



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

- **Complexities caused by the use of different versions of AIDC**

**THE ISSUES ASSOCIATED WITH IMPLEMENTING DIFFERENT
VERSIONS OF AIDC**

(Presented by Australia)

SUMMARY

AIDC Version 3 contains optional formats for AIDC messages that may not have been implemented by all ATS units. This information paper identifies some of the issues that need to be considered by States when upgrading their AIDC functionality.

1. BACKGROUND

1.1 When the Asia/Pacific AIDC ICD Versions 2.0 and 3.0 were being developed, the intention was for States implementing new AIDC versions to maintain backwards compatibility. This concept allowed continued interoperability with adjacent ATS units who had not updated their AIDC capability.

1.2 To support this concept, any new AIDC messages or message formats that were developed were defined as “optional”, and were only to be used only following bilateral agreement by both parties. This requirement means that a State introducing AIDC V3 must have the capability to control the format of messages sent to a specific ATS unit depending on the receiving ATS units’ AIDC capability.

2. DISCUSSION

2.1 When developing AIDC software, States need to consider that:

- An adjacent ATS unit may choose to implement only a subset of the current version of the AIDC ICD;
- Different adjacent ATS units may implement different subsets of the current version of the AIDC ICD; and

- The implementation of AIDC by an adjacent ATS unit not only affects the format of AIDC messages sent **to** that ATS unit, but also how AIDC messages received **from** that ATS unit are processed. This is best explained by way of the following example.

2.2 Example

A weather deviation has been previously coordinated for an inbound flight by the previous ATS unit. Subsequently a CDN message has been received from the previous ATS unit, proposing a change of level to FL350.

Depending on the AIDC capability of the previous ATS unit, this message could be processed in either of two different ways, as described below:

AIDC capability of previous ATS unit	Field 14 of CDN message received	Result
Previous ATS unit DOES support weather deviations in AIDC messages	14/SCUBY/2200F350 (Note that Field 14 of this CDN does not contain any off track information)	<p>This CDN:</p> <ul style="list-style-type: none"> • Proposes a change of level to FL350; and • Provides information that the aircraft is back on route (due to the absence of off track information in Field 14)
Previous ATS unit DOES NOT support weather deviations in AIDC messages	(Note that Field 14 of this CDN does not contain any off track information)	<p>This CDN only proposes a change of level to FL350.</p> <p>No conclusion can be drawn from the absence of off track information in Field 14. Any “Back on Route” information needs to be coordinated by voice (or other means)</p>

When developing automation, it is important that this difference in functionality is taken into account when the CDN message – or any other AIDC message – is processed.

3. CONCLUSION

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