strategy and objectives.

4. IMMEDIATE BENEFITS

4.1 Certain elements of the Roadmap are already available and are providing improvements in safety, capacity, efficiency and the environment in certain regions. As a result, airlines and other airspace users are deriving significant savings through improved flight profiles.

4.2 Accordingly IATA Member airlines encourage the adoption of these elements in a harmonised way over specific homogeneous ATM areas and/or major international traffic flows. Some examples are reduced vertical separation minima (RVSM), required navigation performance (RNP), area navigation (RNAV), high intensity runway operations, reduced runway separation and data link surveillance and communications.

5. ACTION BY THE CONFERENCE

5.1 In the interests of increasing safety, capacity, efficiency and the environmental benefits, the conference is invited to:

- a) note that IATA Member airlines endorse the ICAO ATM Operational Concept and recommend that it be established as the top-level guidance document for the future global ATM system;

- b) recommend that ICAO coordinate the ATM Operational Concept with the Global Air Navigation Plan and ensure that the Regional Implementation Plans are consistent with both. States should implement the Regional Implementation Plans recognizing the longer-term vision of the ATM Operational Concept and the Global Air Navigation Plan to secure convergence towards a uniform gate-to-gate ATM system;
- c) note that IATA Member airlines recommend the operational concept guide development of ICAO provisions and the implementation of specific ATM technology solutions;
- d) recognize there is a clear and urgent need for a worldwide transition strategy developed under the leadership of ICAO in consultation with airspace users and other members of the ATM community;
- e) recognize the benefits provided by the Global ATM Implementation Roadmap and recommend that it be considered by ICAO for incorporation into the global air navigation planning process;
- f) urge States to enable early improvements to ATM by implementation of elements listed in paragraph 4.2; and
- g) note that an essential element of future ATM should be increasing aircraft autonomy by the transfer of certain procedures and responsibilities from ground-based to airborne separation assurance.

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