



International Civil Aviation Organization

AIDC Review Task Force Meeting

Brisbane, Australia, 27-28 March 2003

Agenda Item 3: Develop an updated version of the Asia/Pacific ICD for AIDC

SURVEILLANCE ADS MESSAGE

SUMMARY

This working paper proposes an amendment to the Asia/Pacific Regional Interface Control Document (ICD) for ATS Inter-facility Data Communications by modifying the existing ADS message to provide the information necessary for an ATS unit to establish Automatic Dependent Surveillance (ADS) contracts with an aircraft.

(Presented by the FAA)

1 Background.

- 1.1 ATS units are required to provide flight plan and flight progress information to adjacent ATS units when flights under their control are operating in close proximity to FIR boundaries.
- 1.2 The APANPIRG developed an ICD to ensure that data exchanged between ATS units providing air traffic services in, and adjacent to, the Asia/Pacific Region is harmonized to a common standard and to ensure that evolutionary development is encouraged and coordinated centrally.
- 1.3 Version 1 of the ICD includes an optional surveillance data transfer service message, the ADS message, to be used in the transfer of ADS data over ground-ground links. The ADS message includes a text field to provide unspecified ADS data.
- 1.4 Since the adoption of the ICD, FANS-1/A equipped aircraft have been introduced into the Asia/Pacific region. ATS units throughout the region are utilizing the ADS ATC application onboard these aircraft to obtain position, velocity, and intent data.

2 Discussion.

- 2.1 The data obtained through an ADS contract with aircraft operating near their boundaries could be used by an ATS unit to supplement the flight plan and flight progress data provided by the adjacent ATS unit during the information transfer.

- 2.2 The messages currently defined to provide flight plan and flight progress data (e.g., ABI) for flights operating in close proximity to FIR boundaries using ground-ground data links do not have sufficient fields to provide the information necessary for an ATS unit to establish ADS contracts with these aircraft.
- 2.3 The additional information required to establish an ADS contract is the aircraft registration number, the airborne ADS application address, and the ADS application version number.
- 2.4 Modifying the ADS message Text field to include three sub-fields; /REG, /ADD, and /VER would allow for sending sufficient data for ADS contract establishment by the adjacent ATS unit during an information transfer.

3 Recommendation.

- 3.1 The meeting is invited to:
 - 3.1.1 Consider the contents of the working paper;
 - 3.1.2 Review the proposed amendment, and provide modification or enhancement;
 - 3.1.3 Consider amending the Asia/Pacific Regional Interface Control Document (ICD) for ATS Inter-facility Data Communications by modifying the existing ADS message to provide the information necessary for an ATS unit to establish Automatic Dependent Surveillance (ADS) contracts with an aircraft.