Combined Fourth Meeting of Arabian Sea/Indian Ocean ATS Coordination Group (ASIOACG/8) and Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE/4) –

Melbourne, Australia 25th November – 28th November 2013

Agenda Item 4: [Coordination Issues]

Improvement in Arabian Sea FLAS

(Airports Authority of India)

SUMMARY

The Flight Level Allocation Scheme (FLAS) was implemented to provide pre-coordinated levels to flights flying in Arabian Sea Airspace. The airlines have been requesting cancellation of FLAS, but owing to the presence of legacy aircraft still flying in Arabian Sea airspace operating without ADS-C/CPDLC and unable to contact Mumbai OCC on HFRT, AAI has been constrained to maintain FLAS. This paper presents recent review of FLAS undertaken by AAI as discussed with other ANSPs and airlines during BOBASIO3 Meeting, 22-24 October 2013, held at Hyderabad India.

This paper relates to :

Relevant Strategic Objectives:

*A: **Safety** – Enhance global civil aviation safety*

***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-6 Air traffic flow management

1 INTRODUCTION

1.1 The Flight level allocation scheme was introduced in Arabian Sea region of Mumbai FIR during RVSM implementation as some of the neighbouring FIRs were still using CVSM. Under this scheme one FL i.e. F330 is not available to East Bound flights on EMARRSH routes.

1.2 There has been a demand to remove FLAS in Mumbai FIR and the paper discusses the review undertaken by AAI

2 DISCUSSION

2.1 The FLAS was introduced for safe implementation of RVSM in Mumbai FIR considering the fact the four North South Routes (P751, G450, B459, A474) cross the Six East West Routes (N563, M300, P570, UL425, L894, L516) outside VHF and RADAR coverage. A separation of fifteen minutes is applicable at twenty two crossing points of these ATS routes.

2.2 Because of FLAS one flight level is not available to eastbound traffic and one is not available to westbound traffic in East West Flow. The volume of traffic is much higher in East West flow than North South Flow. The FLAS not only ensures safety but also provides access to reasonably high flight level to north south flow (F330 and F300). However, to support the high traffic density on Middle East- Australia Sector, the FLAS is suspended during 0530-0930 UTC.

2.3 The narrow body traffic on these routes is also substantial owing to industry requirements and these aircrafts as well as some legacy wide body aircraft are not equipped with ADS-C/CPDLC. The HF has operational limitations as HF suffers from ionospheric effects in this region. Hence the communication and surveillance with these aircraft is not hundred percent.

2.4 This further poses challenge to ATC to apply the rather large fifteen minutes separation applicable in the airspace for crossing traffic.

2.5 In spite of the existing constraints in Arabian Sea airspace, AAI is committed to improve the efficiency of the flow and has reiterated sensitization measures for controllers so that FLAS should be employed as the last step and all efforts are made to allocate optimum levels to North South and East West traffic flows as soon as optimum levels are available clear of conflicting traffic.

2.6 It may also be noted that due to their own reasons Sanaa and Mogadishu ATC also sometimes refuse to accept the west bound flights at levels other than FL300.

3 ACTION BY THE MEETING

3.1 The meeting is invited to

a) Discuss the safety and efficiency issues related to FLAS and solutions to the issue.