



*International Civil Aviation Organization*

**The First Meeting of the ICAO Asia/Pacific Seamless ATM Planning Group (APSAPG/1)**

Bangkok, Thailand, 31 January – 03 February 2012

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**Agenda Item 4: Asia/Pacific Seamless ATM Status and Strategies**

**Role of BOBASIO in the application of Seamless ATM practices in Bay of Bengal, Arabian Sea and Indian Ocean**

(Presented by INDIA)

**SUMMARY**

Seamless ATM principles are applied across many FIRs and airspaces and therefore require inputs and coordination between many states.

BOBASIO is a platform in bringing together the ASIOACG members and the Bay of Bengal States for enhanced coordination. The scope of participation in BOBASIO reaches across SE Asia, Middle East and Arabian Sea, thus providing an effective platform for propagating the principles of Seamless ATM. This paper suggests a complimentary role for BOBASIO in adopting ATM strategies for seamless ATM in the oceanic areas of Bay of Bengal, Arabian Sea and Indian Ocean.

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-1 Flexible use of airspace
- GPI-4 Alignment of upper airspace classifications
- GPI-5 RNAV and RNP (Performance-based navigation)
- GPI-6 Air traffic flow management
- GPI-7 Dynamic and flexible ATS route management
- GPI-8 Collaborative airspace design and management
- GPI-9 Situational awareness
- GPI-11 RNP and RNAV SIDs and STARs
- GPI-17 Data link applications
- GPI-18 Aeronautical information
- GPI-21 Navigation systems
- GPI-22 Communication infrastructure

## 1. INTRODUCTION

- 1.1. Asia Pacific region continues to experience an exponential growth in air traffic over which is posing a challenge to all the ANSPs in their efforts for providing safe, orderly, expeditious flow of traffic and at the same time satisfying the need of the Airlines for obtaining their preferred flight profile in the Asia Pacific region.
- 1.2. The ANSPs have responded to the challenge by undertaking technological up gradations, adopting progressive procedures like PBN, RNAV etc. While these initiatives have yielded remarkable success in augmenting safety, efficiency and capacity of Air space/airport in pockets of airspace within a particular State, close cooperation among neighboring countries is often not achieved.
- 1.3. Seamless ATM across FIRs/States means the Major Traffic Flows are not constrained by ICAO Regions. It is important to note that well-coordinated work across trans-regional boundaries will be increasingly required in this regard. To ensure uniform ANS standards and services across many States and for safe, efficient cross border flow of traffic, collaboration becomes vitally ingredient.
- 1.4. APSAPG plans to coordinate with the regional groups to manage trans-regional issues.
- 1.5. The Arabian Sea/Indian Ocean ATS Coordination Group (ASIOACG) plays a key role in supporting and expediting the goals and objectives of ICAO, especially in regard to CNS/ATM initiatives within the Oceanic airspace of the Arabian Sea and Indian Ocean.
- 1.6. Bay of Bengal oceanic area and the States around it, contribute significantly towards Major Traffic Flows from and to the Arabian Sea and Indian Ocean region.
- 1.7. A major portion of the Major Traffic Flows, viz., AR-1, AR-4 and AR-10 in the Asia Pacific Region, lie in the above region. Therefore a common platform for sharing and developing uniform Air Navigation Service standards will be necessary.
- 1.8. An effort has been made to bring together the neighboring states of Arabian Sea, Indian Ocean and Bay of Bengal as part of an ATS Coordination platform, BOBASIO.
- 1.9. The scope of BOBASIO includes the States in the Bay of Bengal, Arabian Sea and Indian Ocean Region. BOBASIO would provide an excellent platform to resolve various ATM related issues concerning coordination between ATS units, search and rescue, air traffic flow management, ATS route structure, contingency plans, development of latest technologies and other related issues.
- 1.10. BOBASIO presents a critical platform for Asian, Middle East Asian and African countries to come together to exchange ANS information. Coordinated application of seamless ATM procedures through such a diverse region will necessitate active contribution from BOBASIO members and as a group as well.

## 2. DISCUSSION

- 2.1. ICAO ASBU concept envisages incremental implementations of modules depending on the state of requirement and readiness. This implies that all modules are not required at all places.

- 2.2. But in order to achieve global interoperability and seamless ATM services, it may be necessary to consider implementation of certain modules across regions in a coordinated timeline. The application of Data link is an excellent example.
- 2.3. A comprehensive deployment of Block Zero (0 ) modules to support Asia Pacific Air Navigation Concept of operations will require concerted efforts in cooperation, collaboration and participation from all member states.
- 2.4. BOBASIO group will act as an additional platform to achieve the required coordination. It will also perform the crucial role of bringing together the Asian, Middle East Asian and African countries in extending the scope of seamless ATM from Asia to Middle East and Africa.
- 2.5. The Arabian Sea/Indian Ocean ATS Coordination Group (ASIOACG) is the primary regional group in Arabian Sea and Indian Ocean region. BOBASIO can supplement the APAC/ASIOACG initiatives for application of seamless ATM procedures in a timely manner.

**3. ACTION BY THE MEETING**

- 3.1. The meeting is invited to:
  - a) note the information contained in this paper
  - b) Discuss any relevant matters as appropriate.

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