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

COORDINATING MACH NUMBER TECHNIQUE

SUMMARY

This paper proposes amendments to the AIDC ICD to facilitate the notification and coordination of assigned Mach Number or other speed control information.

(Presented by Australia)

1. Background

- 1.1 Currently, the specifications for ground to ground messaging do not cater for the transmission of clearances involving speed control (eg Mach Number Technique) in coordination (EST, PAC, CPL) or negotiation (CDN) messages.
- 1.2 Working Paper 5 presented at the OPLINKP meeting in Brussels in February 2003 proposed a method of coordinating an assigned Mach Number between two Air Traffic Services Units. The methodology behind the paper was to add a new field to the boundary estimate variable. A copy of this working paper is available if required.
- 1.3 This paper was accepted by the OPLINK Panel with no amendments. The amended information is in the process of being incorporated into an amendment for PANS-ATM Doc4444 and the Manual of Air Traffic Services Data Link Applications (Doc 9694).

2. Proposed amendment to AIDC ICD

2.1 Add new paragraph 4.5 (page 6) as follows:

"Mach Number Technique information

- 4.5.1 The boundary estimate variable may contain additional clearance information describing a Mach Number that has been assigned to an aircraft. This information shall contain:
 - an indication of whether an aircraft will be maintaining the notified Mach Number or less (L), the notified Mach Number or greater (G), or exactly the notified Mach Number (E)
 - the notified Mach Number; and

Example(s)

Ex1. BUGGS/0349F350F370GM085 The aircraft is operating in a block of levels between F350 and F370 (inclusive) maintaining M0.85 or greater

Ex2. PLUTO/0215F310O20REM076 The aircraft is offsetting 20nm right of track maintaining M0.76

4.5.2 The absence of speed information in the boundary estimate data of an AIDC message indicates that the previously assigned speed has been cancelled.

Ex3. SPEDY/1237F310F330BLM083 The aircraft is cleared to F310 and will cross SPEDY at or below F330, maintaining M0.83 or less;

subsequently followed by:

Ex4. SPEDY/1238F310 The aircraft will no longer be on descent at SPEDY, and has resumed normal speed (and one minute later than previously coordinated)

Note 1. The coordination of Mach Numbers by AIDC should only be made following regional air navigation agreement"

3. Recommendation

3.1 AIDC Review Task Force members are requested to consider the proposed amendment for the coordination of Mach Number Technique for incorporation into the AIDC ICD.
