



International Civil Aviation Organization

**Fifteenth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/15)**

Bangkok, Thailand, 25 – 29 July 2005

Agenda Item 4: Consider problems and make specific recommendations concerning the provision of ATM/AIS/SAR in the Asia/Pacific Region

**UPDATE ON THE ACTIVITIES OF THE
AIR TRAFFIC FLOW MANAGEMENT TASKFORCE**

(Presented by the Secretariat)

SUMMARY

This paper updates the progress of the Air Traffic Flow Management Task Force established by the Bay of Bengal ATS Coordination Group to initially address flow management issues associated with the high time westbound traffic flows from the Bay of Bengal through the Kabul FIR, Afghanistan.

1. INTRODUCTION

1.1 As discussed in Working Paper 23 (WP/23) to the ATM/AIS/SAR/SG/15 meeting, a special coordination meeting for Bay of Bengal Air Traffic Flow Management (SCM BOB ATFM) was convened in conjunction with the BBACG/16 (February 2005) meeting in follow-up to the recommendation of the RVSM/TF/24 meeting (BOB one-year review, November 2004) to progress the establishment of an ATFM plan and implementation of ATFM automated systems for the Bay of Bengal traffic flows. This matter was considered a high priority by users and ATS providers, and was to be progressed in a timely manner.

1.2 The SCM BOB ATFM had recalled that at recent meetings of APANPIRG, the Bay of Bengal ATS Coordination Group (BBACG) and the RVSM/TF, all recognized a need to improve the overall management of traffic flows across the Bay of Bengal area, in particular for the westbound traffic flows to Europe through Afghanistan airspace. In order to progress this work, the SCM BOB ATFM established the Air Traffic Flow Management Task Force (ATFM/TF) under the auspices of the BBACG. The SCM BOB ATFM defined terms of reference and objectives for the ATFM/TF, as described in WP/23.

2. DISCUSSION

Informal Singapore ‘Mini’ Meeting

2.1 In accordance with the request from the SCM-BOB that discussions continue “off-line” in preparation for the ATFM/TF/1 meeting, an informal ‘mini’ working group meeting of several South East Asia task force members and industry stakeholders was held at the Singapore Aviation Academy on 14 & 15 March 2005. The meeting was attended by the task force Chairman (Mr. Ron Rigney, Airservices Australia) and representatives from Singapore, Thailand, and IATA

officers and airline representatives. After reviewing the report of the Special Coordination Meeting for Bay of Bengal (SCM-BOB, 31 January to 4 February 2005) the meeting commenced work on a draft framework for the proposed ATFM/TF activities to be considered by the full ATFM/TF/1 meeting in April.

First meeting of the ATFM Task Force (ATFM/TF/1)

2.2 In order to save time and allow an early start to the work of the ATFM/TF, the ATFM/TF/1 meeting was held in conjunction with the previously scheduled combined meeting of the FANS Implementation Teams for the Bay of Bengal and South East Asia (FIT-BOB/5 & FIT-SEA/2) during April 2005. Recognizing that the ATFM/TF would report via the BBACG to the ATM/AIS/SAR Sub Group of APANPIRG, the ATFM/TF/1 meeting reviewed and updated the Terms of Reference (TOR) set by the SCM BOB ATFM.

2.3 ATFM/TF/1 identified a core team for the Task Force, comprising representation from the Regional Office, India, Malaysia, Singapore, Thailand and IATA. In this regard, the meeting regretted the late notice absence of Pakistan from the ATFM/TF/1 meeting, noting the critical role that Pakistan played in feeding traffic into the Kabul FIR. The meeting urged the Secretariat to ensure that Pakistan was again invited to the next task force meeting, with a view to including Pakistan in the core team at that time.

ATFM/TF Phase One

2.4 The SCM-BOB ATFM had agreed that the first priority of the task force should be towards resolving the immediate problems encountered by westbound traffic operating across the Bay of Bengal to Europe during the night time period. In order to progress toward a solution, the following steps were identified to assist in the implementation of ATFM in this context by the third quarter of 2005:

- a) complete an analysis of the traffic data including Departure/Arrival data;
- b) identify bottleneck areas;
- c) develop an ATFM tool to optimize the usage of all ATS routes and levels available through the Kabul FIR;
- d) Undertake a series of trials and demonstrations of the ATFM tool; and
- e) Develop the ATFM/TF Task List.

Traffic Sample

2.5 In order to gain an accurate appreciation of the traffic volume and disposition during the night time period, it had been identified that it would be necessary for the Task Force to undertake a traffic sampling over a short period of time. Accordingly, the Regional Office issued a request to affected States for assistance in providing suitable traffic data for the period Sunday 3rd April until Saturday 9th April 2005 inclusive

2.6 Detailed traffic sample data was provided by Afghanistan, India, Pakistan, Singapore and Thailand. The data that was recorded comprised aircraft expected to transit the Kabul FIR during the period 1900-2330 UTC, and included westbound departures from Singapore between approximately 1430-1730 UTC, departures from Kuala Lumpur between approximately 1500-1800 UTC and departures from Bangkok between approximately 1530-1830 UTC. Sampling parameters

included the departure point, ETD, ATD, destination, airways flown, flight levels and estimates at the Kabul FIR entry points.

US FAA Dynamic Ocean Track System Plus (DOTS+)

2.7 During RVSM/TF/24 (November 2004) an FAA representative briefed the meeting regarding the DOTS+ automated flow management system. DOTS+ and its Online Track Advisory service had been in operational use in the United States for more than 10 years and could be modified to manage the westbound departures across the Bay of Bengal. The system was developed by the FAA, but could be owned and operated by a State ATS provider(s) or by IATA and its member airlines, and the software provided by the FAA under a licensing arrangement.

2.8 In order to facilitate decision making by the States involved, the FAA provided a follow up presentation to ATFM/TF/1, addressing all aspects involved in potentially commissioning an operational trial of DOTS+ in the Bay of Bengal, effective AIRAC 29 September 2005. The DOTS+ could be readily adapted to provide flow management in the Bay of Bengal area, with an implementation time frame in the order of three months. The FAA representative cautioned that if a decision to adopt DOTS+ was delayed until the second task force meeting scheduled in June, then it was likely that the FAA would have difficulty meeting the proposed implementation date of 29 September 2005.

2.9 In regard to funding the DOTS+ implementation, Singapore informed the meeting that if the DOTS+ was selected by the States concerned, Singapore would be prepared to work with FAA to host the DOTS+ system in Singapore and, in addition, would consider funding of up to half the start up cost. However, for the ongoing operation of the system other cost-recovery funding arrangements would be required.

2.10 India indicated that subject to suitable high-level approval, they could also consider providing a portion of the funding for the implementation of DOTS+, if DOTS+ was selected by the States of the region. The meeting expressed its appreciation to Singapore and India for their generous offers to support the implementation of DOTS+.

Thailand's ATFM developments

2.11 ATFM/TF/1 recalled Thailand's previous advice to the SCM-BOB ATFM that in recognition of a flow management need, Thailand would be prepared to take an active lead role in developing an appropriate ATFM system in coordination with States and the airlines with a target date for implementation of AIRAC date 29 September 2005. In this regard, Thailand presented the ATFM/TF/1 meeting with details of an AEROTHAI proposal to develop and implement an Air Traffic Flow Management (ATFM) system in the Bay of Bengal and South Asia for aircraft transiting the Kabul FIR.

2.12 Thailand also informed the meeting that it had recently held encouraging and cooperative discussions on these matters, together with other ATFM topics, with representatives from the Airports Authority of India and the Indian Department of Civil Aviation during a visit to Delhi by senior AEROTHAI personnel.

Selection of ATFM Tool

2.13 ATFM/TF/1 recalled that the mini working group meeting in Singapore had recommended that the 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 South Asia, and that a decision be taken during ATFM/TF/1 as to which system tool would be adopted by the ATFM TF.

2.14 In this regard, as a result of the broad nature of the material that had been made available by Thailand, the meeting had experienced difficulty in establishing a full understanding of the ATFM system tool and associated concepts that were being proposed by AEROTHAI. Accordingly, the meeting considered that there was insufficient detail presently before the ATFM Task Force to enable it to make a suitably informed decision on the merits of the AEROTHAI proposal, and as such the meeting was also unable to undertake a meaningful comparison between the AEROTHAI and FAA proposals.

2.15 ATFM/TF/1 also expressed concerns in regard to the proposed implementation timeframe, noting that in order to meet the implementation target date of 29 September, the corresponding AIRAC date for the publishing of required AIP amendments and associated documentation would be 7 July 2005.

2.16 Accordingly, ATFM/TF/1 agreed that the selection of an ATFM system tool be deferred until ATFM/TF/2, at which time the two systems would be evaluated by way of “Proof of Concept” demonstrations to the ATFM/TF/2 meeting. The meeting agreed that the development of an ATFM operational requirement would also be of assistance in the selection process.

Task List and Handbook

2.17 ATFM/TF/1 considered that the Task List was the primary tool for progressing the work of the task force and, in this regard, agreed that an ATFM Operations Handbook should be developed as a task list item. The Operations Handbook should include the operating procedures and associated guidance material for the ATFM Unit, ACCs and Airline operators. The meeting updated the Task List in light of the inputs and discussions that occurred during the ATFM/TF/1 meeting.

Establishment of an Operational Trial

2.18 In regard to the implementation process of a Bay of Bengal ATFM system, the ATFM/TF/1 meeting agreed that an operational trial would be required and this matter would be considered further by the ATFM/TF/2 meeting.

Second meeting of the ATFM Task Force (ATFM/TF/1)

2.19 The Second Meeting of the Air Traffic Flow Management Task Force (ATFM/TF/2) was held in New Delhi, India from 28 June to 1 July 2005. The meeting was attended by 48 participants from Afghanistan, Australia, India, Indonesia, Malaysia, Singapore, Sri Lanka, Thailand and IATA. Due to the resource constraints at the Regional Office, an ICAO official was unable to attend the Task Force meeting.

Thailand proposal to develop, trial and implement an Air Traffic Flow Management (ATFM) automated advisory system tool (BOBCAT)

2.20 ATFM/TF/2 recalled that at several previous ICAO forums Thailand had stated that they would be prepared to take an active lead role in developing and implementing an appropriate ATFM system in coordination with States and the airlines, to cater for the present traffic operating westbound through the Kabul FIR during the hours of 1900 – 2359UTC. Thailand had undertaken further development work in this regard, and advised the meeting of several items which had been considered by Thailand prior to the development of their ATFM system tool. These included:

Comparison between route distance from each departure point

2.21 It was noted that three out of the four available routes which transit the Kabul FIR, i.e. N644, L750 and G792/V390 all come together at ABEKO in Turkmenistan, close to the Caspian Sea. The following Table compares approximate route lengths from departure points of Bangkok and Singapore to ABEKO:

Dep. Point	Bay of Bengal route	Kabul FIR	Dist. Dep Pt to ABEKO (Ashgabat/ Turkmenbashi FIR)	Remarks
Singapore	M770	N644	3561	Intersecting route with P646/L507
Singapore	L759	L750	3566	
Singapore	L759/KKJ/Delhi	N644	3594	Intersecting route with A466/N644
Singapore	P628	G792/V390	3565	
Bangkok	L507	N644	2864	
Bangkok	P646	N644	2858	
Bangkok	P646/Delhi/G452/TI GER	L750	2874	Intersecting route with L759
Bangkok	L301/URKOK/P628	G792/V390	2977	Crossing route BOB – also intersecting route with Sing/KL traffic on P628

2.22 ATFM/TF/2 recognized that track distance to a common point is not the only factor which airlines have to take into consideration when flight planning. Other factors which could influence the performance and economics of the flight may also include:

- a) flight level allocation;
- b) weather conditions; and,
- c) air navigation charges through FIRs on the flight plan.

Crossing and intersecting points associated with Kabul FIR transit routes prior to entering the Kabul airspace

2.23 Thailand advised the meeting that, after studying a sample of Kabul transit flight plans, there appears that various alternatives routings are used no matter from where the aircraft departs. From these observations, it became obvious that various scenarios and combinations of overall routings to entry points into Kabul FIR will need to be taken into consideration when allocating slot times at gateways for aircraft enroute to the Kabul FIR. The meeting concluded that on most routes between departure points east of the Bay of Bengal joining routes through Kabul FIR, there will need to be at least two “Gateway Fixes” to be taken into consideration.

Aircraft using Kabul transit tracks from departure point but not flying through Kabul FIR

2.24 The meeting also observed that some aircraft depart from Southeast Asia or Southern Asia to other westbound destinations using primary planned routes across the Bay of Bengal and/or India. These aircraft could be in competition for flight levels with aircraft who plan to transit the Kabul FIR.

2.25 These aircraft would also need to be considered in the slot allocation system at selected gateway points. This may not be the case regarding aircraft departing from South Asia (India/Pakistan) ports as they should be satisfactorily managed by the ACCs concerned.

Overcoming present bottlenecks on transit routes leading to Kabul FIR

2.26 ATFM/TF/2 noted that bottlenecks in Indian and Pakistan airspace have been identified as having been caused by route and level restrictions and limitations within the Kabul FIR. As a result, the traffic entering into Kabul FIR could not obtain a slot to enter Kabul FIR and, as a consequence, were diverted via I.R. Iran. Of major concern are transit routes from Singapore, Kuala Lumpur, Bangkok, China, Hong Kong China and Kathmandu which join at various locations in India prior to the route section, SAMAR/DI. In addition, there are further routes joining other main transit routes in India/Pakistan airspace which may cause conflicts.

2.27 ATFM/TF/2 was further informed that not all routes transiting the Kabul FIR are being shared equally thus causing a bunching of aircraft on particular routes during certain times of the 5 hour period. This bunching not only affects entry into the Kabul FIR, but also the air traffic management of enroute aircraft within the Indian and Pakistan airspace.

Gateway and intermediate fixes in India and Pakistan

2.28 The term “Gateway and intermediate fix” is part of the Thailand computer model and defines positions at which where agreed metered spacing will be applied between aircraft in order to:

- a) ensure a smooth flow of enroute traffic at the same level where routes across the Bay of Bengal join over Indian airspace;
- b) enable India and Pakistan to manage the traffic for transition into the Kabul FIR

Transition from RVSM to CVSM for entry into Kabul FIR

2.29 ATFM/TF/2 The meeting recalled that, at the RVSM/TF20 meeting which was held in Delhi on 27 – 31 Oct 2003, agreement was reached between India and Pakistan for the ATS routes through the Kabul FIR with pairs of levels FL300/320, FL340/360 and FL380/400 to be treated as same level for CVSM transition to FL310, FL350 and FL390 respectively. This would also facilitate in avoiding confliction during transition from RVSM to CVSM with traffic on reciprocal track at FL330 and FL370.

2.30 In regard to A466 and N644, it was also agreed at the RVSM/TF20 meeting that special flow arrangement would provide for three aircraft with two at FL310 and one at FL350 operating on A466 and N644. This would be implemented only to accommodate traffic departing from Delhi that may enter the Lahore FIR via SAMAR at FL280. Delhi ACC would sequence the traffic at FL300 and FL320 in a manner that there would be no less than 5 minutes longitudinal separation between two aircraft diverging at “DI” on ATS routes A466 and N644 at FL310. This traffic arrangement would require Lahore ACC radar to monitor these aircraft and to effect the appropriate level change from RVSM to CVSM.

2.31 The meeting agreed that the above items which Thailand had taken into consideration in developing the ATFM system tool were provisional in nature and needed further analysis by the ATFM Project Management Team.

Bay of Bengal Cooperative ATFM Advisory System (BOBCAT)

2.32 Taking all of these matters into consideration, ATFM/TF/2 was presented with a Thailand Concept of Operations on the Bay of Bengal Cooperative ATFM Advisory System (BOBCAT).

2.33 The purpose of BOBCAT was to regulate the flow of air traffic departing airports from East Asia, Southeast Asia and South Asia who plan to transit the Kabul FIR between the hours of 1900UTC and 2359UTC. Additional to this requirement, the automated programme will also take into account the present bottlenecks caused by merging routes by applying appropriate spacing between aircraft wishing to cross intermediate Gateways enroute to Kabul FIR. A presentation on the abilities of BOBCAT was presented to the meeting detailing the various capabilities of the system.

2.34 The meeting was advised that BOBCAT was not intended to “control” aircraft nor take away any of the responsibilities of the ATS providers concerned. The major benefits of the system was as follows:

- a) From proposed flight plan data supplied by airlines on aircraft wishing to enter Kabul FIR during the critical times, sorting will be applied by BOBCAT to ensure a smooth flow of aircraft from departure point to the Kabul Gateways;
- b) Airlines will be given several alternative options if their first choice is not successful. These could include alternative levels, alternative ATS routes or a delayed departure time to meet the requirements of their first option;
- c) BOBCAT has the ability to selectively meter all enroute gate times in accordance with requirements decided upon by the ATS provider concerned, however the final Gateways entering Kabul FIR will be metered to ensure that aircraft at the same level transit this airspace with not less than the required separation minimum.
- d) BOBCAT has the flexibility to manage the flow during contingency conditions given sufficient notice. For example, if a particular or several ATS routes were affected by extreme weather conditions, on request the system would use alternative routing in its selection process;
- e) BOBCAT will provide airlines with the final allocation to all aircraft who have submitted slot requests for the nominated period prior to the cut-off time. In other words airlines will be able to view an overall picture in tabulated form of slot allocation for this period.

BOBCAT System Prototype Demonstration

2.35 A prototype demonstration of the BOBCAT system was presented to the meeting by Thailand to show the ability of the computer model. The prototype set up several gateways points along major ATS routes through Bay of Bengal and Kabul FIR. For the purpose of the demonstration, only departures from Bangkok, Kuala Lumpur and Singapore were used. The spacing parameter for routes over Bay of Bengal and Kabul FIR was assumed to be 10 minutes, while parameters for routes over continental India was assumed to be 5 minutes. Kabul FIR’s flight levels were assumed to be CVSM flight levels with the remaining areas using RVSM flight levels with exception of FL300 on crossing routes over the Bay of Bengal. The demonstration showed an airline dispatcher interface that allowed the dispatcher to input up to three alternate choices of gateways an aircraft would like to take in transit from departing airports through Kabul FIR. In addition, dispatchers have an option of

selecting one alternate flight level for each of the gateway. Over 10 slot requests were inputted into the system, the cut-off time was introduced followed by the system generating the slot allocation and sending the information to dispatchers.

2.36 ATFM/TF/2 noted that, in an effort to gather further advice in display design from the users of the system, it was proposed that AEROTHAI should visit a number of airline dispatchers to seek input into the development of the final interface between the dispatcher and the BOBCAT system.

Airservices Australia and the FAA DOTS+ System

2.37 The meeting was informed that Airservices Australia had recently acquired the DOTS+ system under a technical agreement with the FAA. The DOTS+ platform had been installed at the Melbourne Centre and was being used to generate daily Flex Tracks for the Australian Organized Track Structure (AUSOTS). Under AUSOTS, and within the Australian FIR, aircraft are permitted to operate on daily Flex Tracks between Singapore, Brisbane, Melbourne and Sydney.

2.38 The meeting noted that the first phase of AUSOTS was successfully implemented on 27 June 2005 and that Airservices Australia was currently conducting a number of post-implementation activities, including a busy ongoing training programme.

2.39 The meeting was also informed that although the Melbourne DOTS+ platform was specifically acquired for Flex Track generation, it was also capable of serving as an ATFM system tool, using the “Track Advisory” functionality that currently resides within the DOTS+ core system. However there were certain administrative and operational arrangements that would need to be put in place prior to Airservices Australia being in a position to provide an operational trial using the DOTS+ platform. Further, the meeting was informed that due to other operational priorities within Airservices Australia, it was unlikely that an operational trial could be arranged prior to the beginning of 2006.

2.40 The attention of the meeting was also drawn to the two previous DOTS+ presentations that had been delivered by the FAA at the RVSM/TF/24 meeting (8 – 12 November 2004) and the ATFM/TF/1 meeting (18 – 22 April 2005). In both instances, the FAA had proposed that the “Online Track Advisory” function would be utilised in a DOTS+ ATFM system for the Bay of Bengal. However it was emphasised that the FAA’s proposed “Online Track Advisory” function currently existed at this stage in prototype only. In addition, the meeting was informed that the FAA was willing to work with Airservices Australia and others to provide a web-based ATFM system tool for deployment in the Bay of Bengal.

2.41 ATFM/TF/2 Airservices Australia for its update on the DOTS+ system in Melbourne and noted both the FAA’s and Airservices Australia present position on this matter.

ATFM Operational Trial for the Bay of Bengal and South Asia

2.42 ATFM/TF/2 considered available options for the conduct of an ATFM Operational Trial in accordance with Phase One of ATFM across the Bay of Bengal and South Asia. In this regard, the meeting noted Thailand’s readiness to proceed to an operational trial and accordingly, the meeting requested Thailand to continue to develop BOBCAT to the stage of an operational trial in close cooperation with concerned States and IATA.

2.43 In response, Thailand advised the meeting that their target date to be ready for this operational trial would be the end of 2005. The meeting thanked Thailand for its comprehensive presentation on BOBCAT and noted the obvious amount of work that had been undertaken since

ATFM/TF/1. The meeting encouraged Thailand to continue this work in the lead-up to the operational trial for BOBCAT.

Outcomes of study into existing constraints and limitations on air traffic flow in the Bay of Bengal by the Airports Authority of India

2.44 India provided the meeting with a detailed report on recent studies undertaken into the following items:

- a) Various traffic flows through Bay of Bengal and Indian Airspace and bottlenecks and choke points which adversely affect smooth flow of traffic;
- b) Uneven distribution of traffic on all available ATS routes;
- c) Options for the decongestion of the traffic flow at all exit points based on the analysis of approved schedule; and
- d) Plans to incorporate strategies to alleviate bottlenecks and traffic issues by the ATFM system tool.

Possible solutions

2.45 India advised that, in order to overcome some of the operational difficulties experienced within Indian airspace, the meeting was asked to consider various Short Term and Long Term solutions

Short Term

- a) Mandatory provision of ADS/CPDLC in Bay of Bengal airspace to facilitate the implementation of reduced Longitudinal and Lateral separation.
- b) Consideration to having some aircraft flight plan on P628 in lieu of L759 based on the current schedule.
- c) Proposal to suspend operations on B209 on a trial basis for a few weeks to achieve two clear streams of traffic without conflicts over Khajuraho 'KKJ' VOR.
- d) Revival of a previous operational trial of air traffic flow enhancements across the Bay of Bengal area.

Note 1: With regard to item c), the meeting noted India's proposal to temporarily suspend operations on B209.

Note 2: The meeting was informed that Malaysia, Singapore and Thailand had previously agreed to continue with the trial on air traffic flow enhancement from July to Sept 2005.

Long Term

- a) Early implementation of a suitable ATFM tool incorporating operational requirements of various States;
- b) Early implementation of appropriate ATC system in Afghanistan;
- c) Implementation of RVSM in Kabul FIR; and

- d) Release of FL 280 on 24 Hour basis by Kabul on all four ATS Routes transiting the Kabul FIR

2.46 The meeting was advised that India had trained several Afghanistan Air Traffic Controllers and is providing further assistance in the provision of Air Traffic Services within the Kabul FIR.

Establishment of an ATFM Project Management Team

2.47 In considering the number of specialized tasks that would be required before the implementation of an Operational Trial, the meeting formed the view that these matters would be best progressed through the establishment of an ATFM Project Management Team. It was further agreed that the Project Management Team would comprise members of the Core Team as well as designated Subject Matter Experts (SMEs).

2.48 The project management team will define the parameters to be applied in the ATFM system tool to facilitate the application of the required longitudinal spacing between aircraft operating at the same flight level transiting the Kabul FIR.

Special cooperative arrangements between India and Thailand

2.49 The meeting also recognized that there were a number of unique and important operational issues that would need to be discussed between India and Thailand in close coordination and partnership basis in preparation for the implementation of the ATFM Operational Trial. In this regard the meeting encouraged both States to enter into special coordination and liaison activities to resolve these matters. It was requested that the parties report progress in these matters to the ATFM Project Management Team.

Flow Management Handbook

2.50 The meeting recalled the guidance provided under ICAO DOC 4444 (PANS-ATM) chapter 3.2.1.5 and noted that the First Meeting of the Bay of Bengal and South Asia Air Traffic Flow Management Task Force (ATFM/TF/1) had agreed that an ATFM Operations Handbook should be developed as a Task List item. The meeting also recalled that the ATFM/TF/1 meeting had agreed that the ATFM Handbook should include the operating procedures and associated guidance material for the ATFM Unit, ATS Providers and Airline operators.

2.51 In this regard, the meeting was presented with a first draft of the “Bay of Bengal and South Asia ATFM Operations Manual (V1.0)” for consideration and amendment by the meeting. The attention of the meeting was also drawn to the structure of the Manual, which provided for a two-part format, under which Part I was assigned to the “Traffic Management Plan” and Part II assigned to the “ATFM System Tool & Operations”.

Afghanistan Report on present and future air traffic operations

2.52 The Manager of the Kabul ACC provided the meeting with an update on the Kabul ACC services as per changes which were implemented on 15 May 2005. The Kabul FIC had been upgrade to provide ACC services in the upper airspace and was expected to provide ACC services in the lower airspace from late July. Under these new arrangements, Air Traffic is controlled under authority of the Afghanistan Government (MOT) in collaboration with the United States Military CENTAF forces.

2.53 The meeting noted that Class A airspace now exists along those ATS routes which are approved for use by civil aircraft, between FL310 and FL430 (inclusive). Class E airspace now exists at or below FL290 along the same ATS routes. All other airspace within the Kabul FIR remains as Class G.

2.54 The meeting was also requested to note that the ATS routes were restricted to only 10NM either side of centerline track. More details are provided on the May 2005 publication of charts for Afghanistan.

2.55 In addition to these airspace changes, the Manager of the Kabul ACC also informed the meeting of recent and proposed improvements to ATS facilities, including VSAT voice coordination channels, VHF, and AFTN communications.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note and support the work and initiatives taken by the BBACG in establishing the Air Traffic Flow Management Task Force to address the flow management issues of the Bay of Bengal and associated operational matters necessary to improve the efficiency of operations and enhance safety;
- b) note and support the work being undertaken by Aeronautical Radio of Thailand (AEROTHAI), Airservices Australia and the FAA in preparing automated ATFM systems tools for use in the Bay of Bengal; and
- c) consider the need to address aspects of ATFM in other sub-regions of the Asia and Pacific Region.
