

International Civil Aviation Organization

Fifth Meeting of the Air Traffic Services Route Network Task Force (ARN TF/6)

Sixth Meeting (Cairo, Egypt, 22-24 April 2013)

Agenda Item 3: Review ATS Route Network

PROPOSAL FOR ALTERNATIVE ATS ROUTE AMENDMENTS

(Presented by IATA)

SUMMARY

This working paper presents an alternative to the submission of new route proposals due to the recognition that many of the present proposals in the Route Catalogue have little likelihood of being approved.

Action by the meeting is at paragraph 3.

1. Introduction

1.1 In view of continual feedback and input from airline operators into the ARN TF, this working paper makes reference to various ICAO Recommendations on alternatives to the current practice of trying to find short-cuts within the existing Airway Structure that can be approved & implemented to improve efficiency and capacity & reduce Carbon Dioxide (CO2) Emissions.

2. DISCUSSION

- 2.1 The record of route request approvals in the ICAO MID Region has not been very successful. Every Task Force goes through the 100+ proposals in the Route Catalogue one-by-one, yet almost all are continually deferred.
- 2.2 In the Global Air Navigation Plan, ICAO introduced the concept of dynamic and flexible Air Traffic Management (ATM) as a Strategic Objective: Global Plan Initiative (GPI-7) States that routes need not be fixed to pre-determined waypoints, except where required for control purposes. GPI-8 enhances the implementation process with Collaborative Decision Management techniques. It is aimed at organizing airspace in a collaborative manner involving all stakeholders so that airspace is managed to accommodate user-defined flexible routings.
- 2.3 Today's ATM system handles some 40 million yearly IFR movements. Air services between several new city-pairs have opened up while others are being dropped. The Air Navigation System continues to be challenged to provide for shorter flight times, and thereby lower Carbon Dioxide (CO2) Emissions and fuel burn.

- Building on lessons learned in various areas of the world, the MID Region needs to apply existing best practices, apply current technologies and employ operating practices that can be implemented safely and broadly in daily operations. All Flex Routes are planned in consideration of existing airspace constraints and flight conditions. The resulting flight plan trajectories will have been created to optimize each flight's efficiency within the applicable rules.
- 2.5 International cooperation is the key for an efficient and cost-effective development of a "seamless" airspace on a regional and/or global scale.
- 2.6 This approach to the use of airspace which would otherwise be segregated (i.e. special use airspace) along with flexible routing adjusted for specific traffic patterns supports the new ASBU modules defined by ICAO and approved by the Air Navigation Conference last fall. It allows greater routing possibilities, reducing potential congestion on trunk routes and busy crossing points, resulting in reduced flight length and fuel burn.
- 2.7 ASBU Block B0-10 (Improved Operations through Enhanced En-Route Trajectories) and B0-40 (Improved Safety and Efficiency through the initial application of Data Link En-Route) as defined in the first tranche of ASBU for the MID Region support this initiative.

3. ACTION BY THE MEETING

3.1 *Considering:*

The position of ICAO in relation to the imperatives driving the implementation of the seamless concept (i.e. sustainability through the delivery of environmental, safety, and economic benefits):

• the position of the ICAO Secretary General that the aviation community should aim for the goal of spurring the most effective allocation of resources and ensuring the greatest rewards for the global economy at the least cost and with maximum environmental accountability; and

and recognising:

- that a number of economic and organisational issues are likely to emerge:
- 3.2 The meeting is invited to:
 - a) note the information contained in this paper; and
 - b) consider the formation of a work group, comprised of States and International Organizations to define a better framework to migrate the airspace concept from the Fixed Route scenario that we have to a fully flexible and seamless airspace in the Middle East Region.