International Civil Aviation Organization

The Fourth Meeting of the South Asia, Indian Ocean and Southeast Asia ATM Coordination Group (SAIOSEACG/4)

Bangkok, Thailand, 18 – 21 March 2025

Agenda Item 5: ATS Route Development

CHALLENGES IN THE NORTHERN PART OF MUMBAI OCEANIC AIRSPACE AND PROPOSED SOLUTIONS

(Presented by India-Airports Authority of India)

SUMMARY

This paper presents the challenges due to congestion of crossing traffic in the northern part of Mumbai FIR and possible solutions to decongest the airspace with improved probability of optimum levels for flights.

1. INTRODUCTION

Mumbai Oceanic Control unit provides Air Traffic Services over a vast airspace. The air traffic growth in this airspace is significant. The main challenge off late are the conflicts between flights operating from Africa to South Asia and from Middle East to South Asia at crossing points. With the increase in the volume of traffic, these flights are not only forming crossing traffic with each other but also affecting the availability of efficient flight levels resulting in inefficient utilization of airspace.

2. DISCUSSION

PROBLEM AREAS

1) Flights from Africa to South Asia are mainly using Route P751 transiting through Mumbai Oceanic Airspace and Mumbai TMA resulting in congestion in northern half of Mumbai Oceanic airspace.
2) Flights from Male FIR to Middle East are mainly using route L894 and L516 which are converging over KITAL. There is another route P570 which is also converging over KITAL. P751 cuts across these routes resulting in decreased availability of levels.

SOLUTIONS PROPOSED

1) With respect to problem area one regarding flights from Africa to South Asia majorly using route P751, one of the solutions proposed is diverting part of traffic from P751 to P323 - GIDAS to DONSA and thereafter using G450 to enter Mumbai TMA (Shown in Green Colour). UPRs (Use preferred Routes) were also established in the southern part of Mumbai oceanic airspace to decongest the major routes. Flights from central and southern parts of

Africa towards South Asia can explore the possibility of using UPR zone for increased availability of optimum levels. The above mentioned measure along with usage of UPRs will not only decongest the major routes but will also facilitate availability of optimum levels to most of the flights. The above proposal was also communicated to respective Airline operators and IATA in a meeting held in the month of January and feedback is awaited from them.

2) The problem area number two pertains to decongestion of the waypoint KITAL at Muscat/Mumbai FIR boundary. At present 3 major ATS Routes L516, L894 from MALE FIR and P570 from Chennai FIR converge at KITAL. This convergence of the 3 major ATS Routes results in decreased availability of optimum levels to all flights and inefficient use of airspace. The solution proposed to the above issue is to create a route originating at ASPUX on MUSCAT/MUMBAI FIR boundary and passing through a waypoint at least 50NM south of waypoint BIBGO on MUMBAI/MALE FIR boundary (Shown in Blue). This will result in decongesting the major routes going to MUSCAT FIR and facilitate increased availability of optimum levels to flights coming from MALE and CHENNAI FIR.

3) The Mumbai Oceanic Airspace Map is attached.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the issues and challenges mentioned in this paper; and

b) discuss the solutions proposed in the paper or any other possible solutions.

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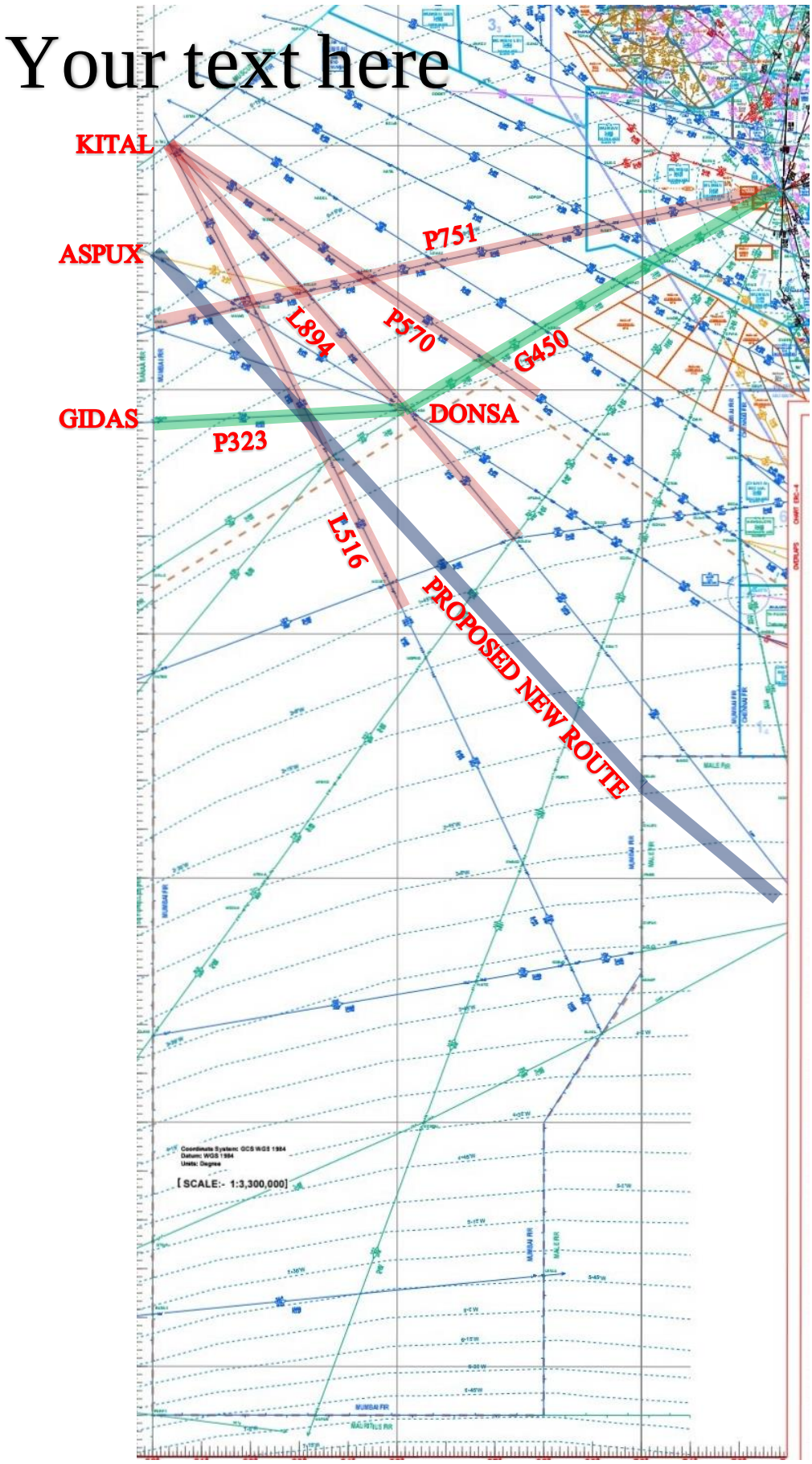
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