



ARABIAN SEA INDIAN OCEAN ATS
COORDINATION GROUP AND INDIAN
OCEAN STRATEGIC PARTNERSHIP TO
REDUCE EMISSIONS WORKING GROUP
MEETING

ARABIAN SEA INDIAN OCEAN ATS COORDINATION GROUP AND INDIAN OCEAN STRATEGIC PARTNERSHIP TO REDUCE EMISSIONS WORKING GROUP MEETING

DOHA, QATAR 4-5 JUNE 2014

Agenda Item 2: Review of UPR zone promulgation and next steps

Proposal to extent the current UPR Zone to Mogadishu, Sanaa and Muscat FIR.

(Presented by Qatar Airways)

SUMMARY

This paper proposes extension of the current Arabian Sea and Indian Ocean UPR Zone to Mogadishu, Sanaa and Muscat FIRs. It also proposes introduction of the UPR gates at waypoints KUTVI and RAPDO.

1. INTRODUCTION

- 1.1 The Arabian Sea Indian Ocean UPR Geographic zone is that airspace formed from contiguous portions of adjoining Flight Information Regions (FIRs) across the Arabian Sea, Indian Ocean and adjoining airspaces.
- 1.2 The Arabian Sea and Indian Ocean UPR geographic zone was implemented successfully on the 17 October 2013.
- 1.3 The access to this UPR airspace from Sanaa and Muscat FIR is limited. At the same time the route structure feeding into the UPR airspace is not well aligned to support optimum flight trajectories to the Australian and Indian Ocean destinations.
- 1.4 This paper identifies areas where the route structure needs to be improved, proposes extension of the current UPR zone and the new entry/exit gates.

2. DISCUSSION

- 2.1 With the expected improvements in the Empty Quarter airspace in Jeddah FIR, there are opportunities to have a better access to the Arabian Sea and Indian Ocean UPR Zone.
- 2.2 During summer, flights from Doha to Australian destinations and Indian Ocean destinations can efficiently access the UPR zone through Muscat, Sanaa and Mogadishu FIRs without having to go through busy Emirates airspace.
- 2.3 To efficiently access the UPR zone, better routing structure is required to airspace adjacent to UPR airspace. In particular, routing structure with Jeddah, Muscat, Sanaa and Mogadishu FIR.
- 2.4 While the current UPR Zone has brought the flexibility of flight planning optimum route

trajectories that tracks the best winds on daily basis, there exist additional benefits if the boundaries are extended closer to the west towards Mogadishu, Sanaa and Muscat FIR. This will ensure the advantage of flying off airways is gained early enough.

2.5 Along with the proposal of extending the boundaries, introducing new entry/exit gates **KUTVI** and **RAPDO** at the proposed boundary of UPR Zone may provide means by which the respective ATS units can manage traffic safely into and out of the UPR airspace.

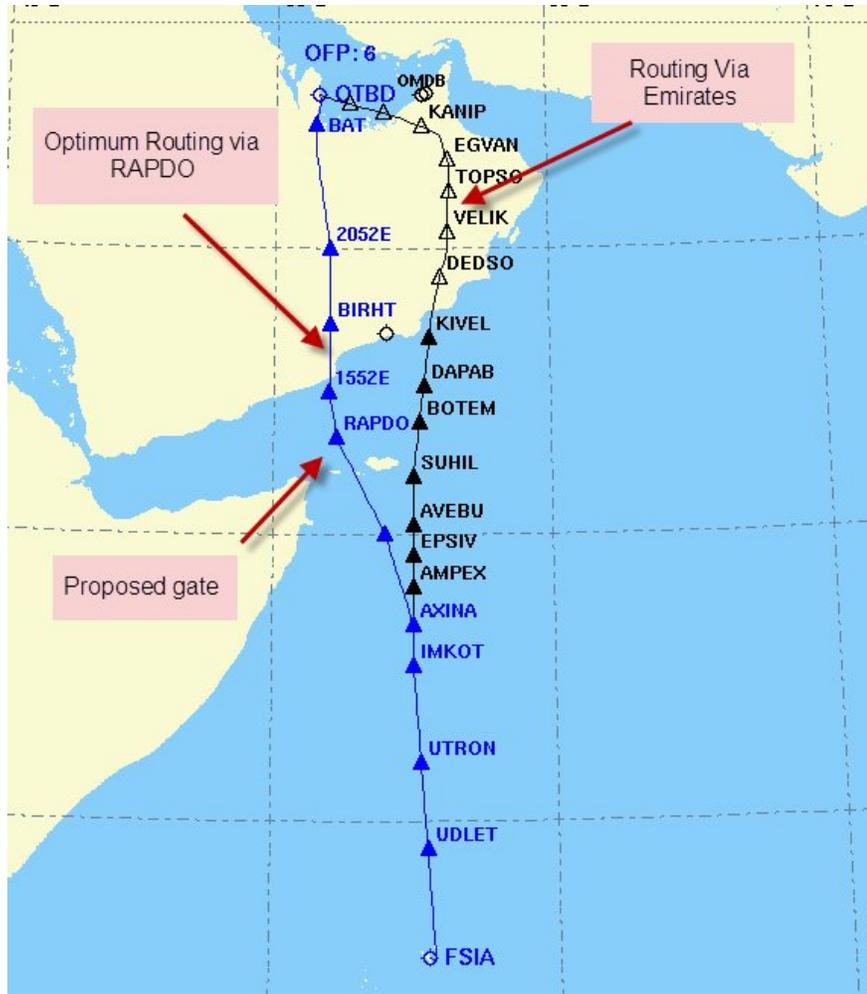
2.6 In terms of the benefits to the user;

- I. Subject to route restructuring in Jeddah/Muscat/Sanaa FIRs, flights from Doha and Bahrain to Indian Ocean island destinations through the gate **RAPDO** (Sanaa FIR) can result in up to **10** minutes of flight time savings.
- II. Accordingly, the routing via the gate **KUTVI** (Muscat FIR) to Australian destinations may lead gain in terms of payload uplift up to nearly a tonne.

2.7 Below is diagram showing the routings via **KUTVI** gate



2.8 Below diagram showing the routing via **RAPDO** gate



2.9 Below is the proposed UPR boundary extension and new gates (**RAPDO** and **KUTVI**)

