



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

APPLICATION STATUS MONITOR MESSAGE

SUMMARY

This working paper proposes an amendment to the Asia/Pacific Regional Interface Control Document (ICD) for ATS Inter-facility Data Communications adopting an Application Status Monitor message.

(Presented by the FAA)

1 Background.

- 1.1 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.
- 1.2 Since the adoption of the ICD several ATS units in the region have installed automation systems that present functionality incorporating the standards and messages put forth in the document. The use of this functionality to minimize the need for verbal coordination has been incorporated into the operating procedures of these ATS units to such a degree that the service is now virtually essential.

2 Discussion.

- 2.1 One of the evolutionary developments is that ATS units are now trialling dynamic airborne rerouting procedures to allow flights to request modified routing in order to take advantage of updated wind forecasts.
- 2.2 The routes requested by the flights utilizing this service often contain large numbers of waypoints, many of which are of the latitude/longitude format. The workload imposed on the controller to verbally coordinate these routes with the adjacent ATS unit is of such a magnitude that provision of this service would likely be halted if automated inter-facility data communications became unavailable.
- 2.3 Cross boundary flows in much of the region are widely fluctuating with extended periods during which no traffic is moving between a given pair of FIRs. During these periods, the true state of the inter-facility data communication interface is not known since no messages are being exchanged.

- 2.4 The essential nature of ATS inter-facility data communications within the Asia/Pacific region necessitates some automated method for timely notification when these interfaces become unavailable.
- 2.5 The North Atlantic Systems Planning Group has adopted an application management message, the Application Status Monitor (ASM), that is transmitted on a periodic basis in the absence of other application messages. The ASM can also be transmitted by technical personnel on an ad hoc basis as a part of system and service certification.
 - 2.5.1 The ASM message consists of ATS field 3a.
- 2.6 The failure to receive a Logical Acknowledgement Message (LAM) in response to the ASM can alert technical and operational personnel to the loss of the interface.

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 adding an Application Status Monitor message.