



*International Civil Aviation Organization*

**THE SECOND MEETING OF ASIA/PACIFIC ATS INTER-FACILITY  
DATA COMMUNICATION (AIDC) IMPLEMENTATION TASK  
FORCE (APA TF/2) OF APANPIRG**

Bangkok, Thailand, 16 - 18 March 2016

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**Agenda Item 5:      Sharing of experience on AIDC implementation including plan for use of  
Pan regional ICD for AIDC and update implementation status**

**PROGRESS OF AIDC IMPLEMENTATION**

(Presented by Singapore)

**SUMMARY**

This paper presents the progress of AIDC implementation in Singapore with adjacent FIRS and the plan use of the Pan regional ICD for AIDC.

**1.      INTRODUCTION**

1.1            Singapore has collaborated with neighboring States to operationalize AIDC implementation. Technical and operational trials were conducted and AIDC has been implemented with Ho Chi Minh ACC.

1.2            Singapore is currently upgrading its ATM system to AIDC ICD version 3.0. Future upgrade to the newly adopted PAN regional ICD will be planned after the current software upgrade has stabilised.

**2.      COLLABORATION WITH NEIGHBOURING STATES**

Viet Nam (Ho Chi Minh FIR)

2.1            Singapore and Viet Nam adopted a multi-phased approach in introducing AIDC communications. Phase 1 implementation had commenced on 24 July 2014 and consisted of EST, ACP, LAM and LRM AIDC messages.

2.2            Operational trial for Phase 2 implementation had commenced since 22 June 2015 consisting of ABI, TOC and AOC messages. During the operational trial, it was found that the ABI message was not successfully processed due to pre-2012 flight plan format details captured in field 18.

2.3            Singapore is exploring alternate connection links with Viet Nam for AIDC message exchanges as existing potential AFTN network latency issues could cause disruption to AIDC message exchanges. Singapore is also working with Viet Nam to implement other relevant AIDC messages to improve the AIDC implementation between the 2 ATS units.

Malaysia (Kota Kinabalu, Kuching and Kuala Lumpur ATCCs)

2.4 Singapore and Malaysia had completed technical trials on 24 April 2015 with Kota Kinabalu, Kuching and Kuala Lumpur ATCCs. Subsequently, operational trials were carried out with Kota Kinabalu ATCC from 15 October to 14 November 2015 and Kuching ATCC from 15 November to 22 November 2015.

2.5 During the two operational trials with Kota Kinabalu and Kuching ATCCs, issues with odf3 parameter were encountered. As a result, the planned operational trial with Kuala Lumpur ATCC in December was postponed pending investigations. A second technical trial with Kuala Lumpur ATCC was held on 29 February 2016 and results shown that there was no issue with odf3 parameter hindering the AIDC communication with Kuala Lumpur ATCC.

2.6 Once the identified technical issues have been resolved, operational trials will resume with the ACCs. The operational parameters will also be reviewed at the end of the trials and a revised implementation plan will be formulated.

Philippines (Manila FIR)

2.5 Singapore and Philippines had previously conducted technical trials in December 2014 to test AIDC messages and identify potential issues. Both States have agreed to conduct further technical testing once the software correction has been completed. Even though the new test dates have yet to be finalised due to conflicting schedules of both States, they are expected to resume no later than May 2016.

Indonesia (Jakarta FIR)

2.6 Singapore is ready to commence discussions with Jakarta ATCC on AIDC trials as soon as practicable.

2.7 The various activities that has been conducted or planned for AIDC implementation with adjacent FIRs are summarised in the table below:

State/ATC unit	Technical Test commencement	Implementation Date	AIDC message set	Remarks
Vietnam / Ho Chi Minh ACC	December 2013	24 July 2014	Phase 1 (24 <sup>th</sup> July 2014): EST, ACP, LAM, LRM Phase 2 (3Q2015): ABI, TOC, AOC	Phase 2 operational trials started on 22 June 2015 to present.
Malaysia/ Kuala Lumpur, Kota Kinabalu and Kuching ATCCs	December 2014	December 2015: Kota Kinabalu ATCC January 2016: Kuching ATCC February 2016: Kuala Lumpur ATCC	ABI, EST, ACP, LAM, LRM, TOC, AOC	Messages for different phases and ATCCs are yet to be finalized. Coordination meeting held in Feb 2016 to set new dates for technical testing.
Philippines/ Manila ACC	December 2014	December 2015	ABI, EST, ACP, LAM, LRM, TOC, AOC	Initial testing December 2014 with interim system. Further technical testing will be scheduled for May 2016.
Indonesia/Jakarta ATSC	TBA	December 2016*	ABI, EST, ACP, LAM, LRM, TOC, AOC	Jakarta ATSC expected AIDC capability in September 2015. Discussions on AIDC implementation to commence once Jakarta is ready

#### Use of Pan regional ICD

2.8 In order to ease the introduction of AIDC into operations, Singapore had taken a phased approach to introduce AIDC functionality into ATM system. The ATM system was commissioned with AIDC ICD version 1.0, introducing the basic set of messages available for AIDC communication. An upgrade to the software (AIDC ICD version 3.0) will be completed this year to enable the system to fully utilize the full message set made available in the AIDC version.

2.9 Singapore will plan for the upgrade to implement Pan regional ICD for AIDC in ATM system after the introduction of AIDC ICD version 3.0 in ATM system has stabilised.

**3. ACTION REQUIRED BY THE MEETING**

3.1 The meeting is invited to:

- a) note the information contained in this papers; and
- b) discuss any relevant matters as appropriate.

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