

International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

Third Meeting (ATM SG/3) (Cairo, Egypt, 22 – 25 May 2017)

Agenda Item 4: MID Region ATS Route Network

RESILIENCY OF ROUTE STRUCTURES ACROSS TRAFFIC AXES

(Presented by IATA)

SUMMARY

This paper provides the meeting with a proposal to look at the route structure resiliency across the traffic axis Europe-Middle East-South East Asia (EUR-MID-SE ASIA).

Action by the meeting is at paragraph 3.

1. Introduction

- 1.1 With long haul flights and new generation aircraft, airlines today are crossing two or more regions per flight. The high growth and expansion in airlines' networks requires airlines and Air Navigation Services Providers (ANSPs) to look at major traffic flows and the resilience of the route structure from regional and inter regional perspectives to ensure continuity of operation.
- 1.2 The Middle East is strategically situated between Europe, Africa, and South East Asia. Over the past five years, this region has suffered from political turmoil which has affected the operation of international air traffic. In addition to the region being susceptible to political unrest and friction, the route structure is already suffering from restrictions and capacity limitations which hinder a continuous traffic flow in the event of partial or total disruption of Air Traffic Services.
- 1.3 To ensure route structure resilience, existing constraints such as overflight permission processes, air traffic flow management restrictions and airspace capacities (including the effects of varying separation standards) need to be addressed to ensure operation continuity with minimal disruption to airlines. Such an exercise needs to look at traffic end-to-end and assess the resilience across the traffic axis rather than looking at routes within specific FIRs.
- 1.4 The International Air Transport Association defined 10 priority inter-regional traffic flows as global route priorities. This paper provides an overview of the traffic axis EUR-MID-SE ASIA and proposed next steps towards looking at the route structure end-to-end.

2. DISCUSSION

- 2.1 The current traffic within and across the Middle East is showing high growth figures;
- 2.1.1 Over the past five years the number of revenue passenger kilometres flown has increased by 86% between 2010 and 2014, or an average of 13% per year. The region's air travel expansion is expected to continue, at a rate of 6% per annum on average over the next two decades.

- 2.1.2 Airlines from this region are some of the most ambitious in the world.
- 2.1.3 Traffic across the interface between Europe and the Middle East is growing rapidly.
- 2.2 However, this traffic growth is faced with many challenges, including; political unrest, conflict zones, military restricted airspace, and old route structure. In addition, we are lacking engagement and dialogue beyond FIR and regional boundaries. Therefore, we seldom see solutions that address challenges and issues end-to-end (gate-to-gate).
- 2.3 IATA sees great value in taking a holistic approach when looking at routes structure, and focus on resiliency and major traffic flows. Based on that, the Advanced Inter-regional Air Traffic Services Route Development Task Force (AIRARD/TF) could be the forum to look at traffic, bottlenecks, challenges, and operational improvements, all end-to-end.
- 2.3.1 The First meeting of the Advanced Inter-regional Air Traffic Services Route Development Task Force (AIRARD/TF/1) was hosted by the Georgian Civil Aviation Authority in Tbilisi, on 21 October 2016.
- 2.3.2 The Terms of Reference have already been established for this Task Force, although there might be a need to look at the scope and ensure that its work is aligned with the Global Air Navigation Plan (GANP) and Aviation System Block Up-grades (ASBUs).
- 2.3.3 The second AIRRAD TF Meeting is planned to be held in October 2017. During this meeting, the discussion and conclusions should focus on operational improvements across the interface EUR-MID-SE ASIA with the following considerations:
 - i. Focus on solutions end-to-end;
 - ii. Look at the route structure and develop proposals the enable resiliency and provide more flexibility. The optimum goal should be user preferred routes where possible;
 - iii. Address issues such as military restricted airspace and varying separation standards;
 - iv. Look at the hot spots across the interface between the three ICAO Regions;
 - v. Look at the bottle-necks on the interface border between the three regions; and
 - vi. Develop proposals and solutions that could be used for implementation under the existing IATA/ICAO initiatives and groups.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) support the proposed action to look at the interface between EUR-MID-SE ASIA and review the route catalogue based on that proposal;
 - b) note that proposals for the hot spots and bottle necks across the interface between EUR-MID-SE ASIA will be presented for discussion during the next AIRARD TF/2 meeting; and
 - c) review the terms of reference of AIRARD TF to ensure it is in line with the GANP and ASBU methodology; and that the TF addresses the operational improvements highlighted at para 2.3.3.