



International Civil Aviation Organization

MID Region ATM Enhancement Programme Steering Committee

First Meeting (MAEP SC/1)
(Dubai, UAE, 20-22 January 2015)

Agenda Item 3: MID Region ATM Enhancement Programme (MAEP) Project/working packages

MAEP - AIRSPACE RESTRUCTURING PROJECT

(Presented by United Arab Emirates)

SUMMARY

The purpose of this working paper is to propose the immediate initiation for a MAEP Airspace Restructuring Project for the MID States in coordination with the adjacent regions to enhance air traffic safety and efficiency.

1. INTRODUCTION

1.1 The Middle East region has witnessed substantial traffic growth over the last decade. Air traffic is anticipated to continue to grow in the region, which is considered to be amongst the busiest in the world. Information contained in ICAO DOC 9956 (Global and Regional 20-year forecasts) suggest that an annual increase in traffic of 5.2% is expected in the Middle East over the next 20 years.

1.2 The UAE, for example, is forecasting some 5,100 daily air traffic movements compared to 2,228 movements in 2014. There is an urgent need to steer the focus attention to start implementing collaborative projects to enhance the MID region's airspace structure.

2. DISCUSSION

2.1 There are various large investments in some MID region states in the aviation sector. Massive expansion plans for the regional carriers, birth of new operators, huge developments in the existing airports and the development of new ones are all indications of the need to have similar investments to support the airspace infrastructure to accommodate the anticipated growth safely and efficiently.

2.2 The current airspace route structure across the region has been developed over many years to safely and efficiently accommodate the growth in traffic. Over the past many years, the air traffic movements have rapidly increased and it is anticipated that the MID region will continuously witness rapid traffic growth.

2.3 Notwithstanding the individual and collective efforts by States and organisations, the MID region airspace is still characterised by:

- a) Fragmented airspace structures;
- b) High-levels of tactical intervention by ATC;

- c) Choke Points; traffic bunching; and queuing; and
- d) Reliance on conventional technologies.

2.4 This paper presents the immediate requirement to formally establish a joint MID Airspace Restructuring Project under the umbrella of MAEP. Urgency is required to enable airspace enhancements to be delivered across the region to support the continued growth in aviation.

2.5 The Project objective is to develop an airspace structure and concept of operations that is performance-based, addresses ATM community expectations, cost-efficient, environmentally sustainable and is regionally harmonized.

2.6 The Project scope is to:

- Increase access to all Middle East Airports
 - Take into consideration the optimal access to the route network from departure and destination airports within the MID region as well as with adjacent FIRs
- Increase MID region airspace capacity
 - Determine the most efficient route structure within the region;
 - Take into account Civil / Military requirements to ensure that known future requirements for airspace access are planned for; and
 - Make optimum use of Performance Based Navigation
- Improve safety, or at the very least maintain the current safety factors

2.7 It is proposed that the project implementation timelines should be aligned with the ASBU timelines (2018, 2023 and 2028), agreed and common across all Member States taking into consideration already existing/future commitments.

2.8 The Airspace project shall be separated into four phases:

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| Phase 1: | Regional Airspace Study that include Gap Analysis and detailed recommendations |
| Phase 2: | Airspace Restructuring Project that include Conceptual Designs and concept of operations |
| Phase 3: | Implementation plan |
| Phase 4: | Post Implementation review and assessment. |

2.9 Full cost benefits analysis shall be developed within Phase 2 to support continued commitment within States and across stakeholders.

2.10 It is suggested that an ad-hoc Working Group be established to:

- Propose the implementation roadmap
- Source suitably qualified organizations and initiate an intent to tender to these organizations
- Finalise a preliminary non-binding RFP (Request for Proposal)
- Obtain a cost estimation of the project Phase 1 and an estimated timeline to conduct the study.
- Provide a detailed report to the next MAEP Board meeting

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in the working paper;
- b) discuss the details of the proposal in 2 above;
- c) agree on the establishment of a Middle East Airspace Restructuring Project; and
- d) subject to 3.1.c agreement, agree to establish the ad-hoc working group with the tasks in 2.10 above

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