



**Seventh ATS Coordination Meeting of Bay of Bengal, Arabian Sea  
and Indian Ocean Region (BOBASIO/7)  
New Delhi, India, 18 – 19 September 2017**

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**Agenda Item 5: AIRSPACE SAFETY**

**CREATION OF BOBASIO AIRSPACE SAFETY HAZARD DATA LIBRARY**

(Presented by India)

**SUMMARY**

In accordance with the principle of coordination between the various BOBASIO STATES, this paper proposes a new initiative to create a BOBASIO Safety Hazard Identification Library (BSHIL) that would enable Safety Managers to effectively identify Safety Hazards for various changes that will be introduced by States in the quest of enhancing airspace safety either individually or collectively.

The proposal includes establishment of a voluntary Task Force for realization of the project.

**1. INTRODUCTION**

1.1 Air Navigation in India is being managed by AAI over the entire civil airspace, whereas Airport Services for 126 airports are provided by AAI other than for some airports wherein it is operated by various private operators. There has been a continuous upgradation on ground at the airports as well as in the Indian Airspace to meet the growing demands of air traffic and to ensure implementation of India's strategic plans in line with ICAO Aviation System Block Upgrades.

1.2 The Global Aviation Safety Program (GASP) objectives call for States to put in place robust and sustainable safety oversight systems and to progressively evolve them into more sophisticated means of managing safety. These objectives align with ICAO requirements for the implementation of State Safety Programmes (SSP) by States and Safety Management Systems (SMS) by service providers. As a requirement of near term deliverables, all States need to establish effective safety oversight systems and have safety oversight (over 60% EI) to fully implement SSP and States / Stakeholders support RASG with the sharing of safety information.

1.3 In order for these objectives to be met, Regional Aviation Safety Groups (RASG) and regional Safety Oversight Organizations (RSOO) are actively involved in the coordination and, to the extent possible, harmonization of all activities undertaken to address aviation safety issues at a regional level, including the use of the global aviation safety roadmap by individual States or a group of States.

1.4 BOBASIO is evolving as an effective informal group that is harmonizing number of activities commonly affecting the involved states. It would be appropriate to consider utilization of common risk assessment database among BOBASIO states to implement predictive risk management.

1.5 In the long term, the BOBASIO States can build upon safety management practices within the SSP to develop advanced safety oversight systems, including predictive risk management. This objective is intended to sustain collaborative decision-making in an environment characterized by increased automation and the integration of advanced capabilities on the ground and in the air, as outlined in the GANP. (E.g. in the highly automated air traffic management concepts of the future). The evolution to this dynamic and

integrated environment will require the continuous exchange of information on a real-time basis. As a result, coordination of safety management activities between BOBASIO States as well as across all operational domains will be essential for implementation of the Aviation System Block Upgrades (ASBU).

## 2. **DISCUSSION**

2.1 India has adopted a robust Safety Management System as per norms laid down by both ICAO and the national regulator and has an oversight audit machinery both from the service provider and the regulator. Any new addition to the existing system or any change that is contemplated for improvement in Air Traffic Services will be preceded by a Safety Assessment with involvement of stake holders.

2.2 Hazards are identified through brain-storming by the focus group. The consequence(s) of the risks so identified are expressed in terms of probability and severity, as stipulated in the Corporate SMS Manual of AAI. The risks are classified according to the risk indices and the change will be implemented only if the risks are in the Acceptable Region of the Risk Pyramid. India has adopted this procedure for managing safety in the developmental changes such as upper airspace harmonization, ADS-B implementation, establishment of PBN routes and procedures, installation of navigation aids, modifications made in the airport operational areas and have been highly successful.

2.3 The safety hazard database is collected electronically and is made available to safety managers while implementing similar works at different airports or within different Indian Flight Information Regions. BOBASIO states may consider evolving a common web based databank that can be shared among BOBASIO states.

2.4 Aviation Safety Directorate of AAI maintains a comprehensive Safety Risk Library, which is accessible through intranet to all AAI employees. The Safety Risk Database contains all safety risks identified at CHQ, RHQ and airport/facility levels. The mitigation strategy for each safety risk along with the existing and potential defenses is also available in the library.

2.5 As a proposal, India encourages CAA, ANSP and Industry Organizations of BOBASIO States to share Safety Risk information, accumulated through their respective safety management processes, so as to benefit all stakeholders, thereby reducing the need for “reinventing the wheel”.

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

3.1. The meeting is invited to:

- a) take note of the above initiative by India;
- b) consider evolving BOBASIO states to create a BOBASIO Safety Hazard Identification Library (BSHIL) that would enable Safety Managers to effectively identify Safety Hazards for various changes that will be introduced by BOBASIO states in the quest of enhancing airspace safety both individually and collectively; and
- c) consider establishment of a voluntary Task Force for realization of the project.

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