International Civil Aviation Organization

The Combined Meetings of the Fifth FANS Implementation Team – Bay of Bengal (FIT-BOB/5), the Second FANS Implementation Team – South East Asia (FIT-SEA/2), the First Air Traffic Flow Management Task Force (ATFM/TF/1) and ADS/CPDLC Seminar

Bangkok, Thailand, 18 - 22 April 2005

Agenda Item 6:   Air Traffic Flow Management Plan and Implementation

**SUMMARY OF DISCUSSIONS
INFORMAL ATFM WORKING GROUP MEETING
SINGAPORE 14 & 15 MARCH 2005**

(Presented by Australia)

SUMMARY

This paper presents a summary of discussions arising out of the informal ATFM Working Group meeting which was held in Singapore on 14 & 15 March 2005.

1   INTRODUCTION

1.1   At the Sixteenth Meeting of the Bay of Bengal ATS Coordination Group (BBACG/16) held in conjunction with a Special Coordination Meeting on Air Traffic Flow Management (SCM-ATFM) for the Bay of Bengal on 31 January to 4 February 2005 at the ICAO Regional Office, Bangkok, it was decided to establish the Air Traffic Flow Management Task Force (ATFM/TF) to develop the ATFM plan and implementation of ATFM automated systems for the Bay of Bengal area.

1.2   In establishing the ATFM/TF, the BBACG/16 meeting urged members of the ATFM/TF to enter into discussions with States and industry stakeholders prior to the First ATFM/TF meeting, to establish the framework for the ATFM/TF and to consider options for an ATFM system tool and flow management plan.

1.3   Accordingly, an informal ATFM Working Group meeting was convened in Singapore during the period 14 – 15 March 2005. The purpose of the informal Working Group meeting was to initiate the Core Team process for the ATFM/TF and to develop the framework and objectives ahead of the ATFM/TF/1 meeting in Bangkok from 18 to 22 April 2005.

2   DISCUSSION

Terms of Reference

2.1   The informal Working Group reviewed the ATFM/TF Objectives and Terms of Reference, as developed during the BBACG/16 meeting. A copy of these Objectives and Terms of Reference are show under FIT-BOB/5, FIT-SEA/2 & ATFM/TF/1 – WP/3.

ATFM System Tools

2.2   The informal Working Group reviewed the report of the Special Coordination Meeting (SCM) which was held at the ICAO Regional Office in Bangkok from 31 January to 4 February 2005.

2.3   Thailand informed the SCM of its decision to develop and operate an automated ATFM system to address the westbound traffic flow problems and that work had already commenced on developing an ATFM computer model, with a target date to complete testing, acceptance and completion by the third quarter of 2005.

2.4   Thailand also informed the SCM that in view of the complexities and size of this project, as well as the urgency in overcoming the airspace management problems, Thailand was also interested in working with partners to share ideas and workload for the purpose of putting in place a system or systems to meet present and future airspace management requirements, and allow for a smooth flow of traffic for the foreseeable future.

2.5   The SCM welcomed the ATFM initiative from Thailand (AEROTHAI) and noted the advice from Thailand that in recognition of the work being done in this area by other States involved, Thailand was prepared to take a proactive role in the establishment of an effective ATFM system for the area under consideration.

2.6   The informal Working Group was also presented with an updated presentation on the DOTS+ system as an alternative ATFM system tool for the Bay of Bengal.

2.7   The meeting recalled that the FAA and IATA had conducted a DOTS+ Track Advisory simulation for the Bay of Bengal in May 2004, during which nine air carriers participated and of the 39 flights that were programmed, all 39 were placed over their primary requested gateway and 35 were slotted at their primary requested altitude. The average delay time for delayed flight was 6.6 minutes.

2.8   The FAA presentation also advised the following:

a)   *"DOTS+ Online Track Advisory is available as a complete end to end service on a cost re-imbursement basis. In this arrangement, the service function is performed by FAA supplied Track Advisory Specialists.*

b)   *Alternatively, DOTS Online Track Advisory is available on a cost-reimbursement basis as a complete hardware and software system, wherein the service function is performed by a regional operator, such as IATA or a Bay of Bengal Air Traffic Service Provider. This regional operator would be trained on the DOTS+ Online Track Advisory system to perform traffic flow metering.*

c)   *Under either arrangement, the FAA incurred cost of setting up the Online Track Advisory service would be covered by the customer on a cost-reimbursement basis."*

2.9   In the light of the revised DOTS+ presentation, the informal Working Group agreed to recommend to the ICAO Secretariat that the FAA be invited to present their amended DOTS+ proposal – including a detailed financial proposal to the ATFM/TF/1 meeting.

2.10   The informal Working Group also agreed to recommend that ATFM/TF/1 be urged to fully consider the options available for the delivery of an ATFM system tool for use in the Bay of Bengal and beyond and that a decision be taken as to which system tool is to be adopted by the ATFM TF. This will provide the nominated organisation with sufficient time to develop the ATFM system and associated management arrangements for implementation by AIRAC date 29 September 2005 as well as finalisation of funding arrangements for the provision of the ATFM Service.

2.11   The meeting also noted that the SCM had agreed that an operational trial would be required and that this matter would be considered further by the ATFM/TF. Accordingly, the informal Working Group recommended that this matter be fully considered at the ATFM/TF/1 meeting, possibly as a separate Agenda Item.

<u>Protocols for an ATFM System for the Bay of Bengal</u>

2.12   The informal Working Group considered a number of factors which could be regarded as "Protocols of ATFM" – defining the ATFM requirements ahead of the ATFM/TF/1 meeting. These "Protocols of ATFM" can be summarised as per the following:

- Identify Phase One for ATFM – Bay of Bengal and beyond

  o Critical hours:
    - Over Kabul FIR (and work back to DEP time)

  o Routes, Gates & Flight Levels: (1901 – 2359 UTC*)

    - G792   KN   V390   ASLUM**   FL310/FL390
    - G202N/L750   ROSIE   FL280/FL390
    - DI   N644   PAVLO   FL280/FL390
    - DI   A466   SANAM   FL280/FL390

    *   *Note: Confirm time interval for FL280 availability within Kabul FIR*
    ** *Note: Kabul NOTAM A0422/04 refers*

    - Take note of crossing routes within Indian and Pakistan airspace. Discuss with India and Pakistan as to whether they can solve this problem using other means or whether the ATFM/TF has to take this into consideration when allocating Gate Times into Kabul FIR.

- Principles of ATFM:

  o Define the area of operation
  o Method and time of operation
  o Determine need for prioritisation of Kabul entry points depending on Departure location
  o Maximise the usage of the four routes and levels available through the Kabul FIR
  o Development of ATFM Handbook
    - FANS1/A Operations Manual as suggested model for ATFM Handbook
    - Research Eurocontrol Flow Management Handbook

  o ATFMU defined procedures – agreed by ATFM T/F
    - Roles & Responsibilities
    - Coordination with States and Airlines
    - Hours of coverage

- Manning
- Communication requirements with States and Airlines
- Mechanism to obtain DEP reports for aircraft proceeding through Kabul FIR
- Process for reservation and allocation of Gates, Slot Times and Flight Levels
- Slot Time validity period and procedures for renegotiation/reallocation and procedure to permit "swapping" of allocated Slot Times
- Updating Slot Times due to unforseen circumstances

   o ACCs defined procedures
- Departure ACCs
- Priority for departing aircraft which have to meet Slot Times through Kabul FIR
- Enroute ACCs
- Review requirement for continuation of No PDC Procedures
- Interface between
  - India & Pakistan
    - Use of radar spacing for aircraft at same level diverging at DI for A466/N644
  - Pakistan & Afghanistan
    - Confirm arrangements for use of FL280 regarding prior coordination

   o Airline Operators – defined procedures
- Responsibilities
- Communications with the ATFMU (e.g. booking slots etc)
- Coordination with ATFMU and ACCs
- Ascertain preferred flight levels and routing for aircraft entering the Kabul FIR for aircraft departing India and Pakistan Airports

   o Contingency arrangements
- Kabul FIR restrictions
- Weather deviations
- Other contingency issues including ATFM system back-up

   o Multi-Lateral Agreements and/or Regional AIP SUP
- Arrangements for itinerant and ad-hoc flights through the Kabul FIR during allocated period of ATFM operations

- Priorities for ATFM TF:

   o Select ATFM system tool
- Confirm preferred location of ATFM System Server and Management position(s) within the area of operation

   o Establish Working Groups as follows:
- WG for Funding Arrangements
- WG for Development of ATFM Handbook
- Identify other WGs as required

- Link actions back to ICAO Docs where appropriate – e.g. PANS ATM CH3; and DOC 9426; etc.

- How do we want to implement the system, parameters, and timelines once in operation?

- Recommended composition of the Core Team:

  The meeting considered that as a minimum, the composition of the Core Team should include representatives from the following States and Organisations:

    o   ICAO   (TF Chairman & Secretariat)
    o   India   (AAI)
    o   Singapore   (CAAS)
    o   Thailand   (AEROTHAI)
    o   IATA

  The meeting also recognised the specialist contributions that other States and Organisations could make to the Core Team activities and recommended that the Secretariat in consultation with the Task Force Chairman include additional Core Team members and resources as and when required.

- Develop Task List

- Traffic data capture

- What do the ATFM system designers need from this meeting to assist in development of their respective models?
    o   List from AEROTHAI

    Task List

2.13   The informal Working Group updated the initial Task List which was developed during the SCM in February and the revised Task List is shown as an Attachment to FIT-BOB/5, FIT-SEA/2, ATFM/1 –WP/3.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

    a)   Note the summary of discussions from the informal Working Group meeting; and

    b)   Incorporate this initial work undertaken by the informal Working Group meeting into the work of the ATFM Task Force.

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