

International Civil Aviation Organization

MIDANPIRG Air Traffic Management Sub-Group

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

Agenda Item 5: Airspace Management Issues

B0-FRTO

(Presented by the Secretariat)

SUMMARY

This paper presents the outcome of the MIDANPIRG/16 meeting related to civil/military cooperation and flexible use of airspace for the meeting appropriate actions.

Action by the meeting is at paragraph 3.

REFERENCES

MIDANPIRG/16 Report

1. Introduction

1.1 B0-FRTO (Free-Route Operations) aims to improve operations through Enhanced En-Route Trajectories that allow the use of airspace, which would otherwise be segregated (i.e. special use airspace) along with flexible routing adjusted for specific traffic patterns. This will provide greater routing possibilities, reducing potential congestion on trunk routes and busy crossing points, resulting in reduced flight length and fuel burn.

2. DISCUSSION

2.1 For the purpose of performance monitoring and reporting, two (2) elements have been included in the MID Region Air Navigation Strategy: *Flexible Use of Airspace (FUA) and Flexible routing*. Performance Indicators/Supporting Metrics, Targets and status of their implementation are detailed in **Appendix A**.

Implementation Reporting/Monitoring

- 2.2 ATM Sub-Group was assigned by MIDANPIRG as the main Regional monitoring body for the collection of data related to the B0-FRTO implementation in the MID Region.
- 2.3 At the national level, ATM Focal Points are responsible for following-up the B0-FRTO implementation issues and forwarding necessary data on the implementation of B0-FRTO to the ICAO MID Office, as and when required.

Data Collection Mechanism

2.4 Detailed information on the monitoring of B0-FRTO is included in Volume III of the MID eANP, including necessary supporting enablers (i.e. tables, databases, etc.), in order to be used as planning tools for the measurement of the air navigation systems performance. The MID eANP Table related to the status of implementation of the different B0-FRTO elements is at **Appendix A**.

Challenges and Recommendations

- 2.5 The meeting may wish to note that the main step toward the successful implementation of the B0-FRTO is the identification of the segregated airspace to be released for civilian air operations in order to publish ATS routes over these airspaces in the AIP, with the aim for pre-flight planning by the airspace users.
- 2.6 It is to be highlighted that the MIDANPIRG/15 meeting urged States to take necessary measures to implement the provisions of the Resolution A38-12 and MIDANPIRG/14 Conclusions 14/12 and 14/13 and provide the ICAO MID Office with an update on the action(s) undertaken before 1 October 2015. Moreover, the MSG/5 meeting urged States to provide their feedback to the ICAO MID Office on the actions undertaken, by 15 October 2016.
- 2.7 The MIDANPIRG/16 meeting (Kuwait, 13-16 February 2017) noted with appreciation that the Flexible Use of Airspace Concept has been implemented by Bahrain and Jordan.
- 2.8 The MIDANPIRG/16 meeting may wish to recalled that MIDANPIRG/15 meeting established the MID Civil/Military Support Team, with a view to expedite the implementation of the FUA Concept in the MID Region. Accordingly, the meeting encouraged States to benefit from the MID Civil/Military Support Team and coordinate with the ICAO MID Office for the conduct of a Support Team visit, which includes in its work programme a Civil/Military Cooperation Workshop.
- 2.9 In this respect, the MIDANPIRG/16 meeting agreed that in the communication with States, the Support Team visits should rather be called Civil/Military Cooperation and FUA National Workshop. Accordingly, the meeting agreed that the ATM Sub Group:
 - review and amend, as necessary, the "Objective and Working Arrangements" of the MID Civil/Military Support Team endorsed by MIDANPIRG/15; and
 - identify the list of States, in a prioritized manner, that would need the conduct of a Civil/Military Cooperation and FUA National Workshop, based on the users' needs.
- 2.10 The meeting may wish to note that the ICAO/ACAC/CANSO Joint Civil/Military Workshop planned to be held in Tunis from 25 to 27 September 2017, would be postponed to 2018 due to the new dates of the RASG-MID/6 meeting (Bahrain, 26-28 September 2017).

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) review and update the elements of the ASBU Module B0-FRTO taking into consideration the latest developments;
 - b) agree to the monitoring table of the B0-FRTO that should be included in the MID eANP Volume III;

- c) review and amend, as necessary, the "Objective and Working Arrangements" of the MID Civil/Military Support Team endorsed by MIDANPIRG/15 at **Appendix** B; and
- d) identify the list of States, in a prioritized manner, that would need the conduct of a Civil/Military Cooperation and FUA National Workshop, based on the users' needs.

APPENDIX A

B0 – FRTO: Improved Operations through Enhanced En-Route Trajectories									
Elements	Applicability	Performance Indicators/Supporting Metrics	Targets	Status	Remarks				
Flexible use of airspace (FUA)	All States	Indicator: % of States that have implemented FUA Supporting metric*: number of States that have implemented FUA	40% by Dec. 2017	TBD by ATM SG/3 meeting May 2017	Inputs should be provided by States				
Flexible routing	All States	Indicator: % of required Routes that are not implemented due military restrictions (segregated areas) Supporting metric 1: total number of ATS Routes in the Mid Region Supporting metric 2*: number of required Routes that are not implemented due military restrictions (segregated areas)	60% by Dec. 2017	TBD by ATM SG/3 meeting May 2017	Inputs should be provided by States				

Table B0-FRTO

EXPLANATION OF THE TABLE

Column

- 1 Name of the State
- 2 Status of implementation of Flexible Use of Airspace (FUA). The Implementation should be based on the published aeronautical information:
 - FI Fully Implemented
 - PI Partially Implemented
 - NI Not Implemented
- 3 Total Number of ATS Routes in the State.
- 4 Total number of required routes (through Regional Agreement) to be implemented through segregated areas
- Number of routes that are NOT implemented in the State due military restrictions (segregated areas)
- 6 Remarks

Applicability State	FUA Implemented	Total number of ATS Routes	Total number of required routes to be implemented through segregated areas	Number of routes that are NOT implemented due military restrictions (segregated areas)	Remarks
1	2	3	4	5	6
Bahrain	FI	78	1 (UM430)	0	Time route
Egypt					
Iran					
Iraq	PI	15	0	2	P/UP975 closed btw SIDNA & MUTAG
Jordan	FI	12		1 (G662)	
Lebanon	PI	9	1 (M1)	M1 (KAD-LATEB)	
Libya					
Kuwait					
Oman					
Qatar					
Saudi Arabia	PI	153	1 (RC083)	0	
Sudan	PI	16	4	2	
Syria	PI	19	0	0	
Unite Arab Emirates	PI	41	3	4	
Yemen					
Total					
Percentage					

APPENDIX B

MID CIVIL/MILITARY SUPPORT TEAM

Objective and Working Arrangements

I. Objective

The overall objective of the MID Civil/Military Support Team is to provide States with high-level guidance and recommendations to enhance the civil/military cooperation and expedite the implementation of the Flexible Use of Airspace (FUA) Concept.

II. MID Civil/Military Support Team Composition

The MID Civil/Military Support Team will be composed of experts from ICAO, IATA and other representatives/subject matter experts from States and Stakeholders, as appropriate.

III. State Civil Aviation Authority Responsibilities

- Provide facilities and all kind of support for a successful conduct of the visit.
- Ensure that all stakeholders (civil and military) involved in the FUA implementation are represented during the visit.
- Provide required information and documentation.

IV. Working Arrangements

Phase I - Coordination for the Visit

- Identification of the candidate States in need of a MID Civil/Military Support Team by IATA, ICAO, or through the relevant MIDANPIRG subsidiary bodies.
- ICAO to coordinate with the candidate State the dates and pre-acceptance of the visits.
- Hosting State to formally confirm, to the ICAO MID Regional Office, the acceptance of the MID Civil/Military Support Team visit.
- Hosting State to appoint a Point of Contact (POC).
- Agenda, Work Programme, activities and expected outcomes of the visit to be communicated with the State.
- Teleconference(s) to be conducted with the POC jointly by IATA and ICAO to ensure good preparation for the visit.

PHASE II - Team Coordination

- IATA and ICAO to coordinate the establishment of the Team (call for experts).
- Team members to agree on the States to be visited.
- The team should prepare the Work Programme for the visit with the assigned tasks for each member.
- Priority work areas to be identified by the Team.
- The Team members should share the required information.
- The coordination between the Team members will be mainly through emails and teleconferences.

PHASE III – Support Team Tasks

Utilizing best practices and available ICAO provisions, the MID Civil/Military Support Team will assist States through the following process:

- Assessment of the existing ATS route network.
- Assessment of the existing airspace structure.
- Review the status of CNS infrastructure.
- Identify potential gaps and develop a list of recommended actions.
- Assist States in the development of measures to implement the FUA through strategic Civil/Military coordination and dynamic interaction, in order to open up segregated airspace when it is not being used for its originally-intended purpose and allow for better airspace management and access for all users.
- Address with the relevant authorities the ICAO provisions related to civil/military cooperation and FUA, as well as the recommendations emanating from the ICAO General Assembly, DGCA-MID and MIDANPIRG.
- Organize Workshop(s) as deemed necessary.

PHASE IV – Follow-up Activities.

- The MID Civil/Military Support Team will provide a report with a list of Recommendations/Action Plan, which would foster the FUA Implementation, within 30 days after the completion of the visit.
- State visited is requested to provide the ICAO MID Regional Office with a periodic update on the implementation of the Recommendations (Action Plan).