



International Civil Aviation Organization

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

Chennai, India, 21-25 January 2013

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

**SEAMLESS ATM BUILDING BLOCKS BETWEEN MALAYSIA AND SINGAPORE**

(Presented by Malaysia and Singapore)

**SUMMARY**

While the introduction of new Aviation System Block Upgrade (ASBU) initiatives in the region entails new systems to be implemented, close cooperation and coordinated working relations between States forms a good basis for future transformation. This paper presents some of the seamless ATM activities between Malaysia and Singapore that will form the building blocks for future enhancement.

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-1 Flexible use of airspace
- GPI-5 RNAV and RNP (Performance-based navigation)
- GPI-6 Air traffic flow management
- GPI-8 Collaborative airspace design and management

**1. INTRODUCTION**

1.1 At the 1st meeting of the ICAO Asia/Pacific Seamless ATM Planning Group (APSAPG) in Jan 2012, it was decided that the planning group will develop the Asia/Pacific principles for Seamless ATM by mapping out the traffic flows against defined capabilities and utilizing the ICAO Aviation System Block Upgrade as the framework to establish a work plan to introduce ATM modernization across the region. The planning group is expected to deliver a Seamless ATM Plan that will guide the enhancement of seamless ATM in this region.

1.2 Malaysia and Singapore have, through regular ATS coordination meetings and close collaboration adopted various initiatives. Malaysia and Singapore's approach to these collaborations is consistent with the principles that can be applied to the development of the Seamless ATM Plan by the APSAPG. These initiatives allow both ANSPs and aircraft operators to reduce co-ordination workload between controllers, minimize delays to airlines and enjoy greater efficiency.

## **2. DISCUSSION**

2.1 To date, Malaysia and Singapore have initiated the basic building blocks that can lead to the region's vision to achieve seamless ATM even before major system changes are introduced. Aircraft operating between airports in the Malaysian Peninsular and Singapore enjoyed No-Pre Departure Clearance (NPDC) procedures and either 15NM or 20NM longitudinal spacing based on several considerations like uni-directional routes and crossing routes with surveillance coverage, thus enhancing capacity and better efficiency for aircraft in attaining their optimum flight profile.

2.2 Established standing agreements for aircraft operating between Kuala Lumpur and Singapore FIRs contribute to the seamless ATM service delivery. The established agreed altitudes allow aircraft to climb or descend more efficiently and close to their desired flight profile. For instance, for arrivals into Singapore Changi Airport, Malaysia will descend the aircraft to FL210, without prior co-ordination, before transferring the flight to Singapore ACC. Similarly for arrivals into Kuala Lumpur International Airport (KLIA) from the south, Singapore ACC will descend the aircraft to FL340, without prior co-ordination, before transferring the flight to Malaysia ACC.

2.3 Recognising the need to keep capacity ahead of demand on high density routes, two RNAV5 routes, M630 and Y339, were established in August 2012 to enhance air traffic management for aircraft operating between the Kuala Lumpur and Singapore FIRs. The restructured routes allow for better air traffic management segregating short haul and long haul flights, thereby enhancing the flight efficiency in that area.

2.4 ATS Coordination meetings between Malaysia and Singapore ACCs are held regularly thereby providing a suitable platform to collaboratively resolve operational issues. Where necessary, other ATM stakeholders are also invited to provide the necessary inputs to resolve those issues. Participation from airlines and pilots are also crucial in these meetings to provide the necessary feedback and spur further enhancements to achieve a seamless ATM services delivery between Malaysia and Singapore ACCs. The important starting point is the desire and will to enhance the services provided to the aviation stakeholders. The regular cooperation also provides the foundation for future enhancement.

2.5 Malaysia and Singapore are also exploring Collaborative Decision Making (CDM) concepts between the KLIA and Changi city pair. Being one of the busiest international city pair in this region, CDM operations between KLIA and Changi would help balance demand and capacity, which will in turn provide predictability and enhance efficiency for airlines.

## **3. ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) note the current status of ATM cooperation between Malaysia and Singapore and that it can be the foundation for future enhancement;
- b) encourage States to continue in their efforts to achieve seamless ATM within Asia Pacific Region.

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