



*International Civil Aviation Organization*

**The Twenty-first Meeting of the Bay of Bengal ATS Coordination Group  
(BBACG/21)**

Bangkok, Thailand, 07 – 10 March 2011

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**Agenda Item 6:   ATS Route Developments**

**Uni-directional Crossing Routes**

(Presented by IATA)

**SUMMARY**

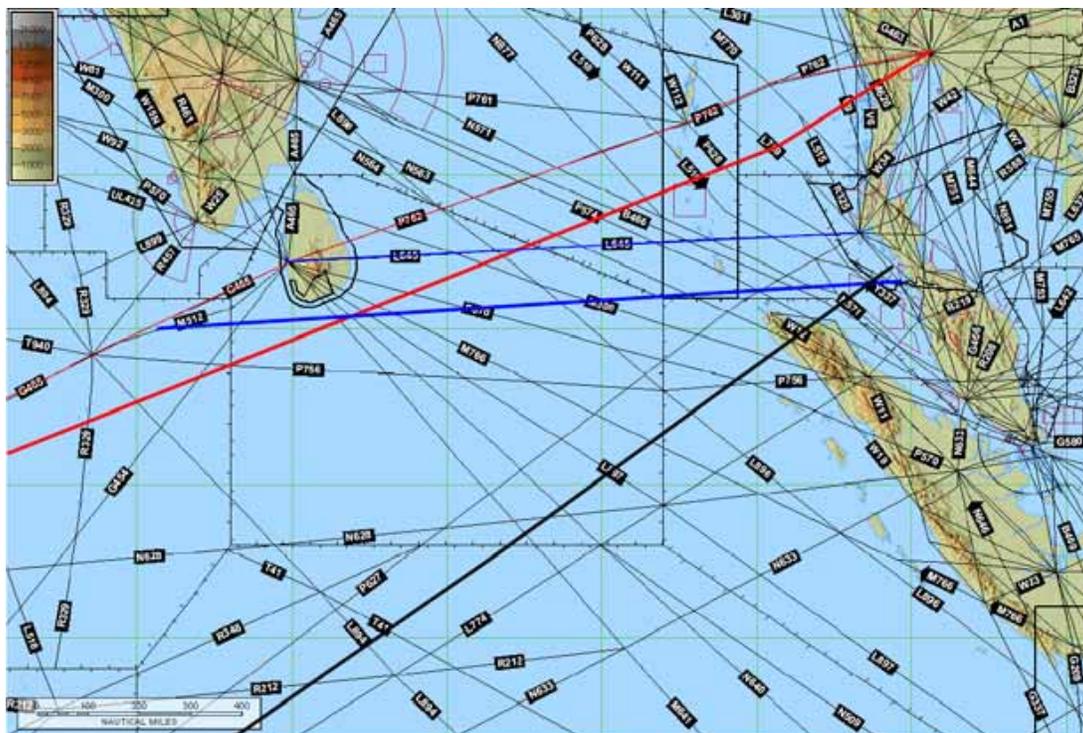
This paper repeats a proposal made to BOB-RHS TF/2 to establish uni-directional crossing routes to enhance capacity for both the Primary and secondary traffic flows.

**1.   INTRODUCTION**

- 1.1   In the absence of a BBACG meeting in 2010, IATA presented a proposal to the 2<sup>nd</sup> meeting of the Bay of Bengal Reduced Horizontal Separation Task Force (BOB-RHS TF/2) to establish uni-directional crossing routes in the southern Bay of Bengal to further increase efficiencies.
- 1.2   With the BBACG meeting again being held in 2011, it is appropriate to review this proposal. The following is a copy of IP/02 submitted as to BOB-RHS TF/2.

**2.   DISCUSSION**

- 2.1   While the primary traffic flow is between South East Asia, the Indian Subcontinent and onto the Middle East and beyond, there are also crossing tracks serving traffic between Asia and Africa. While these tracks are not as heavily trafficked, allowance must still be made with the allocation of Flight Levels. These routes can effectively limit the capacity of the primary routes.
- 2.2   The establishment of uni directional crossing routes can increase the capacity available for the primary traffic flow. This can be achieved by allocating same levels on the uni directional crossing routes thereby enabling increased altitude availability on the primary routes.
- 2.3   The chart below indicates where this concept of uni directional routes could be utilised.



- 2.4 The lines drawn are not intended to designate exact routes but rather indicate where uni directional routes may be established. It will be incumbent on States to specify exactly where routes should be established that satisfy their own requirements.
- 2.5 The benefits to users are significant with greater availability of flight levels at/ or close to optimal for both primary and crossing routes. Potentially the reduction in CO2 emissions could be in the vicinity of 3.5 million kg per year.
- 2.6 The potential benefit to ATC is an increase in capacity with increased level availability on the primary routes and an increase in efficiency with fewer aircraft having to undertake large changes of altitude to cross the busy traffic flow.
- 2.7 IATA anticipates that all new routes will be established in accordance with the principles associated with Performance Based Navigation.

**3. ACTION BY THE MEETING**

- 3.1 The meeting is invited to:
  - Note that the benefits that uni-directional routes can provide for both Primary and Secondary flows
  - Develop a work plan to develop and implement uni-directional crossing routes

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