



*International Civil Aviation Organization*

**The Sixth Meeting of the Bay of Bengal Reduced Horizontal Separation Implementation Task Force (BOB-RHS/TF/6) and the First Meeting of the South Asia/Indian Ocean ATM Coordination Group (SAIOACG/1)**

Bangkok, Thailand, 19 – 23 September 2011

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**Agenda Item 6: Future Direction and Arrangements.**

**India's preparations for Phase 2 of BOB-RHS**

(Presented by India)

**SUMMARY**

This paper presents a brief review of India's preparedness for implementation of Phase 2 of BOB RHS. Some of the issues that should be paid attention to have also been highlighted.

**1. INTRODUCTION**

- 1.1 India successfully participated in the phase 1 of BOBRHS programme. The BOB-RHS/TF has now to decide upon phase two of the programme which involves ATS routes L301, L759, M300, M770, N563, N877, P570 & P574.
- 1.2 This paper presents a brief review of the preparations by India for the implementation of the second phase of the programme.
- 1.3 Some of the issues regarding traffic flows that should be paid attention are also highlighted.

**2. DISCUSSION**

- 2.1 The Chennai airspace has been restructured and it will have two sectors for Oceanic airspace and a four layer concept for the continental airspace. There will be five Upper area controls, six Lower area controls, six Approach control units. The fourth layer will consist of the Aerodrome traffic zones around the aerodromes. All the radar sensors within Chennai FIR and some outside have been integrated so as to provide for seamless radar coverage within the continental airspace. These changes will cater to the requirements of additional surveillance and communication need for implementation of RHS along all RNP routes in Phase 2.
  - 2.1.1 The ATS automation system and ADS/CPDLC system at Mumbai have been upgraded. The new system has advanced capabilities for Conflict detection. Two new sectors have been created in Oceanic airspace to account for increased surveillance and communication needs required for RHS.
- 2.2 The ATS automation system at Delhi also has been upgraded with additional features of conflict detection and electronic flight progress strips

- 2.3 Pending participation by neighbouring FIRs implementation of 50 NM Longitudinal Distance Based Reduced Horizontal Separation on RNP-10 Routes (P628, L510) in Kolkata FIR was kept in abeyance.
- 2.4 One of the issues in Mumbai FIR is overloading of ATS route L301 by flights between Middle East Asia and South India. About 25 flights originating from the airports Middle East region, with destinations as Chennai, Calicut, Trivandrum, Goa, and even Colombo are being Flight Planned through Mumbai TMA, whereas alternate routes from the other EMARSSH Routes to cross Arabian Sea are available. AAI has initiated a dialogue with airlines and efforts are being made to organize a meeting between ANSPs and Airlines involved in the traffic flow to resolve the issue.
- 2.5 Another important issue is participation by neighbouring FIRs. As seen in the first phase the opportunity of RLS could be used only 15 times against 37 opportunities. The non implementation of RVSM and RLS in northwest FIRs and of RLS in Eastern FIRs is a significant limiting factor for phase two.
- 2.6 It is strongly suggested that the implementation of second phase along with the routes left out in phase one should be done only if all the FIRs in the region are participating in it. Otherwise as seen in the statistics the benefits will be minimal whereas operational difficulties would be considerable.

### **3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to:
- a) note the information regarding INDIA's preparedness for phase 2 implementation of RHS,
  - b) other states are urged to be in preparedness for the implementation of the second phase of RHS and participate in the second phase for achieving the potential benefits.

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