



International Civil Aviation Organization

Regional Aviation Safety Group - Middle East

Sixth Meeting (RASG-MID/6)  
(Bahrain, 26-28 September 2017)

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**Agenda Item 5: Update from and Coordination with MIDANPIRG**

**UPDATE FROM AND COORDINATION WITH MIDANPIRG  
FOR SAFETY RELATED ISSUES**

*(Presented by the Secretariat)*

**SUMMARY**

This paper provides an update on some activities of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG), especially those related to safety. It highlights the activities coordinated between RASG-MID and MIDANPIRG for an improved efficiency of both Groups and to avoid duplication of efforts including the agreed coordination mechanism.

Action by the meeting is at paragraph 3.

**REFERENCES**

- ATM SG/3 Report
- MIDANPIRG/16 Report
- MRC/3 Minutes
- RSC/5 Report

**1. INTRODUCTION**

1.1 The RASG-MID and MIDANPIRG have been coordinating safety-related issues based on the outcome of the PIRG-RASG Global Coordination meeting (Montreal, 5 February 2015) and in accordance with the Handbooks of each Group.

1.2 The meeting may wish to note that the Third MIDANPIRG/RASG-MID Coordination meeting (MRC/3) was held on 14 February 2017 as a side meeting of MIDANPIRG/16 (Kuwait, 13-16 February 2017). The MRC/3 meeting reviewed and updated the table listing the subjects in which both MIDANPIRG and RASG-MID have interest with an assignment of the leading Group as at **Appendix A**. The MRC/4 was held in Bahrain on 25 September 2017 back-to-back with RASG-MID/6.

**2. DISCUSSION**

2.1 The following sections provide an update on some air navigation subjects of common interest to MIDANPIRG and RASG-MID.

***Reduced Vertical Separation Minima (RVSM)***

2.2 The meeting may wish to recall that the Middle East Regional Monitoring Agency (MIDRMA) has been established in accordance with the provisions of ICAO Annex 11, to monitor the height-keeping performance of aircraft operating between FL290 and 410 inclusive, in order to ensure that the continued application of the vertical separation minimum meets the safety objectives.

2.3 It is to be highlighted that the MIDRMA has several tools to improve the monitoring of RVSM implementation such as:

- Large Height Deviation (LHD) Online Reporting Tool;
- Collision Risk Assessment software;
- Online Auto Minimum Monitoring Tool; and
- Airspace Collision Risk Hot-spot Analysis software

2.4 The following tools are still under development:

- Collision Risk Analysis Visualisation Effect Software (animation with 4D function).
- Traffic Data Extractor Software.
- Non-RVSM Approved Aircraft Finder.

2.5 States are invited to visit the MIDRMA website ([www.midrma.com](http://www.midrma.com)) for more information, reports and tools related to the RVSM implementation.

2.6 The meeting may wish to recall that the RSC/5 meeting was apprised of the MIDRMA activities related to the Minimum Monitoring Requirements (MMR). The meeting noted with appreciation that the MIDRMA developed an Auto Online MMR Tool to enable the Civil Aviation Authorities in the MID Region to check their MMR for each air operator under their responsibility and identify the aircraft that are non-compliant with the Annex 6 requirements for height-keeping performance. Accordingly, the meeting urged States to use the Auto Online Minimum Monitoring Requirements (MMR) Tool, available on the MIDRMA website.

2.7 The meeting may wish to note that MIDANPIRG/16 underlined that several FIRs with high volume of traffic continue to report NIL LHDs, which have a negative effect on the computed Targets Level of Safety (i.e.: not representative/realistic). It was highlighted that the level of reporting of LHDs is still far below expectation compared to the volume of traffic, which is mainly due to the reporting culture of the air traffic controllers. In this respect, the meeting urged States to take necessary measures to ensure effective reporting of LHDs by air traffic controllers. The meeting reiterated MIDANPIRG/15 Conclusion 15/6, and encouraged States to develop a simplified LHD Template containing the minimum data necessary to trigger the process of reporting LHDs by the air traffic controllers.

2.8 It is to be highlighted that most of the LHDs are related to coordination failures between adjacent ACCs. Accordingly, States were encouraged to implement AIDC/OLDI, which would improve significantly the coordination process and would reduce the amount of coordination failures, thus enhancing safety.

2.9 The MIDANPIRG/16 meeting noted with appreciation that the MIDRMA LHD Online Reporting Tool is being used for the exchange and coordination of LHDs at the interface between the ICAO Asia Pacific and MID Regions.

2.10 The MIDANPIRG/16 meeting noted with appreciation that the MIDRMA managed to conduct GMU monitoring for 124 aircraft registered in the Middle East Region since MIDANPIRG/15. Thanks to the MIDRMA, the MID Region achieved the highest percentage of monitored aircraft worldwide (94% of aircraft have known Height-Keeping Performance monitoring results).

2.11 The MIDANPIRG/16 meeting noted with concern that some State aircraft were filing “W” in their flight plans while they were not RVSM approved. Accordingly, the meeting urged States to implement necessary measures for granting RVSM approvals to their State aircraft.

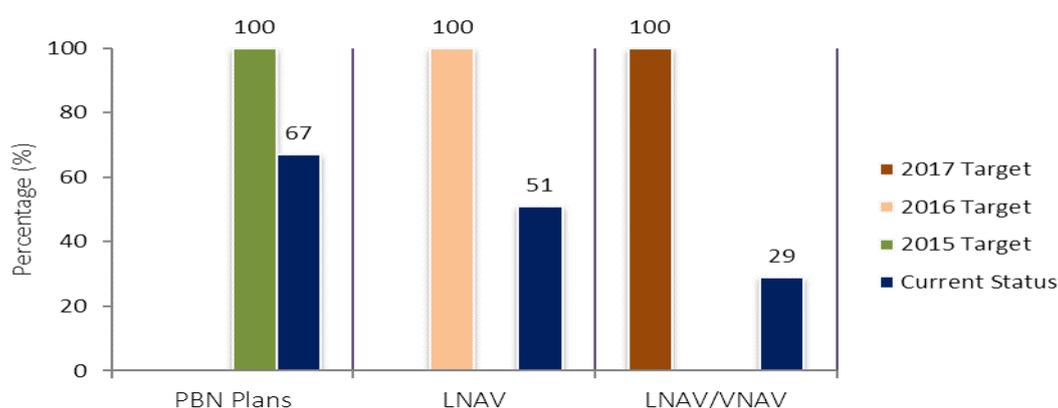
2.12 The MIDANPIRG/16 reviewed and endorsed the MID RVSM SMR 2015, which presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, through Conclusion 12/16, continue to be met. The MID RVSM SMR 2016 and 2017 will be presented to MIDANPIRG/17 for endorsement.

### ***Performance Based Navigation (PBN)***

2.13 The meeting may wish to recall that the Fourth edition of the Global Air Navigation Plan (GANP) considered the Performance Based Navigation (PBN) as the highest priority for the air navigation. The introduction of PBN has met the expectations of the entire aviation community, by increasing airspace capacity, improving airport accessibility, ensuring flight safety, and reducing CO<sub>2</sub> emissions. The status of PBN implementation is reflected in the Global Air Navigation Report as well as the Global and Regional Air Navigation Performance Dashboards.

2.14 Several mandates are requesting States and stakeholders to work together in order to foster the implementation of PBN such as: the Assembly Resolution A37/11, GANP, Montreal Declaration on Planning for Aviation Safety Improvement, MID Region Air Navigation Strategy, MID Region PBN Implementation Plan, Doha Declaration on Aviation Safety and Air Navigation in the MID Region, PIRGs and RASGs Conclusions, etc. The PBN implementation in the MID Region is still far below the agreed targets. The status of implementation of PBN in the MID Region is as follows:

**BO-APTA Status of implementation in the MID Region**



2.15 The main identified challenges impeding the advancement of PBN implementation in addition to the low number of qualified PBN Experts (PANS-OPS, Airspace planner, OPS Approval and Instructors) is the lack of necessary regulations enabling service providers to implement and the air operators to use PBN procedures.

2.16 The meeting may wish to note that the establishment of the MID Flight Procedure Programme is on-going. The Project Document of the MID FPP will be presented to the DGCA-

MID/4 meeting. The MID FPP main objective in Phase 1 is building the MID States' capabilities related to PBN, which eventually will foster the PBN Implementation.

### ***Contingency Planning***

2.17 End of 2012, the MID Office initiated the development of Regional ATM contingency plan to address the challenges affecting the air traffic flows within and across the Middle East Region due to disruption of air traffic services, conflict zones, weather, etc. The Plan was endorsed by MIDANPIRG in 2013 as MID Doc 003 (available on ICAO MID Office website), which includes the notification and coordination processes through the establishment of Contingency Coordination Teams.

2.18 Several Contingency Coordination Teams (CCTs) have been established that succeeded in the provision of a forum for sharing information, identifying the challenges and implementation of contingency measures/routes ensuring the safety of air traffic during contingency situations. The following reflects the status of CCTs:

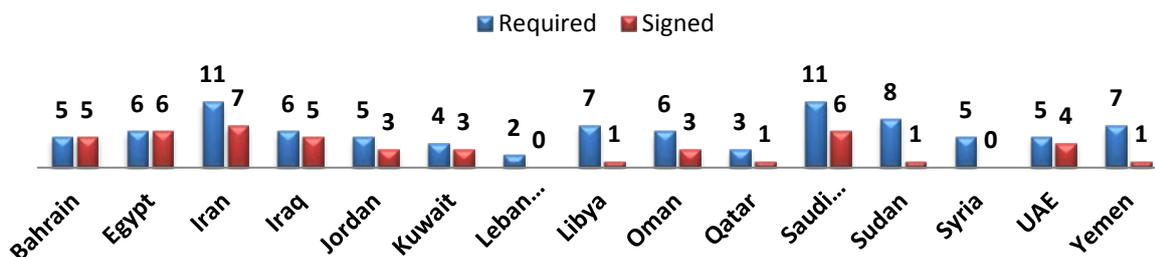
- Active CCTs: Iraq, Libya, Qatar, Syria, Yemen
- Closed CCTs: Beirut-Cyprus, Ankara-Bagdad-Tehran Interface, Turkey Coup, Tehran-Bahrain and Kuwait interface, Egypt (Sinai Peninsula)
- Other focused CCTs related to different factors that had impact on the MID Region traffic flows such as ATC strikes, weather, etc., which addressed the issues and were closed after the situation returned to normal.

2.19 The ATM SG/3 meeting (Cairo, Egypt, 22-25 May 2017) agreed to the establishment of MID ATM Contingency Plan Action Group to carry out a comprehensive review of the Plan, taking into consideration the experience gained and comments/feedback and proposals received from stakeholders. The Action Group will be composed of the ATM SG Chairpersons, experts from Saudi Arabia, UAE, AACO, CANSO, IATA and ICAO.

2.20 In accordance with Annex 11 provisions, Air Traffic Services authorities shall develop and promulgate contingency plans for implementation in the event of disruption, or potential disruption, of air traffic services and related supporting services in the airspace for which they are responsible for the provision of such services. Such contingency plans shall be developed with the assistance of ICAO as necessary, in close coordination with the air traffic services authorities responsible for the provision of services in adjacent portions of airspace and with airspace users concerned.

2.21 In order to ensure adequate level of coordination between States, Area Control Centres are required to sign Contingency Agreements with their adjacent ACCs. The status of signed ATS Contingency Agreements in the MID Region is reflected in the Graph below. It is to be highlighted that air navigation deficiencies are reported in the MIDANPIRG Air Navigation Deficiencies Database (MANDDD) related to the non-signature of contingency agreements.

### Status of ATM Contingency Agreements



#### *Civil/Military Cooperation and Flexible Use of Airspace*

2.22 The meeting may wish to note that the Aviation System Block Upgrades (ASBU) Module 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.

2.23 The ATM SG/3 meeting agreed on the establishment of a B0-FRTO Action Group composed of the ATM SG Chairpersons, AACO, CANSO, IATA and ICAO to review and propose elements, indicators, metrics and targets for the B0-FRTO and to develop a revised Reporting and Monitoring Table to be included in the MID eANP Volume III.

2.24 The ATM SG/3 meeting recalled that the MIDANPIRG/16 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. 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 a revised version of the “Objective and Working Arrangements” of the MID Civil/Military Support Team should be presented to the ATM SG/4 meeting.

2.25 The ATM SG/3 meeting noted with appreciation that Sudan and UAE would host Civil/Military Cooperation and FUA National Workshops.

2.26 The meeting may wish to note that the ICAO/ACAC/CANSO Joint Civil/Military Workshop is planned to be held in Algiers, Algeria from 19 to 21 March 2018.

#### *SIDs and STARs Phraseology*

2.27 The meeting may wish to note that the amendment to phraseology related to SIDs and STARs has been included in the latest version of ICAO Doc 4444 (PANS-ATM) with applicability date 10 November 2016. In this respect, the meeting urged States to take necessary measures for the implementation of the SIDs and STARs new phraseologies, using the guidance material available on the ICAO website: [http://www.icao.int/airnavigation/sidstar/pages/changes-to-sid\\_star-phraseologies.aspx](http://www.icao.int/airnavigation/sidstar/pages/changes-to-sid_star-phraseologies.aspx)

2.28 The ATM SG/3 meeting noted that ICAO is developing a Mobile Application for SIDs and STARs Phraseology, which includes animated scenarios, training activities and interactive frequently asked questions. The package is developed to be directly usable by pilots and air traffic controllers.

2.29 The ATM SG/3 meeting reiterated MIDANPIRG Conclusion 16/20 and urged States to implement the provisions of amendment 7 to ICAO Doc 4444, in particular those related to the SIDs and STARs new phraseologies; and provide the ICAO MID Office with their implementation plan by 15 July 2017.

*CONCLUSION 16/20: SIDS AND STARs NEW PHRASEOLOGIES*

*That, States be urged to:*

*a) implement the provisions of amendment 7 to ICAO Doc 4444, in particular those related to the SIDs and STARs new phraseologies; and*

*b) provide the ICAO MID Office with their implementation plan by 1 May 2017.*

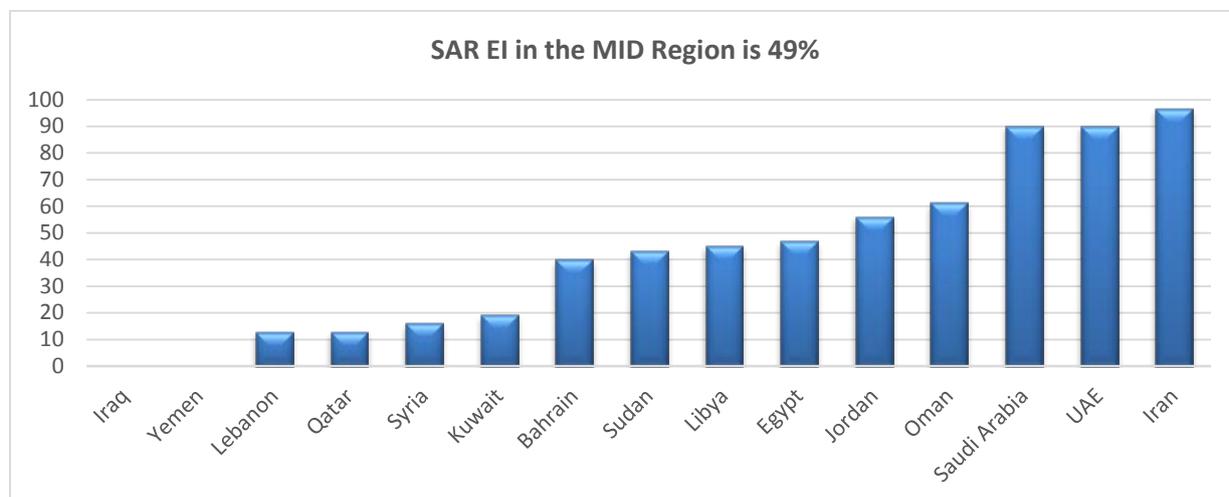
2.30 The ATM SG/3 meeting raised concern related to the implementation of the new phraseologies without a predefined transition plan (similar to the INFPL 2012), which is creating confusion to pilots who are using the old phraseologies within some FIRs and the new phraseologies in other FIRs.

**Search and Rescue**

2.31 The meeting may wish to note that the main USOAP CMA SAR findings in the MID Region are related to lack of:

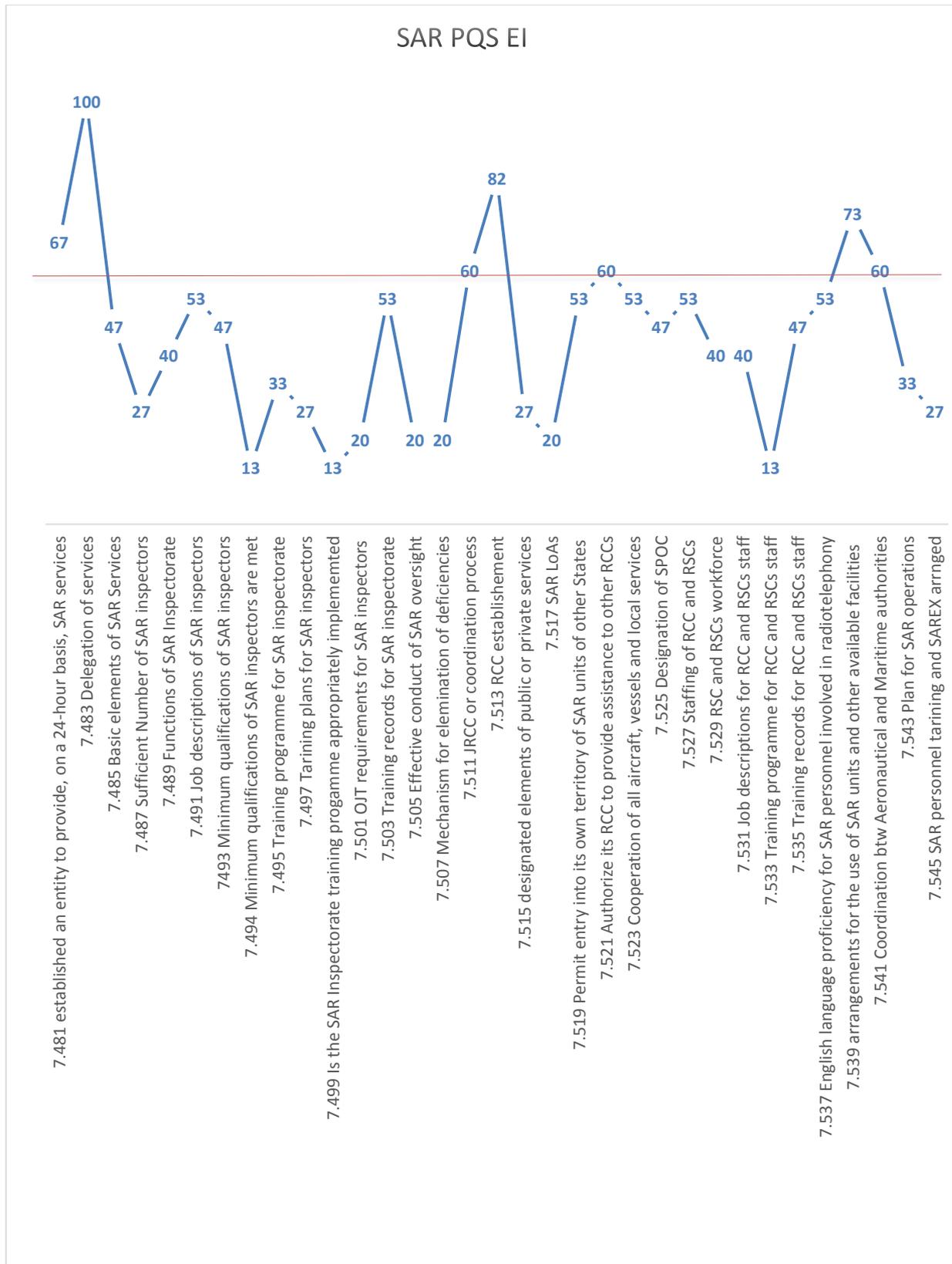
- effective SAR oversight activities;
- English language proficiency for RCC radio operators;
- appropriate training programmes/plans of SAR experts;
- signature of SAR agreements;
- plans of operations for the conduct of SAR operations and SAR exercises;
- provision of required SAR services; and
- non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.

2.32 Based on the USOAP CMA results, as of May 2017, the SAR EIs per State are reflected in **Graph 1**:



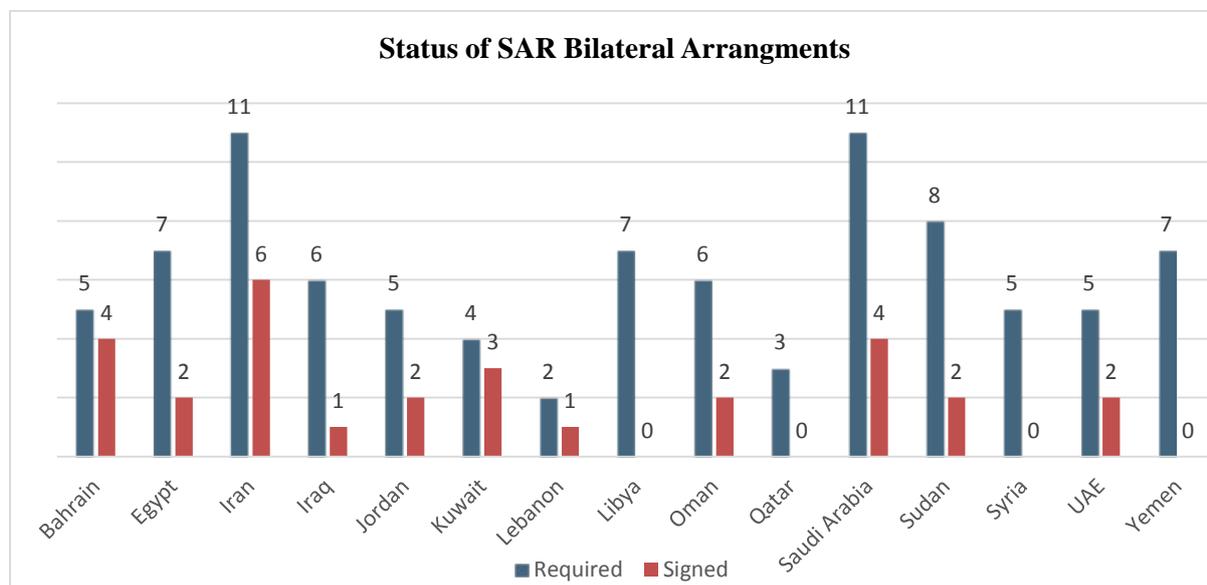
**Graph 1**

2.33 The SAR EIs in the MID Region per Protocol Question (PQ) as of May 2017 are reflected in **Graph 2**:



Graph 2

2.34 The status of SAR bilateral Arrangements, as of 15 May 2017, is at **Appendix 7A**, and is also reflected in the following **Graph 3**:



**Graph 3**

2.35 The MIDANPIRG/16 recalled that during the review of the MIDANPIRG/15 Report, the Air Navigation Commission (ANC) suggested that data from USOAP-CMA and other areas be analysed to determine which SARPs were difficult for States to implement so the identified “problematic” SARPs could be addressed. In this respect, based on the USOAP-CMA results, the meeting recognized that some deficiencies related to Annex 12 provisions are longstanding and very difficult for States to implement such as the signature of SAR Agreement between States (Reference: Annex 12 Standard 3.1.1 and Recommendation 3.1.5). It was highlighted that the regional effective implementation of the relevant USOAP-CMA Protocol Question (7.517) is only **20%**. The meeting was informed that the updated version of the ANS PQs has been approved with applicability date 1 June 2017.

2.36 The ATM SG/3 meeting reviewed the Initial Draft MID SAR Implementation Plan developed by the MID SAR Action Group (SAR AG), which includes guidance material to support States to comply with global and regional requirements for SAR provision. The Plan includes also the Matrix that will be used for the analysis of the SAR status of implementation in the MID Region and Templates related to the conduct of SAREX.

2.37 The ATM SG/3 meeting agreed that, the MID SAR Action Group develop, as part of the MID SAR Implementation Plan, necessary guidance for States to support the elimination of the longstanding SAR deficiencies, in accordance with the outcome of MIDANPIRG/16.

**Remotely Piloted Aircraft (RPAS)**

2.38 In 2017 the subject was addressed by the RSC/5, MIDANPIRG/16 and the ATM SG/3 meetings. The three meetings 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>

2.39 The MIDANPIRG/16 meeting noted that 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. In accordance with the RASG-MID Conclusion 5/18, the meeting urged States 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).

2.40 The ATM SG/3 meeting was apprised of the measures implemented by UAE in order to manage the use of drones within Emirates FIR, which includes awareness campaign launched jointly with the Ministry of Interior, development of Mobile Application, complete set of Regulations related to RPAS, procedures for tactical risk assessment, issuance of safety Alerts, etc.

2.41 The ATM SG/3 meeting was briefed about the CANSO RPAS activities. CANSO's RPAS and Emerging Technologies Workgroup (RPAS/ET WG) members from the ANSPs and the Industry worked together and developed the CANSO Document "the ANSP Considerations for RPAS Operations" and completed the training module to provide ANSPs with a high-level overview of RPAS operations from an ANSP perspective. The training module includes information on the operation of RPAS, unique terminology, contingency operations, etc.

2.42 The CANSO ANSP Considerations for RPAS Operations information document can be downloaded via the CANSO public link: <https://www.canso.org/ansp-considerations-rpas-operations>

2.43 The meeting may wish to note that the MID RPAS Workshop will be held in Dubai, UAE from 20 to 22 November 2017.

### 3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) urge States (regulators) to take necessary measures to:
  - i. develop/update the civil aviation regulations to cover the PBN requirements;
  - ii. ensure that their ATS develop contingency plan in accordance with ICAO provisions that should be coordinated with the adjacent ATS units;
  - iii. ensure the timely implementation of the SIDs and STARs new phraseologies; and
- b) encourage States to:
  - i. implement a process for the RVSM approval of their military aircraft, if not yet done so;
  - ii. participate in the Civil/Military Workshop that will be held in Algiers, Algeria, 19 to 21 March 2018;
  - iii. update, as deemed necessary, the MIDRMA Airworthiness/Flight Operations focal points at **Appendix B**;
  - iv. consider the developments related to RPAS and attend the RPAS Workshop that will be held in Dubai, UAE, 20-22 November 2017; and
  - v. take action as appropriate regarding the coordination of activities between MIDANPIRG and RASG-MID.

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**APPENDIX A**

**Coordination between MIDANPIRG and RASG-MID**

Subjects of interest for MIDANPIRG and RASG-MID	Responsible/Leading Group	
	RASG-MID	MIDANPIRG
Aerodrome Operational Planning (AOP)		X
Runway and Ground Safety	X	
AIM, CNS and MET safety issues		X
CFIT	X	
SSP Implementation	X	
SMS implementation for ANS and Aerodromes	X	
Accidents and Incidents Analysis and Investigation	X	
English Language Proficiency	X	
RVSM safety monitoring		X
SAR and Flight Tracking		X
PBN		X
Civil/Military Coordination		X
Airspace management		X
Call Sign Similarity and Confusion		X
Conflict Zones		X
Contingency Planning		X
USOAP-CMA	X	
COSCAP, RSOO and RAIO	X	
Air Navigation Deficiencies		X
Training for ANS personnel		X
Training other civil aviation personnel	X	

Subjects of interest for MIDANPIRG and RASG-MID	Responsible/Leading Group	
	RASG-MID	MIDANPIRG
Laser attack	X	
Fatigue Risk Management	X	
RPAS		X
GPS Jamming		X
Aeromedical	X	
Airborne Collision Avoidance System (ACAS)		X

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**APPENDIX B**

**LIST OF MIDRMA BOARD MEMBERS/ALTERNATES AND FOCAL PONTS**

<b>STATE</b>	<b>MIDRMA BOARD MEMBER</b>	<b>ALTERNATE</b>	<b>ATC FOCAL POINT</b>	<b>AIRWORTHINESS/FLIGHT OPERATIONS FOCAL POINT</b>
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STATE	MIDRMA BOARD MEMBER	ALTERNATE	ATC FOCAL POINT	AIRWORTHINESS/FLIGHT OPERATIONS FOCAL POINT
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**APPENDIX B**

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