International Civil Aviation Organization

Middle East Air Navigation Planning and Implementation Regional Group

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

Agenda Item 5.2.2:   Specific Air Navigation issues

AIRSPACE MANAGEMENT

(Presented by the Secretariat)

SUMMARY
This paper highlights issues related to airspace management in the MID Region for the meeting appropriate actions.
Action by the meeting is at paragraph 3.

REFERENCES
- ANSIG/2 Report - MSG/5 Report

1. INTRODUCTION

1.1   The effective cross-border coordination and collaboration between all stakeholders is essential in order to achieve seamless Air Traffic Management and optimization of the airspace management in the MID Region.

2. DISCUSSION

ATS ROUTE NETWORK

2.1   Taking into consideration the escalated situation in some States, the MSG/5 meeting agreed to a revised list of routes to be implemented as a priority as at **Appendix A** (6 routes). The meeting through MSG Conclusion 5/3 urged concerned States to take necessary measures to implement these routes in an expeditious manner.

2.2   The ICAO MID Office received a letter from Egypt requesting the removal of proposal TPR 2 from the list based on the result of the safety assessment, and that internal coordination are still in progress for the implementation of the TPR 6.

2.3   Regarding TPR 4, Iran and Turkey agreed on alternative route/measure in order to accommodate the traffic through the Oriented Track System within Tehran FIR.

2.4   The meeting may wish to note that several Special Coordination Meetings for the improvements of the ATS routes within the MID Region and at the interface with Europe, were conducted with the attendance of concerned States and Stakeholders.

2.5   The ICAO MID Office facilitated the coordination between Egypt and Jordan related to the improvement of ATS routes at the interface, which was successfully implemented on the AIRAC date 8 December 2016.

2.6   ICAO has also established the Advanced Inter-regional Air Traffic Services Route Development Task Force (AIRARD) to address ATM issues of mutual interest at the interfaces between Asia Pacific, Europe and Middle East Regions. The first meeting of the AIRARD Task Force (AIRARD TF/1) was held in Tbilisi, Georgia on 21 October 2016 back-to-back with the Twenty Fifth Meeting of the Route Development Group – Eastern Part of the ICAO EUR Region (RDGE/24) from 17 to 20 October 2016. The draft terms of reference of the AIRARD TF are at **Appendix B**.

2.7   It is to be highlighted that the AIRARD TF/1 elected Mr. Kaveh Firouz Deputy Director of Tehran ACC, Iran as the Co-chair of the AIRARD TF from the States side along with a Co-chair from IATA side, who will be nominated by IATA at a later stage. The AIRARD TF/2 meeting was tentatively planned for October 2017, in conjunction with the RDGE/27 meeting in Kazakhstan.

2.8   The meeting may wish to note that the African Region (AFI)-Asia/Pacific Region (APAC)-Middle East Region (MID) Air Traffic Management (ATM) Special Coordination Meeting (AAMA/SCM) was held in Mumbai, India from 19 to 20 January 2017. It is the first meeting organized by the ICAO APAC, ESAF and MID Office to discuss ATM issues at the interfaces of the three Regions. The AAMA/SCM report is at: http://www.icao.int/APAC/Meetings/Pages/2017-AAMA.aspx

Implementation of Reduced Radar Longitudinal Separation in the MID Region

2.9   It is to be underlined that several States in the MID Region are still implementing procedural separation in a surveillance environment or 20NM or higher Radar Longitudinal Separation.

2.10   The meeting may wish to recall that MIDANPIRG/13 agreed that uniform 10 NM separation minima could be implemented in the MID Region. The radar surveillance systems, currently in operation within the Region, allow for consistent separation standards.

2.11   Based on the above, the MIDANPIRG/13 meeting through the following Conclusion encouraged MID States to implement 20 NM longitudinal separation and develop plans for further reduction of longitudinal separation from 20 NM to 10 NM:

> *CONCLUSION 13/5:   IMPLEMENTATION OF REDUCED RADAR LONGITUDINAL SEPARATION IN THE MID REGION*
>
> *That,*
> a) *States, that have not yet done so;*
>
>> i)   *be urged to implement the 20 NM radar longitudinal separation;*
>>
>> ii)   *be encouraged to further reduce the radar longitudinal separation within the MID Region to 10 NM, where appropriate; and*
>>
>> iii) *be invited to agree with their neighbouring FIRs/States on the date of implementation and updating of the LoAs;*
>
> b) *the ATM Regional PFFs be updated to include the reduced radar longitudinal separation as an ATM objective for the MID Region.*

Remotely Piloted Aircraft System (RPAS)

2.12   The main objective of the RPAS Panel is to develop SARPs, procedures and guidance to facilitate safe, secure an efficient integration of Remotely Piloted Aircraft (RPA) into non-segregated

airspace and aerodromes, maintaining the existing level of safety for manned aviation, with priority to Instrument Flight Rules (IFR) operations in controlled airspace. The personnel licensing provisions related to RPAS will be adopted in 2018.

2.13   The RASG-MID/5 meeting encouraged States to use the guidance material related to RPAS provided in the ICAO Doc 10019 and the information available on the RPAS webpage: https://www4.icao.int/rpas

2.14   The RASG-MID/5 meeting encouraged States to consider the developments related to RPAS, and take necessary measures for the amendment of the relevant civil aviation regulations and procedures in a timely manner, in order to ensure safe integration of the RPA into the non-segregated airspace. The meeting agreed to the following Conclusion:

> CONCLUSION 5/18:   REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) OCCURRENCES
>
> That, States be urged to report any safety occurrence related to RPA operations to the ICAO MID Regional Office on regular basis, for review and analysis by the Accident and Incident Analysis Working Group (AIA WG).

2.15   The meeting may wish to note that an RPAS Workshop is planned to be held in December 2017; the venue is still to be determined.

3.   ACTION BY THE MEETING

3.1   The meeting is invited to:

a) take decision related to the Top Routes based on the update provided;

b) urge concerned States to:

   i. support the work programme of the AIRARD TF; and attend the AIRARD TF/2 meeting (Kazakhstan, October 2017)

   ii.   implement the provisions of the MIDANPIRG Conclusion 13/5;

c) encourage States to report RPAS occurrences to the ICAO MID Office and attend the Workshop in December 2017.

APPENDIX A

MID TOP SIX PROPOSED ATS ROUTES

TPR	ATS Route Catalogue Reference	ATS Route Affected	States Concerned	Status			Remarks
				Reviewed by	Date	Changed	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	RC-045	New	Saudi Arabia-Sudan	ATM SG/2	Dec. 2015	No	Moved to ANP
2	RC-055	L315	Egypt-Saudi Arabia	ATM SG/2	Dec. 2015	Yes	Saudi proposed SOBEL-DEDLI
3	RC-083	New	Egypt-Saudi Arabia	ATM SG/2	Dec. 2015	No	Route amended and moved to ANP
4	Not from catalogue	New	Iran-Turkey	ATM SG/2	Dec. 2015	Yes	
5	Not from catalogue	New	Iran-Pakistan	ATM SG/2	Dec. 2015	Yes	
6	Not from catalogue	New	Egypt-Cyprus	ATM SG/2	Dec. 2015	Yes	

Table explanation

a) TPR used as reference for the proposed Top Six routes to be considered for implementation, numbers do not reflect the level of priority.
b) Source of the proposed routes.
c) Affected ATS Routes by the implementation of the new proposed routes.
d) States Concerned with the implementation.
e) The Group, Sub-Group or Task Force that had reviewed and updated the status of implementation of these top 10 routes.
f) Date of last status update.
g) Indicates if the status is changed or Not.
h) Remarks

APPENDIX B

TERMS OF REFERENCE (TOR) OF
Advanced Inter-Regional ATS Route Development Task Force (AIRARD/TF)

1. **TERMS OF REFERENCE**

1.1   **The terms of reference of the AIRARD Task Force are to:**

a)   identify requirements and improvements for achieving and maintaining an efficient route network across the ICAO APAC, EUR/NAT and MID Regions based on the airspace user needs and in coordination with stakeholders (States, International Organizations, user representative organizations and other ICAO Regions);

b)   ensure harmonized planning and implementation of ATS routes and airspace improvement projects at the interfaces between the three ICAO Regions;

c)   monitor the status of implementation of the agreed ATS routes and airspace improvement projects;

d)   in case of implementation problems, identify the associated difficulties and propose/agree to solutions to further progress with the implementation;

e)   review and amend the components of the ATS route structure and airspace description in order to ensure their compliance with ICAO provisions (e.g. five-letter name-code (5LNC) uniqueness, ATS route designators, WGS-84 coordinates, flexible use of airspace (FUA) implementation);

f)   discuss and support the implementation of new concepts, such as the PBN Highway concept;

g)   determine the CNS requirements, interoperable entry/exit points or areas, connections into the TMAs, weather related issues, terrain aspects, airspace organisation which would be needed in order to support the implementation of the new concepts;

h)   achieve common understanding and support from all stakeholders involved in or affected by the ATM developments/activities in the three ICAO Regions; and

i)   use the AIRARD/TF meetings as a forum for bilateral and multilateral discussions (such as review of ANS Letters of Agreements.

1.2   **In order to meet the Terms of Reference, the AIRARD Task Force shall:**

a)   Discuss and review the ATS route network and airspace improvement projects which involve States (including the Military) and all aviation stakeholders (airspace users, international organisations and Computer Flight Plan Software/Service Providers (CFSPs)) across the three Regions;

b)   propose a strategy and prioritized plan for development of improvements to the route network and/or airspace structure, highlighting:

- areas that require immediate attention (solution of safety, capacity or complexity constraints);
- interface issues with adjacent ICAO Regions;

c)   monitor and report on the implementation status of the prioritized plan;

d)   develop a roadmap for the implementation of new concepts such as the PBN highways;

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e) develop a working depository for route proposals that will be used as a dynamic reference document for ongoing discussions on routes under development/ modification. In this respect, the Task Force should explore the utility that can be realized from the route catalogue concept/ATS routes database; and

f) address CNS and ATM interface issues with other regions and make specific recommendations to achieve a harmonized and interoperable environment in the interface areas between the regions.

2. **In order to effectively perform its tasks and responsibilities:**

a) The AIRARD TF shall elect Co-Chairpersons (one from a State and one from the airspace users) for a cycle of three meetings, unless otherwise re-elected.

b) The TF shall meet at least once a year and/or when deemed necessary.

c) The TF meetings should be hosted by its members on rotation basis.

d) The TF shall report to the relevant ATM Groups in the APAC[HS1] and MID Regions under the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG), the European Air Navigation Planning Group (EANPG), North Atlantic Systems Planning Group (NAT SPG) and the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG).

3. **COMPOSITION**

The AIRARD Task Force is composed of:

a) States from APAC, EUR/NAT and MID Regions, or States providing services in the APAC, EUR/NAT and MID Regions;

b) concerned International and Regional Organizations; and

c) other representatives from provider States and Industry may be invited on ad hoc basis, as observers, when required.