



## **Combined ASIOACG/10 and INSPIRE/6 Meeting, 2015**

Madagascar, 17th to 19th November 2015

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### **Agenda Item 3: ATM issues**

#### **Update on AAI's efforts for RNP10 routes and implementation of 50 Nm RHS**

(Presented by Airports Authority of India)

##### **SUMMARY**

This paper presents information about AAI's initiatives to convert all the conventional ATS routes in oceanic airspace of Mumbai FIR as RNP10 routes and implement 50 Nm RHS

This paper relates to:

Relevant Strategic Objectives:

A: Safety – Enhance global civil aviation safety

B: Air Navigation Capacity and Efficiency – Increase the capacity and improve the efficiency of the global aviation system

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-5 RNAV and RNP (Performance-based navigation)

GPI-8 Collaborative airspace design and management

GPI-17 Data link applications

## **1. INTRODUCTION**

1.1 ASIOACG/10 INSPIRE/6 meetings had resolved in 2014 that by the end of 2015 ANSPs should upgrade the Arabian Sea & Indian Ocean airspace to RNP10 and implement 50 Nm RHS across AS & IO airspace.

1.2 This paper presents initiatives of Airports Authority of India to achieve these targets in airspace of Mumbai FIR.

## 2. DISCUSSION

2.1 The oceanic airspace of Mumbai has 12 RNP10 routes and 6 conventional ATS routes. Every day on an average 755 flights fly on these routes. Of these flights, 710 are on RNP10 routes and 45 are on the conventional ATS routes.

2.2 AAI has planned to convert the ATS routes G450, A474, B459, and UL425 to RNP 10 routes with lower limit as FL280 and upper limit of the route as FL460.

2.3 Safety Assessment process for the conversion has been completed and the process of approval and promulgation is expected to be complete by the end of 2015.

2.4 AAI has also completed safety assessment process for removing connector routes V12 to V21 as resolved in earlier ASIOACG INSPIRE meetings and promulgation is soon expected.

2.4 In order to facilitate Non RNP10 flights if any, AAI plans to retain G450 with upper limit as FL270 and also introduce two more conventional routes with upper limit as FL270 below RNP10 routes N571 and L894.

2.5 AAI had implemented 50 Nm longitudinal separation on almost all the RNP10 routes in all the FIRs in the year 2011 and in 2014 implemented 30 NM longitudinal separation on four ATS routes namely N571, P574, M300, P570.

2.6 Since 13<sup>th</sup> July 2015, Muscat has started accepting 50 Nm longitudinal separation across Muscat/Mumbai FIR boundary. The amendment to LOA for 50 Nm RHS signed three years back has now thus come into effect and revised draft of LOA has been discussed between PACA and AAI through emails and may be signed soon.

2.7 Similarly India and Pakistan have agreed to accept 50 Nm longitudinal separation across Karachi/Mumbai and Karachi/Delhi and Lahore/Delhi FIR boundaries. Draft LOAs have been exchanged and before year end would be signed.

2.8 Seychelles and India are also in agreement to implement 50 Nm and after conversion of routes B459, G424 and to RNP10 will implement 50 Nm longitudinal separation across Seychelles/Mumbai FIR boundary.

2.9 As presented in WP/3, after the new RNP10 routes are established, 50 Nm longitudinal separation may be implemented across Mogadishu/Mumbai FIR boundary.

2.10 AAI would soon initiate discussions with Maldives and Sana for RHS implementation and with that 50 Nm RHS implementation would be achieved in the oceanic airspace of Arabian Sea.

## 3. ACTION BY THE MEETING

3.1 The meeting is invited to,

- a) note the initiatives of AAI for 50 Nm RHS
- b) support efforts of AAI and ANSPs mentioned in this paper for achieving the target of RNP10 and 50 Nm RHS.

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