



*International Civil Aviation Organization*

ICAO

**The Third Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/3)**

Bangkok, Thailand, 16 – 19 April 2024

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## **Agenda Item 2: Review Outcomes of Related Meetings**

### **BOBTFRG MEETING OUTCOMES**

(Presented by the Secretariat)

#### **SUMMARY**

This paper presents outcomes from the Fifth Meeting of the Bay of Bengal Air Traffic Flow Review Group (BOBTFRG/5) for the review and action by SAIOSEACG.

## **1. INTRODUCTION**

1.1 The Bay of Bengal Traffic Flow Review Group (BOBTFRG), initiated by SAIOACG, focuses on analyzing traffic patterns and air routes within the Bay of Bengal airspace. Its goals are to address safety concerns and enhancing long-term airspace efficiency.

1.2 The Bay of Bengal Traffic Flow Review Group (BOBTFRG) convened for its fifth meeting in Bangkok, Thailand, from December 6 to 8, 2023. This gathering saw the participation of 22 attendees from Bangladesh, India, Indonesia, Malaysia, Pakistan, Singapore, Thailand, the United States, alongside representatives from IATA and ICAO. Presentations and documents from the meeting can be accessed at <https://www.icao.int/APAC/Meetings/Pages/2023-BOBTFRG-5.aspx>

## **2. DISCUSSION**

### Advancing CNS/ATM Capabilities and Implementing 30NM Longitudinal Separation

2.1 The 5th Meeting of the Bay of Bengal Traffic Flow Review Group (BOBTFRG/5) focused on advancing CNS/ATM capabilities and implementing a 30NM Longitudinal Separation on key routes (P574, N563, M300, and P570) to efficiently manage congestion in the Bay of Bengal area.

2.2 The Small Working Group, recognizing the fully equipped routes for this enhanced separation standard, emphasized the importance of collaborative efforts among member States, particularly between Malaysia and India, to finalize the detailed implementation plan. This initiative was supported by Singapore and acknowledged for its potential to reduce ground delay by improving air traffic flow efficiency.

2.3 Key discussions also included technical considerations like VHF coverage and seamless FIR implementation, alongside environmental benefits and public policy implications. Moreover, the meeting integrated outcomes from the ATM/SG/11, addressing broader air traffic management issues,

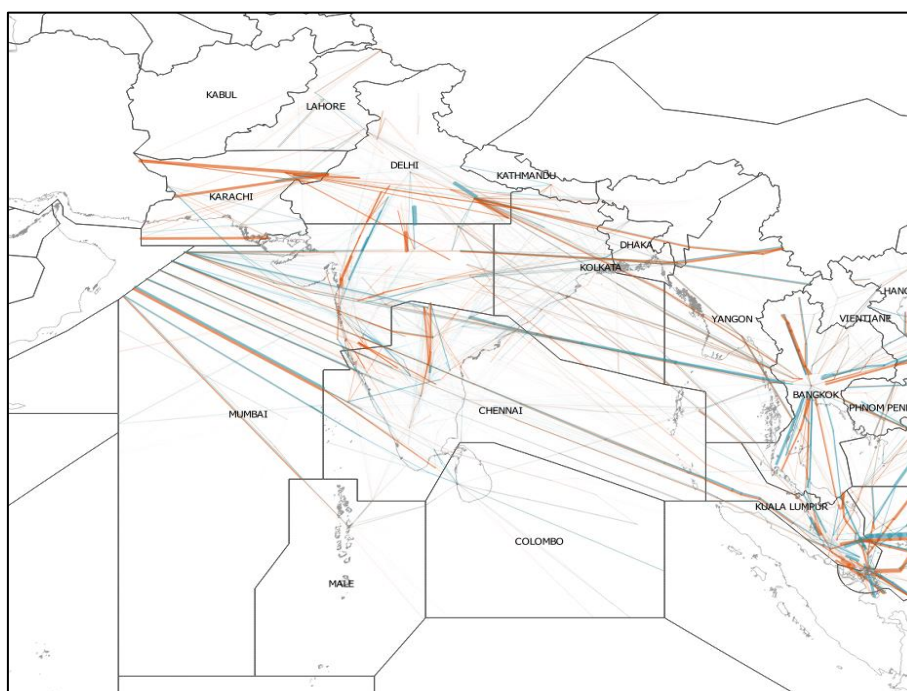
such as ATC separation standards, Regional ATM Contingency Planning, and the need for updated technologies like ADS-C/CPDLC capabilities.

2.4 The collective effort aimed at enhancing regional airspace safety and efficiency, reflecting a strong commitment to the No Country Left Behind principle and the Seamless ANS Plan update. The initiatives underscored the importance of standardized practices and modernization in ATM to ensure safety and efficiency across the Asia/Pacific region.

#### Discussion on Optimizing Airspace Capacity in the Bay of Bengal

2.5 During the BOBTFRG/5 meeting, a comprehensive review of existing traffic flow and route structures in the Bay of Bengal (BOB) airspace was conducted, highlighting priorities and implementation timelines for Performance-Based Communication and Surveillance (PBCS) to achieve reduced horizontal separation.

2.6 The Monitoring Agency for Asia Region (MAAR) presented Traffic Sample Data (TSD), emphasizing the impact of COVID-19 on air traffic and showcasing traffic flow visualizations (Figure 1) to support efficient airspace management.



**Figure 1:** 2022 Traffic Flow from TSD in Bay of Bengal Area

2.7 Discussion on PBCS implementation timelines detailed a phased approach aiming for a 30NM longitudinal separation by March 2026, while highlighting the need for enhanced civil-military cooperation and standardized data collection for accurate traffic analysis.

2.8 The meeting also discussed system readiness across BOB member States for PBCS implementation, identifying specific challenges and progress in ADS-C/CPDLC deployment and RNP capabilities, summarized in Table 1. A focus on collaboration, particularly between India and Malaysia for trial implementations, underscored the collective commitment to optimizing airspace capacity and managing the region's growing air traffic demands effectively.

| STATE          | FIR              | FPL PROCESSING F<br>OR PBCS | ADS-<br>C /CPD<br>LC | RCP 2<br>40 | RSP 1<br>80 | POST IMPLEMENTATION M<br>ONITORING | REMARK   |
|----------------|------------------|-----------------------------|----------------------|-------------|-------------|------------------------------------|--|
| BANGLA<br>DESH | DHAKA            |                             |                      |             |             |                                    | ATM automation system not implemented yet                                      |
| INDIA          | CHENNAI          | YES                         | AVAILA<br>BLE        | YES         | YES         | YES                                | System testing required  |
|                | KOLKATA          | NO                          | AVAILA<br>BLE        | YES         | YES         | YES                                |  |
|                | MUMBAI           | YES                         | AVAILA<br>BLE        | YES         | YES         | NO                                 | System testing required  |
| INDONES<br>IA  | JAKARTA          | NO                          | TRIAL                | NO          | NO          | NO                                 | The system is being upgraded. PDC 2025   |
| MALAYSI<br>A   | KUALA LU<br>MPUR | NO                          | AVAILA<br>BLE        | YES         | YES         | YES                                | monitoring only for ADS-C/CPDLC  |
| MYANM<br>AR    | YANGON           | NO                          | YES                  | NO          | NO          | NO                                 |  |
| SRILANK<br>A   | COLOMBO          | NO                          | YES                  | TESTI<br>NG | TESTI<br>NG |                                    | System is being upgraded PDC by 2024.  |
| THAILAN<br>D   | BANGKOK          | YES                         | NO                   | NO          | NO          | AVAILABLE                          | En-<br>route airspace is fully covered with SSR. no pl<br>an to prescribe PDC. |

**Table 1:** The readiness of ATM/CNS system of BOB States (Updated by BOBTFRG/5)

#### Advancements in ATM Strategies

2.9 The meeting focused on the development of Performance-Based Navigation (PBN) routes and the optimization of the Flight Level Allocation Scheme (FLAS) and Flight Level Orientation Scheme (FLOS). Discussions included reviewing proposals from the Asia/Pacific Region ATS Route Catalogue, emphasizing prioritization based on implementation timelines. Notably, the US FAA shared insights on implementing Performance-Based Separation Minima, highlighting the transition to Advanced Technologies and Oceanic Procedures (ATOP) for enhanced airspace efficiency. Additionally, Free Route Airspace (FRA) initiatives were discussed, underscoring FRA's role in airspace capacity enhancement and emissions reduction.

2.10 The meeting underscored the importance of collaboration among member States, advancements in ATM procedures, and the implementation of FRA to meet growing air traffic demands in the South Asia region effectively. This convergence of expertise aimed at refining ATM strategies and adopting new technologies marks a significant step toward modernizing air traffic management in the region.

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

3.1 The meeting is invited to:

- note the information contained in this paper;
- discuss any relevant matters as appropriate.