## ENR 1.9 AIR TRAFFIC FLOW MANAGEMENT (ATFM)

# IMPLEMENTATION OF AIR TRAFFIC FLOW MANAGEMENT PROCEDURES OVER BAY OF BENGAL, SOUTH ASIA AND PAKISTAN THROUGH KABUL FIR

### 1. Introduction

1.1 On 24 July 2006, the States of the ICAO Asia/Pacific Region within the Bay of Bengal, South Asia and Pakistan airspace implemented an operational trial of an automated Air Traffic Flow Management (ATFM) Service under the auspices of the ICAO Bay of Bengal ATS Coordination Group – ATFM Task Force.

1.2 Pursuant to comprehensive reviews of the performances of the operational trial by the ATFM Task Force, ATFM procedures are permanently implemented in accordance with the provisions detailed herein.

### 2. Provision of ATFM Services

2.1 ATFM services are provided by Aeronautical Radio of Thailand LTD (AEROTHAI) from the Bangkok Air Traffic Flow Management Unit (ATFMU) at Bangkok ACC. ATFM services will be limited to calculation, promulgation and management of mandatory Allocated Wheels Up Time (AWUT) and Kabul FIR flight level, ATS route and entry fix time for each affected flight.

2.2 Air Navigation Services Division (ANSD) of Airport and Aviation Services (Sri Lanka) (Private) Limited (AASL) retain responsibility for the tactical management of flights that are subject to ATFM. In discharging tactical responsibilities, ANSD of AASL will manage non-ATFM compliant flights using delayed pushback and start clearances, non-preferred routes and/or flight levels, en-route holding and/or diversion around Kabul FIR.

2.3 The ATFMU utilizes the automated, web based Bay of Bengal Cooperative ATFM System (BOBCAT) system in meeting is ATFM responsibilities, these responsibilities will be managed in coordination with aircraft operators and ANSD of AASL in the Colombo FIR.

2.4 The ATFMU operates on a 24 hour basis and is responsible for westbound flights entering the Kabul FIR at specified times, flight levels and ATS routes in accordance with the paragraph 3 below. The objectives of these ATFM services are to:

(a) Reduce ground and en-route delays;
(b) Maximize capacity and optimize the flow of air traffic within the area;
(c) Provide an informed choice of routing and flight level selection;
(d) Alleviate unplanned in flight re-routing and technical stops; and
(e) Assist ANSD of AASL in planning for and managing future workload in the light of forecast increased flows within the area.

### 3. ATFM affected ATS routes, flight levels and applicable hours

3.1 All westbound flights intending to enter the Kabul FIR between 2000UTC and 2359UTC daily on ATS routes A466, L750, N644 from FL280 to FL390 inclusive and (SERKA B466 PAROD)/G792/V390 from FL310 to FL390 inclusive shall comply with the ATFM procedures detailed herein. This includes a mandatory requirement for all flights to obtain a specific ATFM slot allocation from the ATFMU (including AWUT) for entry into the Kabul FIR during the period mentioned above.

**Note :** No SLOT allocation required for west bound flights routing via SERKA and UL333 SOKAM.

3.2 Flights who plan to enter Kabul FIR without an AWUT and entry slot (comprising flight level, ATS route and entry fix time) will be accommodated only after flights with slots have been processed.

Such flights should expect delayed push back and start clearances, non-preferred routes and / or flight levels, en-route holding and/or diversion around Kabul FIR.

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3.3 In order to ensure availability of slots for westbound departures from designated airports in northern India and Pakistan, departures from these airports are given priority for FL280 in the slot allocation. This does not preclude these flights from requesting higher flight levels with initial slot request.

**4. Flights Exempted from BOBCAT ATFM**

4.1 The following flights are exempted from the ATFM procedures in this AIP Supplement:

a) Humanitarian or medical flights.
b) State aircraft with Head of State onboard

4.2 Flights exempted from ATFM procedures shall indicate the exemption in their flight plan (Field 18 – STS – BOB ATFM EXMP).

4.3 AIS/BIA (Aeronautical Information Services/Bandaranaike International Airport Colombo) shall forward the flight plan information to the ATFMU at AFTN address VTBBZDZX.

**5. Mandatory AWUT and Kabul FIR Slot allocation**

5.1 Affected flights shall obtain the mandatory AWUT, Kabul FIR entry time, flight level and ATS route from the BOBCAT system. The AWUT and Kabul slot allocation will enable ANSD of AASL to tactically control westbound flights transiting the Kabul FIR at specified times by assigning minimum spacing requirements at established gateway fix points in the vicinity of the eastern boundary of the Kabul FIR.

5.2 The application, calculation and distribution of AWUT and Kabul FIR entry fix slot allocations will be managed via internet access to the BOBCAT system in accordance with the ATFM operating procedures in paragraph 6.

**6. BOBCAT-Operating Procedures**

6.1 All affected flights are required to submit slot requests to the BOBCAT system by logging onto https://www.bobcat.aero between 0001 UTC and 1200 UTC on day of flight and completing the electronic templates provided.

6.2 Affected operators who do not have dedicated BOBCAT username /password access should complete the application from given in page **ENR 1.9-11** and fax the form to the ATFMU as soon as possible.

6.3 **Slot Allocation Process**

6.3.1 The slot allocation process is divided into 3 phases, namely the slot request submission, initial slot allocation and finally slot distribution to aircraft operators and ANSD of AASL.

***Slot Request Submission***

6.3.2 Slot requests including preferred ATS route, flight level and Maximum Acceptable Delay (MAD) should be lodged between 0001 UTC and 1200 UTC on the day of flight. Slot requests may subsequently be amended prior to 1200 UTC, which is the cut-off time. Aircraft operators are encouraged to submit additional slot request options in case their first choice is not available. This may include variations to ATS route, flight level and MAD.

6.3.3 Slot requests shall be for flight parameters that are able to be met by the flight. For example, flights requesting a slot at FL 390 must be able to transit Kabul FIR at FL 390. Flights subsequently unable to meet slot parameters (flight level, ATS route or entry fix time) should expect non-preferred routes and/or flight levels, en-route holding and/or diversion around Kabul FIR.

6.3.4 As BOBCAT will allocate FL 280 on a priority basis to facilitate departures from northern India and Pakistan underneath over-flying traffic, flights departing these airports are

encouraged to include FL 280 as at last one slot request preference.

6.3.5 Flights that were not allocated a slot in the initial slot allocation are not satisfied with the allocated slot or did not submit a slot request should select slot from the listing of remaining unallocated slots available immediately after slot distribution has been completed.

***Slot Allocation and Distribution***

6.3.6 Slot allocation will commence at the cut-off time at 1200 UTC. BOBCAT will process and generate the slot allocation based on the information submitted in the slot requests. Notification of slot allocation will be made not later than 1230UTC via the ATFMU website. Alterative arrangements for notification of slot distribution (e.g. E-mail, Fax, Telephone) should be coordinated with the ATFMU.

6.3.7 After the slot allocation has been published at https://www.bobcat.aero, aircraft operators can:

a) Use the slot allocation result for ATS flight planning purposes,
b) Cancel the allocated slot and/or,
c) Change slot allocation to another available slot in the published list of unallocated slots.

6.3.8 ACC/COLOMBO can also view the slot allocation results at https://www.bobcat.aero.

6.4 **Submission of ATS Flight Plan**

6.4.1 Once aircraft operators are in receipt of the slot allocation, they shall submit the ATS flight plan using the time, ATS route and flight level parameters of the BOBCAT allocated slot.

6.4.2 In addition to normal AFTN addresses, operators should also address flight plan (FPL) and related ATS messages (e.g. DLA, CNL, CHG) to the ATFMU via AFTN address VTBBZDZX for all flights that have submitted a slot request.

**7. Aircraft Operator / Pilot-in Commanded and ANSD of AASL Responsibilities**

***Aircraft Operator/Pilot in Command***

7.1 In accordance with ICAO PANS ATM provisions, it is the responsibility of the Pilot in Command (PIC) and the aircraft operator to ensure that the aircraft is ready to taxi in time to meet any required departure time. PIC shall be kept informed by their operators of the AWUT, Kabul FIR entry fix times and flight parameters (route/level) nominated by BOBCAT.

7.2 The PIC, in collaboration with ATC, shall arrange take-off as close as possible to the AWUT in order to meet the Kabul FIR slot time.

***ANSD of AASL***

7.3 In accordance with ICAO PANS ATM provisions, flights with an ATFM slot allocation should be given priority for take off to facilitate compliance with AWUT.

7.4 AWUT shall be included as part of the initial ATC clearance. In collaboration with PIC, TWR/BIA shall ensure that every opportunity and assistance is granted to a flight to meet AWUT and allocated entry fix times at Kabul FIR.

**8. Coordination between Aircraft Operator/Pilot in Command, ANSD of AASL and Bangkok ATFMU**

8.1 The PIC shall include the AWUT in the initial ATC clearance request.

8.2 PIC shall adjust cruise flight to comply with slot parameters at the Kabul FIR entry fix, requesting appropriate ATC clearance including speed variations in accordance with requirements published in AIP.

8.3 Prior to departure, in circumstances where it becomes obvious that the published Kabul slot time will not be met, a new slot allocation should be obtained as soon as possible

and via the most expeditious means (e.g. via coordination between flight dispatcher, PIC, ACC/COLOMBO and Bangkok ATFMU). Early advice that the Kabul slot time will be missed also enables the slots so vacated to be efficiently reassigned to other flights.

8.4 Prior to departure, in the event that the aircraft is unable to meet the Kabul slot time, when requested by the PIC after the aircraft has left the gate TWR/BIA through ACC/COLOMBO shall assist the PIC to coordinate with the ATFMU for a revised slot allocation.

8.5 The ATFMU (VTBBZDZX) shall be included in the list of AFTN addresses for NOTAM regarding any planned activities that may affect slot availability (e.g. reservation of airspace/closure of airspace, non-availability of routes ,etc).

8.6 The ATFMU (VTBBZDZX) shall be included in the list of AFTN addresses for ATS messages (e.g. FPL,DEP,DLA,CHG,CNL) relating to flights subject to ATFM procedures.

8.7 A missed slot results in dramatically increased coordination workload for ATC and PIC and should be avoided. To minimize coordination workload in obtaining a revised slot allocation, the following procedures are recommended:

a) If the flight is still at the gate, coordination should take place via operators/flight dispatchers to ATFMU;

b) If the flight has left the gate, coordination to ATFMU may also take place via the ATS unit presently communicating with the flight.

**9. Basic computer requirement**

9.1 Aircraft operators and ACC/COLOMBO are required to have computer equipment capable of connecting to the BOBCAT website https://www.bobcat.aero via the internet and satisfying the following minimum technical requirements:

A personal computer of any operating system with the following characteristics;

i. Processor: minimum CPU clock speed of 150 MHz;

ii. Operating System: Any that operates one of the following web browsers(i.e. Windows 2000/XP, Linux, Unix, or Mac OS);

iii. Web Browser: Internet Explorer 5.5 or newer, Mozilla 1.0 or newer, Mozilla Firefox 1.0 or newer, Netscape 7 or newer;

iv. RAM: 64 MB or larger (depending on operating system);

v. Hard Disk Space: minimum of 500 MB or larger (depending on operating system);

vi. Monitor Display Resolution: Minimum of 800 x 600 pixels; and

vii. Internet Connection: 56 Kbps Modem or faster.

**10. ATFM Users Handbook**

10.1 Supporting documentation, including detailed information in respect of the AFTM operations described above and other pertinent information has been included in the *Bay of Bengal and South Asia ATFM Handbook* (the “ATFM Users Handbook”), available at https://www.bobcat.aero

10.2 ANSD of AASL and aircraft operators shall ensure that they are conversant with and able to apply the relevant procedures described in the ATFM Users Handbook.

## 11. Contingency Procedures

11.1 In the event that an aircraft operator or ACC/COLOMBO is unable to access the ATFMU website, the ATFMU shall be contacted via the alternative means (telephone, fax, AFTN) described in paragraph 13.

11.2 Contingency procedures for submission of slot request, including activation of Contingency Slot Request Templates (CSRT), are included in the ATFM Users Handbook.

11.3 In the event of system failure of BOBCAT, ATFMU shall notify all parties concerned and advise that ATFM slot allocation procedures are suspended . In this event, all parties concerned will revert to the existing ATM procedures as applicable outside the daily period of ATFM metering.

## 12. ATFM System Fault Reporting

12.1 An ATFM system fault is defined as a significant occurrence affecting an ATS unit, an aircraft operator or ATFMU resulting from the application of ATFM procedures.

12.2 Aircraft operators and ACC/COLOMBO experiencing an AFTM system fault should complete an ATFM System Fault Report Form from the ATFM Users Handbook (**see page ENR 1.9-13**) and forward it to the ATFMU at the address indicated on the form. The ATFMU will analyze all reports, make recommendations / suggestions as appropriate and provide feed back to the parties concerned to enable remedial action.

## 13. Address of Air Traffic Flow Management Unit (ATFMU)

13.1 The AFTMU may be contacted as follows;

- Unit Name : Bangkok ATFMU
- Telephone: +66-2-287-8024, +66-2-287-8025
- Fax : +66-2-287-8027
- Tel/Fax : +66-2-287-8026
- E-mail : atfmu@bobcat.aero
- AFTN : VTBBZDZX
- Website : https://www.bobcat.aero

# BOBCAT USERNAME / CONTACT INFORMATION MODIFICATION FORM

(To be submitted to Bangkok ATFMU)

## SECTION I : ADD NEW USERS

| Prefix | First Name | Last Name | Proposed Username<br>Up to 20 characters | E-Mail Address |
|---|---|---|---|---|
| | | | | |

## SECTION II : REMOVE USERS

| Prefix | First Name | Last Name | Username | E-Mail Address |
|---|---|---|---|---|
| | | | | |

## SECTION III : RESET PASSWORD

| Prefix | First Name | Last Name | Username |
|---|---|---|---|
| | | | |

## SECTION IV : NOTIFICATION E-MAIL ADDRESS

☐ Change our organization's notification e-mail address to _____

## SECTION V : CONTACT INFORMATION

Organization : _____

Full Name : _____

Tel: _____

E-mail: _____

Signature : _____

Date/Time of Request : _____

# ATFM SYSTEM FAULT AND EVENT REPORT FORM

To be submitted to Bangkok ATFMU

**SECTION I : GENERAL INFORMATION**

1. Date and Time (UTC) of Occurrence _____ / _____ / _____ / _____ / _____
   yy mm dd hh mm
2. Type of Event
   - 2.1 Failure of BOBCAT system ☐
   - 2.2 Communication Link failures ☐
   - 2.3 Non compliance with ATFM procedures by Pilot / Airline Operator / ANSP ☐
   - 2.4 Error in FPL and associated messages ☐
   - 2.5 Failure in ATFM Slot Monitoring (i.e. TWR at Aerodrome of Departure) ☐
   - 2.6 Non compliance with slot allocation window ☐
3. Restrictions applicable to the flight : _____

**SECTION II : DETAILED INFORMATION**

1. Organization / Administration submitting the report : _____
2. Flight Data(if applicable) – Call Sign :_____

   Attach copies of Flight Progress Strips indicating DEP, EOBT, WUT, DES or Entry Point & ETO over entry point, FL to ATC Unit Sector area of activity as applicable.
3. Other details necessary for analysis of the incident.

   Attach copies of FPL or RPL, subsequent ATS modifying messages etc, if appropriate.

**SECTION III : SUPPLEMENTARY INFORMATION**

1. Actions already initiated :……
   ……
2. Contact information follow-up action:
   - 2.1 Name:……
   - 2.2 Designation: ……
   - 2.3 Tel: ……..
   - 2.4 E-mail: ……..

3 Signature :……

4. Date / Time of Report:……..