

# AIDC SEMINAR – CAIRO 3-5 MARCH 2014

## APANPIRG CONCLUSIONS & AIDC IMPLEMENTATION STATUS IN APAC

(Presented by the Secretariat)

### 1. INTRODUCTION

1.1 The 24<sup>th</sup> Meeting of the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/24) was held in Bangkok, Thailand, from 24 – 26 June 2013. Subsidiary bodies considering AIDC matters had earlier met as follows:

- The Combined 3<sup>rd</sup> Meeting of the South Asia/Indian Ocean ATM Coordination Group (SAIOCG/3) and 20<sup>th</sup> Meeting of the South-East Asia ATS Coordination Group (SEACG/20), Bangkok, Thailand, 18 – 22 February 2013;
- The 18<sup>th</sup> Meeting of the Regional Airspace Safety Monitoring Advisory Group (RASMAG/18, Bangkok, Thailand, 27 March – 04 April 2013);
- The 17<sup>th</sup> Meeting of the Communications/Navigation and Surveillance Sub-Group (CNS SG/17); and
- The 1<sup>st</sup> Meeting of the APANPIRG Air Traffic Management Sub-Group (ATM/SG/1), Bangkok, Thailand, 20 – 24 May 2013);

1.2 This paper introduces AIDC related Conclusions arising from APANPIRG/24, and briefly discusses other issues impacting upon the effectiveness of AIDC messaging in the Asia/Pacific Region.

### 2. DISCUSSION

2.1 ATM/SG/1 considered and broadly discussed a Draft Conclusion regarding AIDC messaging. The proposal had originated at the Combined SAIOCG/3 and SEACG/20 meeting, and included five messages which States should implement. APANPIRG/24 subsequently agreed to the following Conclusion:

#### **Conclusion 24/17 - AIDC Implementation**

Recognizing that States implementing AIDC messaging may be doing so without previous knowledge or experience, and significant safety, ATC capacity and workload benefits arise from implementation of an appropriately selected initial suite of AIDC messages;

States should:

- a) engage as soon as possible in AIDC trials to develop knowledge and address any related ATM or communications system issues;
- b) implement operational AIDC messaging as a matter of priority, in accordance with APANPIRG Conclusion 19/19<sup>1</sup>; and

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<sup>1</sup> APANPIRG/19, Bangkok, Thailand, 1 – 5 September 2008, agreed to Conclusion 19/19: *That, States be urged to expedite implementation of AIDC between neighbouring ATS facilities in accordance with the Regional Air Navigation Plan and the Asia/Pacific AIDC ICD.*

- c) implement as far as practicable, the AIDC messages Advanced Boundary Information (ABI), Coordinate Estimate (EST), Acceptance (ACP), Transfer of Control (TOC) and Assumption of Control (AOC).

2.2 Other recommendations identified by the SAIOACG and SEACG Surveillance (SUR) Small Working Groups (SWG) included the following:

*States with overlapping surveillance coverage should implement direct speech circuit to allow tactical coordination between surveillance controllers, in addition to AIDC, instead of relaying the information.*

2.3 ATFM/SG/1 also discussed post-implementation issues arising from the use of converter solutions to implement Amendment 1 to the 15<sup>th</sup> Edition of ICAO Doc 4444 (PANS/ATM). It was noted *inter alia* that the interoperability of AIDC messaging would remain restricted where converter solutions were in use. The following related Conclusion was subsequently agreed by APANPIRG/24:

**Conclusion 24/10: Reliance on FPL and ATS Message Converters**

That, considering the airspace capacity, efficiency and safety benefits intended by the full implementation of PANS/ATM Amendment 1 changes, States are urged to:

- a) report to the ICAO Asia/Pacific Regional Office the:
  - i. current status of ATM automation and conversion systems; and
  - ii. planned date of implementation of full capability to process NEW format FPL and ATS messages without conversion; and
- b) where converters are utilized, upgrade ATM Automation and supporting systems to fully support Amendment 1 changes without using converters.

2.4 RASMAG/18 had discussed the analysis of Large Height Deviation (LHD) hotspots in the Asia/Pacific Region, noting that Category E LHDs (ATC to ATC transfer errors as a result of human factors issues) formed a significant portion of the total reports. Stemming from this analysis there appeared to be an urgent need for prioritization of AIDC implementation as a risk mitigation measure at a number of interface hotspots. The following Conclusion was subsequently adopted by APANPIRG/24:

**APANPIRG Conclusion 24/27: Prioritization of AIDC Implementation to Address LHDs**

Considering that ATS Inter-facility Data Communications (AIDC) is an important means of minimizing Large Height Deviations (LHD), Asia/Pacific States should support the expedition of AIDC through collaborative projects at the following significant LHD interface areas:

- a) Indonesia: between Jakarta and Chennai/Ujung Pandang/Brisbane/Melbourne FIRs;
- b) India: between Chennai and Kuala Lumpur FIRs;
- c) Philippines: between Manila and Fukuoka/Taipei/Hong Kong/Ho Chi Minh/Singapore/Kota Kinabalu/ Ujung Pandang FIRs; and

- d) China: between –  
i. Urumqi and Lahore FIRs; and  
ii. Beijing and Ulaan Baatar FIRs.

2.5 In considering the report of CNS SG/17, and noting the activities of the Inter-Regional AIDC Task Force (IRAIDCTF), APANPIRG/24 encouraged States/Administrations to participate in the Task Force's activities and contribute to its work.

2.6 **The AIDC implementation status in the Asia/Pacific Region is appended at Attachment A.**

### ATTACHMENT A

#### AIDC IMPLEMENTATION STATUS IN THE APAC REGION

Country Administration /Country Administration	ATS Unit A	ATS Unit B (Counterpart)	Remark: Date of implementation
Australia	Brisbane	Melbourne	Implemented
Australia/New Zealand	Brisbane	Auckland	Implemented
Australia/New Zealand	Melbourne	Auckland	Implemented
Australia/Fiji	Brisbane	Nadi (Oceanic)	Implemented
Australia/Mauritius	Melbourne	Mauritius	Implemented
Australia/South Africa	Melbourne	Johannesburg	Implemented
Australia/USA	Brisbane	Oakland	Implemented
Australia/Indonesia	Brisbane	Ujung Pandang	Undergoing operational trial from May 2013
China	Sanya	Hong Kong	8 Feb. 2007
	Hong Kong	Taipei	12 Nov. 2012
	Guangzhou	Nanning	Implemented
	Guangzhou	Zhanjiang	Implemented
	Guangzhou	Zhuhai	Implemented
	Nanning	Kunming	2011
	Nanning	Guiyang	2011
	Nanning	Zhanjiang	2011
	Zhanjiang	Haikou	Implemented
	Chengdu	Chongqing	2011
	Chengdu	Guiyang	2011
	Guiyang	Chongqing	2011
	Guiyang	Kunming	2011
Fiji/USA	Nadi	Oakland	Implemented
India			Being implemented at all ATCC plus 32 Aerodromes
India/Pakistan	Mumbai	Karachi	Under Trial
Japan/USA	Fukuoka ATM Center	Oakland ARTCC	Implemented
	Fukuoka ATM	Anchorage ARTCC	Implemented
Japan/Republic of Korea	Tokyo ACC	Incheon ACC	Implemented
	Fukuoka ACC	Incheon ACC	Implemented

Japan/Taipei, China	Fukuoka ACC	Taipei ACC	March 2012
	Naha ACC	Taipei ACC	Implemented
Malaysia	Kota Kinabalu	Kuching	Implemented
New Zealand/Fiji	Auckland	Nadi (Oceanic)	Implemented
New Zealand/USA	Auckland	Oakland	Implemented
New Zealand/France	Auckland	Tahiti	Implemented
Pakistan	Karachi	Lahore	Implemented

**SOME AIDC CIRCUITS BEING PLANNED AND/OR UNDER TRIAL ARE LISTED  
FOLLOWS:**

Country Administration /Country Administration	ATS Unit A	ATS Unit B (Counterpart)	Remark: Date of implementation
Bangladesh	Dhaka	Chittagong Dhaka	System being updated
	Dhaka	Sylhet	Planned
China/Republic of Korea	Qingdao	Incheon	Planned for 2013
DPR. Korea	Pyongyang	Adjacent ACCs	Planned
Indonesia/Australia	Makassar	Brisbane	On-going trial
Malaysia	Kuala Lumpur	With adjacent ATS Units	By end of 2013
Maldives	Male	With neighboring ACCs	ATM system software already upgraded to support AIDC
Maldives/Sri Lanka	Male	Colombo	Planned for 2013
Mongolia	Ulaanbaatar	With China (AIDC) and Russia (OLDI)	ATM supports OLDI and AIDC discussion with the concerned for implementation
Myanmar	Yangon	All adjacent ATS units	ATM system is ready in 2013
Philippines	Manila	Fukuoka ATM	Planned for 2015
Thailand	Bangkok		Together with ATM system upgrades
Viet Nam			Trial conducted in 2012, implementation planned for 2013

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