



International Civil Aviation Organization

The Seventh Meeting of the ICAO Bay of Bengal Reduced Horizontal Separation Implementation Task Force (BOB-RHS/TF/7)

Bangkok, Thailand, 21 May 2012

**Agenda Item 5: ATS Route Development and
Agenda Item 6: Development of a Coordinated Action Plan**

**Proposal to introduce 50/30NM on ATS Route L301 and N571
As a Transition from 50/50 to 30/30NM RLS**

(Presented by Airports Authority of India)

SUMMARY

This paper presents the proposal by India to introduce 30 NM reduced longitudinal separation on routes N571 & L301. as a transition from 50:50 to 30:30 and also the need to modify the Scope of Work of the Bay of Bengal Reduced Horizontal Separation Task Force.

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-3 Harmonization of level systems
- GPI-5 RNAV and RNP (Performance-based navigation)
- GPI-6 Air traffic flow management
- GPI-8 Collaborative airspace design and management
- GPI-17 Data link applications
- GPI-21 Navigation systems
- GPI-22 Communication infrastructure

1. INTRODUCTION

- 1.1 The Bay of Bengal ATS Coordination Group in its 20th meeting in January 2009 formed the Bay Of Bengal Reduced Horizontal Separation Task Force for implementing Reduced Horizontal Separation in the Bay of Bengal Arabian Sea Indian Ocean.
- 1.2 The Terms of Reference of BOB-RHS/TF calls upon member states to
 - a) Identify areas/routes where the implementation of reduced horizontal separation would bring immediate operational efficiency.

- b) Determine the reduced horizontal separation required, taking into account traffic volumes and disposition, approval status of the aircraft operating on the relevant routes, user expectations and the communication and surveillance capabilities of ATS providers involved.
- c) Consider setting up appropriate teams/groups which might but not necessarily, include the entire Task Force, to address and implement specific agreed measures within specific airspaces.

2. DISCUSSION

- 2.1 BOB-RHS/TF in its various meetings through 2010 and 2011 had decided and implemented 50 NM Reduced longitudinal separation in a Phased manner along RNP10 routes in the BOBASIO airspace. Phase1 implementation was on two RNP10 routes from 30th June 2011 and Phase2A, 2B & 2C were implemented on 15th December 2011, 12th January 2012 & 8th March 2012 respectively.
- 2.2 As per the Terms of Reference, the Objective of the BOB-RHS/Task Force is to develop and implement strategic, benefits-driven plans to improve en-route airspace efficiency by means of the implementation of reduced horizontal separation (lateral and longitudinal) based on the ICAO RNAV 10 (RNP 10) and RNP 4 PBN navigation specifications within the Bay of Bengal Arabian sea and Indian Ocean airspace.
- 2.3 The successful implementation of 50 NM RLS in the sub region has given the Controllers enough confidence and experience to progress to the next level.
- 2.4 The data link capability of Yangon, Kuala Lumpur, Chennai, Kolkata, and Mumbai enables continuous surveillance for FANS1/A aircraft along the two routes, N571 & L301. Muscat FIR to the west of Mumbai FIR has uninterrupted Radar coverage right up to and beyond the common boundary with Mumbai FIR.
- 2.5 As per Section 5.4 of the PANS-ATM (Doc 4444) ADS/CPDLC systems which meet the requirements for application of the 50 NM lateral and longitudinal minima based on RNP10 will also meet the requirements for the application of the 30 NM lateral and longitudinal minima provided they can support the increased reporting rate required.
- 2.6 A sample study conducted over a period of seven days from 25th to 31st December 2011 within Chennai FIR showed that 69% percentage of aircraft population were ADS/CPDLC capable.
- 2.7 30 NM Reduced longitudinal separation can be introduced on the two routes N571 & L301 on opportunity basis depending on aircraft on-board equipage.
- 2.8 To start with it would be more prudent to first introduce 30 NM Reduced Longitudinal separation (50:30) on at least two routes, one medium density and one high density, namely N571 & L301 as a transition from 50:50 to 30:30. This limited implementation on only two routes would not necessitate re-structuring of the RNP routes.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) Modify the Scope of Work in the Terms of Reference of the Bay Of Bengal Reduced Horizontal Separation task Force to include introduction of 50 NM Lateral and 30 NM longitudinal as a Transition Phase leading to full implementation of 30:30.
- b) Consider the proposal by India to introduce 30 NM reduced longitudinal separation on N571 & L301 on an opportunity basis.
- c) discuss any relevant matters as appropriate.

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