



International Civil Aviation Organization

The Second Meeting of the South Asia/Indian Ocean ATM Coordination Group (SAIOACG/2)

Bangkok, Thailand, 22 – 25 May 2012

Agenda Item 3: Review Current Operations and Problem Areas

BOBCAT OPERATIONAL UPDATES AND FUTURE ARRANGEMENT

(Presented by Thailand)

SUMMARY

The purpose of this working paper is to present an analysis and overview of operational data on Westbound flights operating through the Kabul FIR associated with the ATFM BOBCAT process from the commencement of the ATFM Operational Trials in July 2007 to April 2012.

1. INTRODUCTION

1.1 The meeting would recall that on AIRAC 5 July 2007, international long range ATFM procedure using the BOBCAT system became fully operational.

1.2 It was agreed at the ATFM/TF/13 meeting held in September 2009 that monthly traffic data would be collected by all States for one agreed week each month, sent to the ATFMU and analyzed by the BOBCAT Development Team for presentation to the periodic meetings of the ATFM/TF, which was later dissolved by APANPIRG/20 decision. Therefore, BOBCAT matters should be followed up at SAIOACG meetings.

2. DISCUSSIONS

2.1 Over four (4) years since operational implementation of the ATFM procedures commenced on AIRAC 5 July 2007 to 30 April 2012, 97,481 aircraft submitted slot request, with over 90 percent accepting their slot allocation. Based on IATA estimate in July 2007, the ATFM procedure has contributed to saving over 66 million kilograms of fuel, equivalent of over 277 million kilograms of CO₂ emissions since operational implementation to April 2012.

2.2 The meeting should also note that, the average traffic per night have increased from 38 since operational trial's commencement in July 2006, to 57 in May 2011 – April 2012, with peak traffic of between 67-72 aircraft/night. While slot requests continue to increase, the number of airline involved has also increased to 56 airline operators in April 2012.

2.3 The meeting is invited to note that 8 major airports continuing to supply 97 percent of BOBCAT traffic based on May 2011 – April 2012 data are: (1) VTBS: 30%, (2) WSSS: 28%, (3) VIDP: 16%, (4) WMKK: 9%, (5) VABB: 6%, (6) VVNB: 3%, (7) VVTS: 3%, and (8) VHHH: 2%

RVSM and Reduced Horizontal Separation Implementation in the Kabul FIR

2.4 The meeting would recall implementation of RVSM in the Afghanistan airspace (Kabul FIR) on AIRAC 17 November 2011, which increased effective westbound airspace capacity in the Kabul FIR during BOBCAT hours between FL280 – FL360 by 40 percent.

2.5 The meeting would also recall series of implementation of 50NM Reduced Horizontal Separation (RHS) in the Bay of Bengal and Arabian Sea airspace between December 2011 and January 2012, further increasing effective westbound airspace capacity in the Kabul FIR during BOBCAT hours between FL280 – FL360 by approximately 20 percent.

RVSM and RHS in the Kabul FIR: ATFM Delay

2.6 When combined in theory, RVSM in the Kabul FIR and RHS implementation contributed to reducing ATFM Delay, defined by difference between latest slot request and first slot allocation from BOBCAT, from approximately 5 minutes/flight in October – November 2011 to approximately 4 minutes/flight March 2012. It should also be noted that since airlines have the ability to adjust slot allocation after the first slot allocation, the actual delay figure may be lower.

RVSM and RHS in the Kabul FIR: Punctuality

2.7 Analysis of Traffic Sample Data in February – April 2012 indicates that punctuality for major airports is similar to the situation prior to RVSM and RHS implementation in the Kabul FIR with very high punctuality over 90 percent from VTBS, WMKK and WSSS. On the other hand, punctuality from VVNB and VVTS are rather quite inconsistent between 50 – 90 percent. It is unfortunate that while Traffic Sample Data is received from VIDP, departure messages were largely missing. The only month with sufficient data is February 2012 with 23 percent punctuality.

RVSM and RHS in the Kabul FIR: Preferred Flight Levels

2.8 Analysis of Traffic Sample Data in February – April 2012 indicates that percentage of flights achieving preferred flight levels have fallen from approximately 90 percent prior to RVSM and RHS implementation to 65 – 76 percent, which is a grave concern.

2.9 Major causes of aircraft unable to achieve preferred flight level are:

- a) Tactical ATC issues: 38 percent
- b) Departures punctuality: 31 percent
- c) Unknown (more data required): 24 percent
- d) EET inaccuracy: 6 percent
- e) Unachievable slot allocation: 1 percent

2.10 More detailed analysis of BOBCAT Traffic Sample Data will be presented to the SAIOACG meeting in plenary.

BOBCAT Software Updates

2.11 The meeting is also advised that software development progress of the BOBCAT system in Stage 1, which includes Flight Plan and ATS message processing along with Flexible Taxi Time is progressing as planned with most elements of Flight Plan and ATS message processing component to be ready by November 2012, in compliant with Flight Plan 2012 format.

3. **ACTION BY THE MEETING**

3.1 The meeting is invited to:

- a) Note the data collated by the Bangkok ATFMU;
- b) Discuss data collection results; and,
- c) Consider appropriate remedial actions.

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