



International Civil Aviation Organization

**Middle East Air Navigation Planning and
Implementation Regional Group**

**Sixteenth Meeting (MIDANPIRG/16)
(Kuwait, 13 – 16 February 2017)**

Agenda Item 5.2.1: Specific Air Navigation issues

ESTABLISHMENT OF MID ROUTE DEVELOPMENT GROUP

(Presented by AACO/IATA)

SUMMARY

This paper presents the need for regional efforts gathering all stakeholders in order to modernize the region's ATS Route Network in line with the historical and anticipated growth in air transport activities, and proposes a mechanism for regional collaboration in that regards.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 The historical, current, and anticipated growth of civil aviation in the Middle East region requires the development of the airspace infrastructure to accommodate this growth. This paper covers the ATS Route Network arm of the airspace infrastructure.

1.2 The general, there has been little development of the ATS Route Network in the region which, wherever takes place, is mostly conducted on the national levels within FIR boundaries. However, given the cross-border nature of civil aviation, a regional, inter-regional, and indeed a global perspective should reside at the core of air route developments.

1.3 Moreover, the emergence of bottlenecks and hot spots in some parts of the region indicates that the current regional arrangements to address air routes are approaching their maximum usability to sustain the growth of civil aviation.

1.4 Accordingly, this paper proposes a mechanism to enhance collaboration and cooperation in this area.

2. DISCUSSION

2.1 Civil aviation has been growing remarkably during the past couple of decades due to its endorsement by the region's governments as an important catalyst for economic development which allowed the region's airlines to become global players and positioned the Middle East as one of the main global hubs. ICAO data shows that aircraft movements in the Middle East region grew by 113% between 2005 and 2014, and forecasts 125% growth in movements between 2014 and 2030.

2.2 In order to support the growth in civil aviation, there is a need to modernize the regional ATS Route Network in order to sustain aviation growth while at the same time enhance efficiency and the environmental footprint of the civil aviation system.

2.3 The following issues are observed in the current ATS Route Network in the region:

- Regional Route Network is based on conventional structure with continuous patching and crossing/merging points along main routes close to FIR boundaries which makes it very complex and outdated.
- Manifestation of bottlenecks and choke points in the region.
- Increased safety risks through the existence of highly congested bottlenecks.
- Overload on Air Traffic Controllers which leads to less efficient use of controller resources.
- Very limited Route Options to support contingency planning and/or emergency situations.
- Longer routes mean higher fuel burn which increases the amount of aircraft emissions as well as costs on air operators.

2.4 In that regards, a general consensus exists among all stakeholders with regards to the need to enhance the region's ATS Route Network in line with the growth in civil aviation. This consensus manifests through:

2.4.1 ICAO MAEP Board endorsement of the ATS Route Network Optimization Project (ARNOP) as a high priority project for the region.

2.4.2 The endorsement of ARNOP by Ministers and Heads of Delegations attending the Global Ministerial Aviation Summit held in Riyadh in August 2016 as a priority project for the region.

2.4.3 AACO 49th Annual General Meeting, gathering the CEOs of 31 Arab airlines, highlighted the priorities of airspace users to be the enhancement of the regional ATS Route Network and fostering Civil/Military Collaboration, fostering the implementation of Performance Based Navigation in the region, and collaboration among all stakeholders to establish a regional Air Traffic Flow Management mechanism.

2.5 During the past few years, development of the region's ATS Route Network was conducted by the MIDANPIRG ATM Sub-Group. In spite of the commendable work of the Sub-Group in light of its wide mandate, there are several challenges that can be identified and which hinders optimal work on developing the regional ATS Route Network:

2.5.1 The ATM Sub-Group meets every 18 months and deals with many issues besides air routes. This leads to delay in developing enhancements in this area and limited time to discuss this topic during the Sub-Group's meetings.

2.5.2 The model of using the Route Catalog as a basis for the work, mainly because of the limited time reserved to air routes during the Sub-Group meetings, coupled with the stagnation of proposals in the catalog, became a cumbersome process which all stakeholders need to look at to develop a more dynamic approach to air routes development.

2.6 In that regards, and eyeing the experiences of other regions in that area, namely Europe and Africa, which established dedicated Route Development Groups that meet regularly to discuss and agree on air route enhancements. Such model proved to be very successful to provide a dynamic forum for States and airspace users to discuss proposals and agree on developments which are acceptable to both sides for immediate publishing.

2.7 In addition, a similar informal arrangement has been taking place in the region for the past couple of years which involve meetings between organizations representing all stakeholders and one or several States to discuss specific route developments related to traffic flows, in addition to the bilateral/multilateral Special Coordination Meetings. The proposal builds on those efforts in order to create a platform to be invoked when needed to tackle matters related to ATS Routes.

2.8 Moreover, the establishment of the ICAO Advanced Interregional ATS Routes Development Task Force between ICAO Asia Pacific, Europe and Middle East regions necessitates intra-regional coordination and development of the ATS Route Network not only according to the intra-regional requirements but also according to the inter-regional developments at the interfaces and across the adjacent regions.

2.9 Accordingly, we would like to propose the establishment of a MID Route Development Group to be established under the ATM Sub-Group to exclusively deal with the development of the region's air routes. This proposal was endorsed by AACO 49th AGM in its Resolution 8/2016 on Air Traffic Management and Airspace Capacity in the Arab World which calls for "the establishment of a formal group under ICAO composed from States, airlines, ANSPs, and regional and international organizations to focus on enhancing the regional ATS Route Network, and to identify and work on the priorities with regards to areas that require the implementation of Flexible Use of Airspace and Civil/ Military Collaboration in the concerned States." AACO 49th AGM Resolution is included in **Appendix A**.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) agree on establishing a MID Route Development Group (MID RGD) under the ATM Sub-Group to focus on route development in the region and coordinate those developments with interfaces; and
- b) task the ATM Sub-Group to discuss the composition, terms of reference, and modus operandi of the MID RDG during its forthcoming meeting.

APPENDIX A

AACO 49th Annual General Meeting Resolution 8/2016 on Air Traffic Management and Airspace Capacity in the Arab World:

Further to previous AGM resolutions on Air Traffic Management and airspace capacity in the Arab world, and considering the developments in ICAO Middle East ATM Enhancement Programme, AACO 49th AGM:

Welcomes the enhanced spirit of collaboration in the region and commends States for their openness and willingness to collaborate among each other and with stakeholders to enhance the regional airspace infrastructure;

Commends ICAO on its efforts to bring together States and stakeholders and to become a platform for regional collaboration across its bodies and specifically through the Middle East ATM Enhancement Programme;

Calls upon all stakeholders to prioritize and expedite the development of the regional airspace infrastructure through the following priorities:

- ✓ The establishment of a formal group under ICAO composed from States, airlines, ANSPs, and regional and international organizations to focus on enhancing the regional ATS Route Network, and to identify and work on the priorities with regards to areas that require the implementation of Flexible Use of Airspace and Civil/ Military Collaboration in the concerned States.
- ✓ Expedite the design and implementation of Performance Based Navigation where needed through ICAO Middle East Flight Procedure Programme.
- ✓ Formulate a roadmap for the implementation of a regional Air Traffic Flow Management mechanism which includes a plan to identify and implement the enhancements in systems and procedures required at the national and regional levels to implement such mechanism; and

Mandates AACO to continue its coordination with States, airlines, international and regional associations, its support to regional initiatives, and to work closely with ICAO and in collaboration with all stakeholders to advocate and support the implementation of the above priorities.

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