



International Civil Aviation Organization

**THE SEVENTH MEETING OF AERONAUTICAL
TELECOMMUNICATION NETWORK (ATN)
TRANSITION TASK FORCE OF APANPIRG**

Shanghai, China, 18-22 April 2005.



Agenda Item5: Review status of AIDC document

CURRENT STATUS OF THE ATN AIDC APPLICATION

(Presented by the Rapporteur of the ATNTTF Working Group)

SUMMARY

This paper presents the status of the ATN AIDC application.

1. INTRODUCTION

1. The Working Group of the ATN Transition Task Force of APANPIRG is currently developing an Interface Control Document (ICD) for the ATN ATS inter-facility ground/ground data communications (AIDC) application. This working paper reports on the current status of the ATN AIDC application, and on related developments in other regional bodies.

2. AIDC ACTIVITIES

2.1 Standards Development by ICAO

2.1.1 Operational Requirements for Version 2 AIDC

ICAO Doc 9705 Edition 3 defines Version 1 of the AIDC application. Working Group N of the Aeronautical Communications Panel (ACP WGN) is currently awaiting a revised set of AIDC operational requirements from the OPLINK panel before proceeding with the development of specifications for a Version 2 AIDC. These operational requirements must be approved by a meeting of the OPLINK Panel before they become available to ACP WGN for work

The OPLINKP/1 meeting is anticipated in October 2005. However, the summary of meeting discussions of the recent OPLINKP Joint WGA/WGB meeting in Toulouse (13–24 September 2004) expressed “a concern that AIDC may not be ready for OPLINKP/1”. This was noted by the ACP WGN/4 meeting (New Orleans, November 2004), and it was subsequently noted in the ACP WGN/4 meeting report that “there would be no AIDC Version 2 delivery to the ACP/1 meeting”. OPLINKP WGB (21–25 February 2005) has since discussed AIDC and PANSATM4444 for amendment, but the status of these discussions, and whether material will be available for OPLINKP/1, is not known.

The timing for when ACP WGN might be able to start development of Version 2 AIDC is therefore uncertain.

2.1.2 ATN Security and AIDC

It was noted at the ACP WGN/2 meeting (Bangkok, 2003) that the ATN security solution cannot be applied to Version 1 AIDC owing to the fact that it does not use the Dialogue Service. Possible solutions have been mooted to address this deficiency, including re-specifying AIDC over the GACS application, and enabling applications to invoke the Security Service Object (SSO) directly rather than through the UCLS SASO. However, such developments will probably await work starting on AIDC Version 2.

2.2 Other Bodies

The Regional Airspace Safety Monitoring Advisory Group (RASMAG) of APANPIRG has drafted guidance material on the methodologies for monitoring the performance of ATS data link applications, including AIDC (*Draft Guidance Material for End-to-End Safety and Performance Monitoring of Air Traffic Service (ATS) Datalink Systems in the Asia/Pacific Region*). This is expected to be reviewed at the RASMAG/3 meeting (April/May 2005) with the aim of seeking endorsement by APANPIRG/16 as standard guidance material for end-to-end safety and performance monitoring of ATS data link systems in the Asia/Pacific region.

3. DISCUSSIONS

3.1 Impact on the ATN AIDC ICD

Under the current circumstances, the ATNTTF Working Group believes that it would be difficult to proceed with the development of the Interface Control Document for ATN AIDC Version 1, since this is likely to be obsoleted by AIDC Version 2 and new operational requirements are still being drafted.

Delaying work on the ICD is not expected to have an adverse impact on the deployment of AIDC in the region as existing operational requirements are currently being met by APANPIRG AIDC.

Recommendation: *It is recommended that work on the Interface Control Document for the ATN AIDC be delayed until operational and performance criteria have been properly addressed by the appropriate bodies within ICAO.*

3.2 AIDC Performance Requirements

The guidance material currently being drafted by RASMAG establishes guidelines for safety and performance monitoring of ATS data links, including AIDC. However, there are questions over the benefits of performance monitoring without first determining the performance requirement. Further, while it is desirable that performance metrics be standardised, the RASMAG proposal is not aligned with global metrics.

Recommendation: *It is recommended that the ATN Transition Task Force continue to work on AIDC performance requirements based on the ICAO Required Communications Performance (RCP) Manual; however, the ATNTTF should monitor the development of the draft RASMAG guidelines.*

3.3 **APANPIRG AIDC and ATN AIDC**

Some States in the Asia/Pacific region are currently using “APANPIRG AIDC” for automated communication between ATS facilities. “APANPIRG AIDC” uses the AFTN message format, and is not compatible with ATN AIDC. Further, it will not be compatible with the new operational requirements identified by OPLINKP.

There is a need eventually to transition from APANPIRG AIDC to ATN AIDC. The timescale of such a transition must be identified, and a transition plan formulated, to allow States that are considering implementing AIDC to be able to plan effectively.

4. **ACTIONS BY THE MEETING**

The meeting is invited to review this working paper and discuss the above recommendations. The meeting is also invited to review the plans for transition from APANPIRG AIDC to ATN AIDC.
