



International Civil Aviation Organization

**Third Meeting of the ICAO Asia/Pacific Seamless ATM Planning Group
(APSAPG/3)**

Chennai, India, 21-25 January 2013

Agenda Item 4: Asia/Pacific Seamless ATM Status and Strategies

SEAMLESS ATM ACTIVITIES BETWEEN MALAYSIA AND THAILAND

(Presented by Malaysia and Thailand)

SUMMARY

Pursuing Regional Seamless ATM, states/administrations in the region should be aware of all changes and developments, as well as cooperate with their neighbors to ensure smooth flow of traffic. This paper presents Seamless ATM collaboration between Malaysia and Thailand. Each of the activities can be aligned with ICAO Aviation System Block Upgrades, supporting APAC Seamless ATM Plan.

This paper relates to –

Strategic Objectives:

- A: *Safety – Enhance global civil aviation safety*
- C: *Environmental Protection and Sustainable Development of Air Transport – Foster harmonized and economically viable development of international civil aviation that does not unduly harm the environment*

Global Plan Initiatives:

- GPI-5 RNAV and RNP (Performance-based navigation)
- GPI-6 Air traffic flow management
- GPI-8 Collaborative airspace design and management
- GPI-16 Decision support systems and alerting systems
- GPI-17 Data link applications
- GPI-22 Communication infrastructure

1. INTRODUCTION

1.1 As all states in the Asia/Pacific region are moving towards Seamless ATM operations, it is important for all to step forward together in harmony across various efforts and plans implemented throughout the APAC region. States/administrations in the region should be aware of all changes and developments, as well as cooperate with their neighbors to ensure smooth flow of traffic.

1.2 Malaysia and Thailand would like to update the status of major Seamless ATM activities being planned and implemented together.

2. DISCUSSION

Malaysia-Thailand Aviation Consultative Committee (ACC)

2.1 Malaysia and Thailand have established an ACC as a standing committee which meets twice a year. This floor serves to ensure mutual understanding and cooperation between the two states. Some of the resulting initiatives related to Seamless ATM are Surveillance Data Sharing, Direct Communication Line between Bangkok and Kuala Lumpur ACCs, Thailand-Malaysia-Singapore Route Network, and CDM initiative.

Surveillance Data Sharing

2.2 Plan for Surveillance Data Sharing is ongoing to establish a system and agreement for ANSPs of both states to be able to share and utilize surveillance data, with seamless sky as its ultimate goal. This initiative will mitigate the coverage limitations currently being experienced by both ANSPs through surveillance data sharing along the border between the two states.

2.3 During the 17th Malaysia-Thailand Aviation Consultative Committee (ACC) Meeting held on 3-5 July 2012, both states agreed to continue this initiative with:

- a) Malaysia Civil SSR Site: Langkawi and Kota Bharu;
- b) Thailand Civil SSR Site: Phuket and Hat Yai; and
- c) Target Implementation Timeframe: 2013-2015.

2.4 This initiative is aligned with Aviation System Block Upgrades (ASBUs) as follows:

- a) B0-35 Improved Flow Performance Through Planning Based On a Network-Wide View.

Direct Communication Line between Bangkok ACC and Kuala Lumpur ACC

2.5 Additional direct communications lines between the radar controllers at the Bangkok and Kuala Lumpur ACCs are currently being implemented to further reduce longitudinal separation by harnessing the overlapping surveillance coverage. Plans are under development to complement this with AIDC. This has been a continuous effort to improve ATM between the two FIRs.

2.6 Status updates for AIDC are as follows:

- a) Malaysia has completed upgrading and internal testing, and is expected to commence external trials in the near term.
- b) Thailand is expected to implement a new system upgrade (ATMC) by 2014-2015, which will be AIDC-capable.

2.7 This initiative is aligned with ASBUs as follows:

- a) B0-25 Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration

Thailand-Malaysia-Singapore Route Network

2.8 Malaysia has reviewed route structure in cooperation with Singapore to streamline traffic between the two States. Currently, Malaysia and Thailand are working closely together, in response to Malaysia's proposal, to extend this route network into Bangkok FIR ensuring seamless ATM operations in the region. The proposal involves airspace and route structure reviews in order to establish parallel unidirectional RNAV5 routes, harnessing the major traffic flow between Thailand, Malaysia, and Singapore.

2.9 Thailand is currently reviewing its airspace and route structure and is considering the proposed parallel unidirectional RNAV5 routes. This initiative is expected to improve traffic flow between Thailand, Malaysia, and Singapore. It is expected to be completed by 2015.

2.10 This initiative is aligned with ASBUs as follows:

- a) B0-10 Improved Operations through Enhanced En-Route Trajectories

CDM Network

2.11 CDM is an important module of the ICAO ASBUs and it also provides an excellent opportunity to develop a Seamless ATM in the APAC region. Additionally, CANSO and ACI have recently signed a memorandum of cooperation at the global level to promote the roll out of CDM programs world-wide.

2.12 The CDM pilot project advanced into two live trials occurring in July and August 2012 between Bangkok and Singapore with DCA Malaysia as an en route ANSP.

- a) In 2013, CDM is expected to transition into operation with automation linkages between Bangkok and Singapore, with trial expansion to include Hong Kong as its third major city
- b) From 2014, the CDM Network will be expanded to other neighboring major cities.

2.13 In the meantime, Malaysia and Thailand are also supporting Asia-Pacific Economic Cooperation (APEC) project on Air Traffic Management Emissions Reduction through the implementation of ATFM/CDM systems and procedures. The project involves the study of operational and environmental benefits from the implementation of ATFM/CDM between major city pairs as well as other areas, taking Bangkok – Kuala Lumpur as an example. The study report is expected to be compiled by 2013.

2.14 This initiative is aligned with ASBUs as follows:

- a) B0-80 Improved Airport Operations Through Airport-CDM
- b) B0-10 Improved Operations Through Enhanced En-Route Trajectories

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

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

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