



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 of Current Operations and Problem Areas

ISSUES AND SUGGESTIONS REGARDING BOBCAT ATFM OPERATIONS - DELHI FIR

(Presented by Airports Authority of India)

SUMMARY

This paper presents the issues related to ATFM operations through BOBCAT system in Delhi FIR and the Suggestions for improvement.

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-6 Air traffic flow management

1. INTRODUCTION

- 1.1 Delhi FIR being the last ATS Unit to regulate the flow of Traffic as per BOBCAT allocation is experiencing various problems during peak traffic time of westbound aircraft transiting through Afghanistan.
- 1.2 There is a requirement to extend ATFM through BOBCAT during other periods, practically during day time, to accommodate overflying traffic and departures within the available slots.
- 1.3 RHS implemented on ATS routes L509 and P628 need to be reviewed. RHS is required to be implemented on ATS routes L333 – ROSIE and M875 – PAVLO.

2. DISCUSSION

- 2.1 Delhi receives aircraft from five entry points (IBANI, KKJ, IGONA, LLK and GUGIP) and hand over these aircraft to Lahore/ Karachi FIRs through four exit points (SAMAR, GUGAL, TIGER and VIKIT). Aircraft following three routes merge at SAMAR and follow two routes after SAMAR (A466 & L509). Aircraft following A466 after SAMAR converge with the westbound traffic following M875 at a point JHANG inside Lahore FIR and Delhi has to provide separation at JHANG.

- 2.2 SAMAR and GUGAL have maximum overflying traffic due to shorter route length. Even traffic entering Delhi FIR from south, cross all routes and exit via SAMAR/ GUGAL.
- 2.3 Actual estimates of more than 50% of aircraft significantly differ from the allocated ETO. There are some overflying aircraft which do not participate in BOBCAT.
- 2.4 Some aircraft express difficulty in climbing to allocated higher levels in Delhi FIR. The reason quoted is that they are allocated these levels at entry points of Kabul FIR. Lahore and Karachi FIRs insist that Delhi should release aircraft at BOBCAT levels only.
- 2.5 Due to non-conformance with allocated levels and ETO, Delhi is left with no alternative but to release aircraft at different levels well separated. Delay vectors and holding at higher levels put additional pressure on Delhi ATC and is a safety issue in already packed airspace.
- 2.6 Sometimes due to non-availability of levels for overflying traffic, levels of Delhi departures are used, which involves delay on ground.
- 2.7 Airspace saturation is observed during daytime also resulting in delays to Overflying flights and Delhi departures. There is a need to extend ATFM through BOBCAT allocation during daytime also.
- 2.8 Though RHS is implemented on ATS routes P628 and L509. Lahore FIR is accepting aircraft separated by RHS on case to case basis. RHS should be unconditional and smooth flow should be ensured.
- 2.9 India suggests that:

- a) Airline should follow East West routes and avoid changing of routes in Delhi FIR:

	Entry Point in Kabul FIR	Exit Point in Delhi FIR	Route to be followed
1	LAJAK	SAMAR	L509/A466 – G796
2	PAVLO	GUGAL	M875 – N644
3	ROSIE	TIGER	L333/G333 – L750
4	ASLUM	VIKIT	P628

- b) Apart from Time and level allocation at Kabul FIR, Time and level allocation at exit point of Delhi FIR also should be made available.
- c) FL280 and FL300 should be exclusively reserved for Delhi and Lahore Departures.
- d) BOBCAT Slot allocations may be made mandatory for all flights transiting through Kabul FIR between 2000 – 2359UTC.
- e) BOBCAT Slot allocation may be considered beyond 2000 – 2359UTC.
- f) Traffic distribution on all four exit points should be made even. Airlines may be advised to flight plan accordingly.
- g) 50NM RHS may be accepted for all aircraft on routes P628, L333, M875 and L509.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the suggestions offered by India in improving BOBCAT system; and
- b) discuss any relevant matters as appropriate.

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