



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

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

**PROGRESS OF AIDC IMPLEMENTATION – CHENNAI (INDIA) WITH
KUALA LUMPUR, COLOMBO AND MALE**

(Presented by Airports Authority of India)

SUMMARY

This paper presents the progress made and issues experienced during the implementation of AIDC between Chennai and Kuala Lumpur and resolutions/work-around for the identified issues. The paper also presents status of AIDC implementation with Colombo and Male.

1. INTRODUCTION

1.1. In pursuance of Critical ASBU Upgrades B0-FICE, AIDC implementation is under progress between various ATSU's within India as well as with neighboring states' ATSU's.

1.2. Chennai and Kuala Lumpur commenced the AIDC testing from September 2014. Initially Chennai was using the Operational Segment and Kuala Lumpur was using the Training Segment for testing. Subsequently Kuala Lumpur started the testing using the operational segment.

2. DISCUSSION

2.1. During initial phase of implementation of AIDC between Chennai and Kuala Lumpur, various issues cropped up, and were addressed subsequently.

2.2. In December 2015 AIDC Trial operations were conducted for a period of 3 weeks between Chennai and Kuala Lumpur operational segment with voice confirmation. After successful completion, thereafter, AIDC trial operations without voice confirmation were commenced from 25th February 2016.

2.3. Intensive controller training, both theoretical and practical was imparted to all Oceanic rated controllers prior to start of the AIDC trial operations conducted without voice confirmation.

2.4. During the testing and trial operations various issues were experienced which were analyzed to determine the underlying cause(s).

2.4.1. AIDC messages containing Waypoints represented as latitude/longitude were getting rejected by Chennai Automation System. On analyzing it was found that the Kuala Lumpur system was transmitting latitude/longitude in DDMSS format whereas the Chennai Automation system was configured to accept latitude/longitude only in DDMM format. The AIDC ICD Version 3 in para 2.4.3.2 states that, “*Waypoints are represented as latitude/longitude or named en route points*”, without explicitly mentioning the format as DDMM or DDMSS. This has led to different interpretation by the vendors. However this issue could be resolved once the Pan Regional ICD is used for AIDC implementation.

Resolution/Work-around: The issue has been addressed temporarily, by not exchanging CPL and resorting to exchange of only abbreviated initial coordination (EST) with the adapted Change Over Point (COP), as named way point.

2.4.2. Kuala Lumpur reported instances of Coordination failure from Chennai whereas the indication at Chennai system was “Coordination effected successfully”. Investigation revealed that the Application Response (LAM) transmitted by Chennai system in response to the Coordination Acceptance (ACP) message from Kuala Lumpur, was not received by Kuala Lumpur system within the adapted response time. In such a scenario the Chennai controller will totally be unaware of the coordination failure with Kuala Lumpur Control. Whereas in a similar situation when LAM is not received within the adapted response time at Chennai, the system at Chennai is still capable of generating the flight progress strips (FPS) and the electronic strips (FDE) after transmitting ACP to Kuala Lumpur. The Chennai controller will get an indication CO/ACP/LTO, indicating that the coordination has been accepted but with LAM timeout.

2.4.3. Besides, there were instances of AIDC transaction failure due application response time out due to latency in the AFTN. This was especially experienced during re-routing of messages caused by the failure of direct AFTN link between Chennai and Kuala Lumpur.

Resolution/Work-around: For the issues at 2.4.2 and 2.4.3, the adapted applicable response time was increased from 60 to 120 seconds in Chennai system and to 180 seconds in Kuala Lumpur system. Further, Chennai requested Kuala Lumpur to consider having the system to print the FPS and display of FDE after transmitting of ACP.

2.5. As part of AIDC implementation with other adjoining states, AIDC testing between Chennai-Colombo and Chennai-Male commenced in early 2015. Draft LOA has been provided to Male. Subsequently, it is expected that AIDC trial operations with these states will commence soon.

2.6. Further Chennai is ready to commence testing of AIDC operations with Yangon and Jakarta as committed in BOBASIO/5 meeting held at Kolkata, India.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this papers;
- b) urge member states adjoining Chennai FIR to commence AIDC trial operations at the earliest in accordance with RASMAG recommendation; and
- c) discuss any relevant matters as appropriate.
