

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 6 Aeronautical navigation : issues

AIRLINE POSITION ON AERONAUTICAL NAVIGATION NEEDS

(Presented by International Air Transport Association (IATA))

SUMMARY

IATA Member airlines support global implementation of the concept of required navigation performance (RNP) developed by ICAO and support GNSS as the primary radio navigation system for positioning and timing in the near future. This should not be construed to mean that GNSS is supported at any cost.

IATA Member airlines urge States, in close collaboration with airspace users, to move rapidly from the current ground-based system to a cost-effective, robust, harmonised, compatible, and interoperable space-based radio navigation system capable of being used in all airspace during all phases of flight.

States should implement GNSS procedures, in a coordinated manner, with a view to achieving as soon as possible worldwide navigation capability from en-route down to at least CAT 1 minima.

ICAO is the suitable body to take the lead in developing RNP Standards as soon as possible and urge States to transition all navigation procedures to these new global standards.

Action by the conference is in paragraph 2.

¹ Arabic, English, French and Spanish versions provided by IATA.

1. INTRODUCTION

1.1 The aviation community requires a worldwide system providing services that are safe and efficient, globally harmonised, compatible and interoperable and do not require different avionics and procedures in different regions. Airspace users require benefit-driven solutions.

1.2 Airspace users support global implementation of the concept of required navigation performance (RNP) developed by ICAO. RNP creates a seamless environment that allows standard aircrew procedures while allowing the most efficient operations based on navigation performance of available sensors rather than assumed worst-case performance.

1.3 RNP can be presently met using either global navigation satellite system (GNSS), the current ground-based navigation infrastructure, airborne self-contained systems or a combination of these. The choice of technology must, in all cases, be benefit driven, and selected in close collaboration with airspace users.

1.4 Subject to the demonstration of benefits, IATA Member airlines support GNSS as the primary radio navigation system for positioning and timing in the future, allowing navigation to migrate from a fragmented terrestrial system to an efficient global air navigation system.

1.5 States should — in collaboration with airspace users and subject to cost-benefit analyses — move from the current ground-based system to a harmonised, compatible, cost-effective and interoperable space-based radio navigation system capable of being used in all airspace during all phases of flight. States should implement GNSS procedures, in a coordinated manner, with a view to achieving as soon as possible worldwide navigation capability from en-route down to at least CAT 1 minima.

1.6 Airspace users should not be constrained for institutional reasons to the use of specific GNSS services when alternatives are available.

1.7 At the GNSSP/4 Meeting, it was recognised that without ICAO Standards and guidance there is the potential for proliferation of differing requirements in States and/or regions, which may eventually result in additional burden on aircraft operators and service providers. It was urged that “ICAO designate a suitable body to act as the focal point for further development of area navigation (RNAV) and RNP.”

1.8 In light of the urgent need for global harmonisation, it is recommended that ICAO take the lead in RNAV and RNP implementation issues and encourage States to develop all future procedures based on these standards. In addition, States should be encouraged to transition current procedures to conform to RNP Standards.

1.9 Safety analyses may indicate the need to retain certain ground systems in a back-up function, during the transition period.

2. **ACTION BY THE CONFERENCE**

2.1 The conference is invited to:

- a) support global implementation of the concept of required navigation performance (RNP) developed by ICAO;
- b) support GNSS as the primary radio navigation system for positioning and timing in the near future subject to cost-benefit analysis;
- c) urge States, in close collaboration with airspace users, to move rapidly from the current ground-based system to a harmonised, compatible, cost-effective and interoperable space-based radio navigation system capable of being used in all airspace during all phases of flight;
- d) urge States to implement GNSS procedures, in a coordinated manner, with a view to achieving, as soon as possible worldwide navigation capability including en-route and approach down to at least CAT 1 minima; and
- e) invite ICAO to take the lead in developing RNP Standards as soon as possible and urge States to transition all navigation procedures to these new global standards.

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