



International Civil Aviation Organization

**The Second Meeting of ICAO Asia/Pacific Air Traffic Flow Management Steering Group (ATFM/SG/2)**

Hong Kong, China, 1 – 4 October 2013

**Agenda Item 3: ATFM/CDM Global Update**

**APEC AIR TRAFFIC MANAGEMENT EMISSIONS REDUCTION PROJECT**

(Presented by Indonesia, Malaysia, Thailand and the United States)

**SUMMARY**

This working paper presents activities under the APEC Air Traffic Management Emissions Reduction Project studying economic and environmental benefit of CDM/ATFM implementation along with suggestion of CDM/ATFM implementation pathways focusing on Bangkok – Kuala Lumpur city pair, and Sub-regional CDM/ATFM initiatives from Indonesia.

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-2 Reduced vertical separation minima
- GPI-3 Harmonization of level systems
- GPI-4 Alignment of upper airspace classifications
- GPI-5 RNAV and RNP (Performance-based navigation)
- GPI-6 Air traffic flow management
- GPI-7 Dynamic and flexible ATS route management
- GPI-8 Collaborative airspace design and management
- GPI-9 Situational awareness
- GPI-11 RNP and RNAV SIDs and STARs
- GPI-14 Runway operations
- GPI-15 Match IMC and VMC operating capacity
- GPI-16 Decision support systems and alerting systems
- GPI-17 Data link applications
- GPI-18 Aeronautical information
- GPI-19 Meteorological Systems
- GPI-20 WGS-84
- GPI-21 Navigation systems
- GPI-22 Communication infrastructure

## **1. INTRODUCTION**

1.1 In response to rapid air traffic growth in the Asia-Pacific region, Asia-Pacific Economic Cooperation (APEC) endorsed the Air Traffic Management Emissions Reduction Project, proposed by the United States with the goal to study economic and environmental benefits of CDM/ATFM implementation along with proposing pathway towards implementation of such procedure and associated system with the goal of publishing project report by 2013. The APEC ATM Emissions Reduction project has the United States as Lead Economy along with Malaysia and Thailand as Co-Sponsor Economies, with Indonesia observing the overall process, focusing activities in the project on Bangkok – Kuala Lumpur city pair.

## **2. DISCUSSION**

2.1 In accordance to APEC procedure in project approval, Request for Proposals (RFP) has been developed to solicit consultant to carry out work in the project.

2.2 Subsequent to APEC processes, Airbus Pro Sky / Metron Aviation were selected as contractor, with Project Terms of Reference developed. The project includes study of traffic situation in Bangkok and Kuala Lumpur FIRs with data being collected in September 2013 as well as site visits scheduled in October 2013, which will include participation of Indonesia, Malaysia, Thailand and the United States.

2.3 Based on analysis of project Terms of Reference, it is envisaged that tools such as fast-time simulation would be deployed to some extent within the course of the project supplemented by expert judgment.

2.4 In addition to this project, Civil Aviation Authority of Singapore (CAAS) is also engaging Airbus Pro Sky / Metron Aviation in CDM/ATFM Concept Development which also links to CDM/ATFM Collaborative Concept development being carried out by Hong Kong, China; Singapore and Thailand.

2.5 Moreover, the European Union (EU) is also assisting Association of Southeast Asia Nations (ASEAN) in developing ASEAN Single Aviation Market (ASAM) supported by Seamless ASEAN Sky as aviation component of the ASEAN Economic Community (AEC) in 2015. Such assistance is being carried out through the EU ASEAN Air Transport Integration Project (AATIP). The AATIP project also includes cross-border international ATFM development in the work plan along with assistance in airport/airspace capacity assessment and development assisted by use of fast-time simulation and modelling.

2.6 As can be observed from the APEC ATM Emissions Reduction Project, the Tripartite CDM/ATFM development among Hong Kong, China; Singapore and Thailand, as well as the EU AATIP project, multiple CDM/ATFM development in the Asia/Pacific region are being carried out. Including Indonesia, which is implementing CDM/ATFM between its 7 (seven) major airports, which will then be connected to Singapore and Malaysia as sub-regional connection.

2.7 Indonesia also has sub-regional CDM/ATFM development Joint Task Force with Philippines and Australia (JTF-IPA). Indonesia also plans to create the same task force with Singapore and Malaysia as the improvement of current bilateral meeting.

2.8 It is proposed that the ICAO Asia/Pacific ATFM Steering Group coordinates such efforts to ensure these CDM/ATFM developments are proceeding towards the same converging goals while also reducing duplication of work such as use of fast-time simulation and other activities while not compromising credibility of these initiatives.

**3. ACTIONS BY THE MEETING**

3.1 The meeting are invited to:

- a) note information presented in this WP;
- b) discuss proposal to coordinate CDM/ATFM activities in the Asia/Pacific region to ensure goal convergence towards common harmonized ATFM implementation, reducing duplication of work while not compromising credibility of these initiatives; and,
- c) discuss any relevant matters as appropriate.

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