



International Civil Aviation Organization

**SPECIAL IMPLEMENTATION PROJECT (SIP) ON ATS
INTER-FACILITY DATA COMMUNICATION
IMPLEMENTATION SEMINAR**

Bangkok, Thailand, 12-13 October 2010

Agenda Item 3: Review version 3 of the Asia/Pacific ICD for AIDC

- **Status of AIDC implementation in the region**

AUSTRALIAN IMPLEMENTATION OF AIDC

(Presented by Australia)

SUMMARY

This Information Paper provides an update concerning the current Australian implementation of AIDC.

1. INTRODUCTION

1.1 AIDC provides the means to automate routine coordination between ATS units. Provided that an adequate data communications link exists, AIDC provides a reliable and timely means for conducting coordination, with the potential to prevent the occurrence of simple errors that occasionally occur when voice coordination is in use.

1.2 Airservices Australia (ASA) first became AIDC-capable with the implementation of TAAATS (The Australian Advanced Air Traffic System) in 1998. At the time, the only version of AIDC that existed in the region was AIDC Version 1.0, based on the ICD released in June 1995.

2. DISCUSSION

2.1 ASA initially implemented AIDC domestically for flights crossing the Brisbane (YBBB) and Melbourne (YMMM) FIR boundaries. Since then, AIDC has been introduced across a number of international FIR boundaries:

	YBBB	YMMM
FIRs with which AIDC messaging has been introduced	<ul style="list-style-type: none">• NZZO (Auckland)• NFFF (Nadi)• KZAK (Oakland)• WAAF (Makassar) (trial status)	<ul style="list-style-type: none">• NZZO (Auckland)• FIMM (Mauritius)• FAJO (Johannesburg) (being introduced)

2.2 AIDC messages that are currently received and transmitted by TAAATS include:

- ABI (Advance Boundary Information)
- EST (Coordination Estimate)
- PAC (Preactivation)
- ACP (Acceptance)
- TOC (Transfer of Control)
- AOC (Assumption of Control)
- MAC (Coordination Cancellation)

2.3 Limited use of the CDN message is also available to propose revisions after coordination has occurred for flights operating between the YBBB and NZZO FIRs.

2.4 In addition to the messages listed above, AIDC application messages – LAM (Logical Acknowledgement Message) or LRM (Logical Rejection Message) – are transmitted as appropriate.

2.5 In 2007 the capability to transmit block level information in AIDC messages was introduced, in accordance with AIDC ICD V3. However, none of the additional V3 formats available for AIDC messages (e.g. weather deviation, Mach number) have currently been implemented, nor have any of the additional AIDC V3 messages (e.g. TRU, FAN, FCN etc) been introduced.

2.6 The increased implementation of AIDC has revealed the need for an automated means of alerting the controller in the event that a discrepancy exists between information that was coordinated to the next ATS unit and current flight plan information. Because of the automated nature of AIDC it may not be obvious to the controller exactly what information (e.g. estimate/level) has been coordinated and if this information differs from the current estimate/level of the aircraft.

2.7 The implementation of an alert in the event of a coordination discrepancy will further enhance the safety benefits that can be realized by the introduction of AIDC.

3. CONCLUSION

3.1 Where it has been implemented, AIDC has reduced controller workload, by automating routine tasks. This has in turn reduced coordination errors, as well as allowing the controller to concentrate on their primary task(s).
