



**Twenty First Meeting of the  
Informal South Pacific ATS Co-ordinating Group (ISPACG/21)**

Auckland, New Zealand, 6-8 March 2007

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Agenda Item 4: Review progress on Open Action Items.

**FLIGHT PLAN STUDY GROUP – FOURTH MEETING**

(Presented by the ICAO Asia/Pacific Regional Office)

**SUMMARY**

This paper provides a summary of the Fourth Meeting of the ICAO Flight Plan Study Group (FPLSG/4), which was held at ICAO Headquarters in Montreal from 6 to 10 November 2006.

**1. INTRODUCTION**

1.1 The Fourth Meeting of the Flight Plan Study Group (FPLSG/4) was held at ICAO Headquarters in Montreal from 6 to 10 November 2006. Seven members and nine advisers from seven States (Australia, Canada, France, Japan, Singapore, United Kingdom and United States) and two international organizations (Eurocontrol, IBAC) attended the meeting.

1.2 The FPLSG/4 meeting continued with objectives to identify such flight plan data that might be required by the ATM community in order to support the realization of the Global ATM Operational Concept, as described in Doc 9854.

**2. DISCUSSION**

2.1 The following agenda was adopted for the meeting:

- Agenda Item 1: Focus Area 1 – Identification of flight data required by the ATM community, including necessary information for collaborative decision making;
- Agenda Item 2: Focus Area 2 - Enabling user preferred, dynamically optimized 4-D trajectory management, including filing of multiple trajectories with conditional declarations of preference;

- Agenda Item 3: Focus Area 3 - Changes that result from application of air traffic control and air traffic flow management measures, environmental restrictions, etc;
- Agenda Item 4: Focus Area 4 - Potential future mechanisms for flight information exchange;
- Agenda Item 5: Any other business

2.2 The meeting discussed general issues regarding the future flight plan, noting the following:

- a) the importance that the future flight plan fit into the aeronautical information management system, which was a key enabler for the global ATM operational concept;
- b) that the future flight plan provide information on trajectory intent, to support the notion of user preferred trajectories as envisaged in the ATM operational concept;
- c) that the future flight plan provide the necessary flexibility needed by the ATM community;
- d) the need to define the pre-planning, negotiation and agreement phases and to find some mechanism to show the level of commitment during these phases;
- e) a proposal that individual flight plans be filed for each aircraft in a formation;
- f) that global interoperability and seamlessness, as envisaged by the ATM operational concept, be emphasized; and
- g) the importance of timing issues being addressed, not least which information to provide at what stage during the flight planning process.

2.3 The meeting agreed to develop a concept document for the future flight planning system, comprising five broad sections:

- a) Why change? The section would seek to justify the new flight planning system on the basis of problems experienced and foreseen with the current system, and expected benefits with a new system. The relationship with other documents, including Doc 9854, as well as expected outcomes in terms of amendments to ICAO provisions would also be addressed;
- b) Discussion of the future flight planning environment and processes, in particular how the new system would work on a global basis;

- c) Migration of present flight plan elements into the new system, including a traceability matrix;
- d) Operational transition; and
- e) Technical environment, including flight object, exchange mechanism and communications.

2.4 The meeting recognized that following matters would need to be addressed in the concept document

- 1) Transition of the present flight plan items into the new flight plan;
- 2) Proposal concerning how to deal with formation flights in the new flight plan;
- 3) Phases of flight planning;
- 4) Recognition of information from other sources in order to minimize the need for input into the new flight plan;
- 5) Operational constraints / performance (description and explanation);
- 6) Assumptions, discussion of technical environment, including transport mechanism;
- 7) Transition: thoughts and possibilities;
- 8) RPL, entire process. Minimum requirements and minimum entries;
- 9) How to describe the trajectory and intent;
- 10) How to define and ensure equity;
- 11) The applications / approval field, including access provisions;
- 12) Recognition of the requirement for flexibility of the flight planning process to expand and/or adapt;
- 13) Operational impact of transition;
- 14) How to ensure data security, support technologies from outside aviation;
- 15) Impact on other ATS messages from the change to a new flight plan system;
- 16) Cost aspects;

- 17) How to handle re-routing;
- 18) Relationship between aircraft equipment and capabilities;
- 19) Sources and future uses of information; and
- 20) Why change? Benefits expected.

2.5 The first full draft of the concept document for future flight planning systems would be prepared by April 2007 for consideration by the next meeting of the Flight Plan Study Group commencing on 23 April 2007.

2.6 The meeting agreed that additional engineering expertise in the area of next generation data systems was necessary to the work of the FLPSG. Nominations of engineering experts should be provided to the Secretary no later than 30 November 2006.

2.7 Under Agenda Item 4 the meeting considered an initial concept of use for the Flight Object (FO) intended to provide a common framework for discussion prior to validation. The FO concept had been developed during a number of workshops involving Eurocontrol, the FAA and other stakeholders starting in 2003. The meeting reviewed the deficiencies of present flight data exchange mechanisms and listed the expected benefits of a new FO Interoperability Proposed Standard (FOIPS). A number of considerations for scoping and transition were also presented and the following main points were raised:

- a) it was noted that both the FAA and the Eurocontrol FO work were based on the Extensible Mark-up Language (XML). Few, if any, non-proprietary alternatives existed which could offer similar advantages to XML;
- b) it was essential that harmonization of terminologies take place as early as possible;
- c) the same FO service level might not be necessary for all parts of the world. Differentiation based on regional and national needs should be reviewed; and
- d) a first FO deliverable by an ICAO body should take place no later than the end of 2007.

2.7 The meeting recognized that the longer the time before a global FO standard would be developed, the more difficult it would be to achieve global harmonization. The meeting agreed that a window of opportunity now existed for the development of one interoperable global standard for FO. In light of the importance of information sharing to the realization of the global ATM operational concept, the meeting considered that ICAO should now actively promote and support such development work. This could take place either through the existing FPLSG or through the Air Traffic Management Requirements and Performance Panel (ATMRPP) within the framework of an on-going review of Panel work programmes by the Air Navigation Commission.

**3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to note the information presented in this paper.

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