

International Civil Aviation Organization

MIDANPIRG STEERING GROUP

Sixth Meeting (MSG/6) (Cairo, Egypt, 3 - 5 December 2018)

Agenda Item 4: Air Navigation Safety Matters

RASG-MID ACTIVITIES AND COORDINATION BETWEEN MIDANPIRG AND RASG-MID

(Presented by the Secretariat)

SUMMARY

This paper provides an update on the activities of the Regional Aviation Safety Group — Middle East (RASG-MID). It highlights the activities coordinated between RASG-MID and MIDANPIRG for an improved efficiency of both Groups and to avoid duplication of efforts.

Action by the meeting is at paragraph 3.

REFERENCES

- ASRT/3
- RSC/6 Report

1. Introduction

1.1 The Sixth Meeting of the Regional Aviation Safety Group – Middle East Steering Committee (RSC-MID/6 was held in Cairo, Egypt, 25-27 June 2018.

2. DISCUSSION

RASG-MID Activities

- 2.1 The Seventh Edition of the MID Annual Safety Report (MID-ASR) was reviewed and approved by the ASRT/3 meeting. In addition, the Sixth MID-ASR was endorsed by the RSC-MID/6. The following are the main highlights related to the reactive and proactive safety information of the MID-ASR:
 - MID Region had an accident rate of **1.45** accidents per million departures in 2017, which is below the global rate (**2.4**).
 - The 5-year average accident rate (2013-2017) is **2.67**, which is equal to the global average rate for the same period

- The 5- year average rate of fatal accidents in the MID Region for the period (2013-2017) is **0.64** accident per million departures, compared to 0.44 for the globe.
- The MID Region had no fatal accidents in 2013 and 2017. However, three fatal accidents occurred in 2014, 2015 and 2016. The 2014 accident caused 38 fatalities, 224 fatalities were registered in 2015 and 1 fatality in 2016
- No Controlled Flight Into Terrain (CFIT) related accident occurred in the MID Region for the period 2013-2017.
- the main Focus Areas identified for the period 2012-2016 and endorsed by the RSC-MID/6 in the MID Region are as follows:
- 1- Runway Safety (RS); Runway Excursion (RE) and Abnormal Runway Contact (ARC) during landing;
- 2- System Component Failure- Power Plant (SCF-PP); and
- 3- Loss of Control In Flight (LOC-I)
- The main Focus Areas identified for the period 2013-2017 in the MID Region are:
 - 1- Runway Safety (RS); (mainly RE and ARC during landing);
 - 2- Loss of Control Inflight- (LOC-I);
 - 3- Controlled Flight Into Terrain- (CFIT); and
 - 4- Mid Air Collision- (MAC)
- The following Emerging Risks which were identified and included in the 6th and 7th ASRs:
 - 1. Security risks with impact on safety-SEC;
 - 2. Fire/Smoke-non impact- (F-NI);
 - 3. Runway Incursion- (RI);
 - 4. Birdstrike- (BIRD);
 - 5. Wake Turbulence;
 - 6. System Component Failures- (SCF-NP); and
 - 7. Wildlife (Wild).
- 2.2 With respect to the Emerging Risks, the RSC-MID/6 meeting agreed that Runway Incursion and Birdstrike should be addressed by the RGS Working Group. It was also agreed that the Mid-Air Collision (MAC) and Turbulence Encounter (TURB) should be addressed by the Regional Aviation Safety Team (MID-RAST)
- 2.3 It is to be noted that during the RSC/6 meeting, the UAE raised a concern about the repeated occurrences of TCAS TA/RA including STCA warnings, due to military aircraft interfering with civil aircraft that have happened since January 2018 in the Region. UAE stated that "these occurrences demonstrated a negative trend and require that a careful analysis of these occurrences is conducted in the next MID Annual Safety Report with the identification of mitigation measures to ensure that the exposure to MAC in the Region is not worsen". It is to be highlighted that the UAE statement was supported also by Bahrain and Saudi Arabia.

- 2.4 It is to be recalled that the ASRT/2 meeting agreed:
 - to consolidate the list of Emerging Risks using the ADREP Taxonomy based on the previously identified emerging risks, the new emerging risks identified in the Sixth MID-ASR and the top 5 areas of concern endorsed by the RASG-MID/6 meeting;
 - that the State of Occurrence Data will be used at this stage;
 - that States provide the ICAO MID Office by end of March 2018 with the number of accidents, serious incidents and incidents related to each category for the past 3 years (2015 2017), using the template in **Appendix A**;
 - the ICAO MID Office, in coordination with the MID-ASRT Rapporteur review the data provided and classify the different risk categories in terms of frequency; and
 - the top (X) Emerging Risks will be then communicated to States in order to share with the MID-ASRT their data analysis and safety recommendations.

2.5 The ASRT/3 meeting reviewed the consolidated inputs received by the ICAO MID Office from six (6) States as reflected in the **Table 1**.

		2015		2016			2017			
#	Occurrence Category	# Accident	# Serious incidents	# Incidents	# Accident s	# Serious incidents	# Incidents	# Accident	# Serious incidents	# Incidents
1	CFIT			5			1			5
2	Mid Air Collision (MAC)		35	66		20	66		16	102
3	Fire/Smoke (F-NI)		8	26		2	42		8	30
4	Runway Incursion- (RI)		5	15		2	19		9	17
5	SCF-NP		14	122		9	267		9	257
6	Turbulence Encounter (TURB)	2		326			351		1	325
7	BIRD			119			198			297
8	Wildlife (Wild)			3			7			3

Table 1

Near Mid Air Collision

- 2.6 The ASRT/3 meeting noticed a significant increase of the NMAC occurrences and agreed that the Mid Air Collision (MAC) risk should be considered as a Focus Area. However, additional safety data is needed for further analysis in order to identify the underlying safety issues.
- 2.7 It is to be highlighted that the ATM-SG/4 meeting noted with concern the significant increase in the NMAC occurrences and agreed on the establishment of an Action Group composed of the ATM SG Chairpersons and Secretariat and experts from Saudi Arabia, UAE and IATA to carry out further analysis of the reported occurrences, based on the safety analyses and recommendations

emanating from the SMSs of concerned States, and provide feedback to the ASRT. Accordingly, the meeting agreed to the following Draft Decision:

DRAFT DECISION 4/7: NEAR MID AIR COLLISION (NMAC) ACTION GROUP

That, the NMAC Action Group be established to carry out further analyses of the reported MAC incidents and provide feedback to the ASRT.

Wake Turbulence

- 2.8 The ASRT/3 meeting noticed a significant increase of turbulence encounter occurrences mentioned on the table1 and decided to break it down to wake vortex category in order to conduct a meaning full analysis and urged the States to share the occurrences related to wake Turbulence.
- 2.9 The ASRT/3 meeting also noted the data shared by IATA on Wake Turbulence, as presented in **Appendix B**. It is to be highlighted that in 2017, 624 reports were retained for analysis, which equals to 0.01 report per 1,000 flights or 1 encounter in every 100,000 flights. The data analysis also showed that:
 - a. Muscat, Bahrain, Jeddah and Tehran FIRs are the top FIRs in terms of number of reports.
 - b. the CAT D (139 reports) and CAT B (156 reports) were the most frequent aircraft categories report.
 - c. A380, B777 and B747 are the top three generator of wake turbulence in the data set analysed.
 - d. The highest number of reports occurred when both aircraft were in level flight (186 reports).
 - e. The highest number of injuries occurred in moderate wake turbulence events.
- 2.10 The ATM-SG/4 agreed that in respect to Turbulence Encounter (TURB), it would be beneficial if the analysis would be breakdown (at the level of the ATM SG) to the monitoring of the component related to Wake Turbulence.
- 2.11 It is to be noted that an RSA regarding the wake turbulence is being prepared by UAE and will be published once approved by the RASG-MID.

Strategy for the Enhancement of Cooperation in the Provision of AIG Services in the MENA Region

- 2.12 Regarding the Strategy for the Enhancement of Cooperation in the Provision of AIG Services in the MENA Region. The RSC/6 meeting recalled that the Strategy for the enhancement of cooperation among the MENA States in the provision of AIG functions at **Appendix C** was endorsed by the DGCA-MID/4 meeting (Muscat, Oman, 17-19 October 2017).
- 2.13 The RSC-MID/6 meeting recognized the need to establish an AIG Core Team led by the Rapporteur of the SST to develop the Roadmap and to monitor the implementation of the Strategy.
- 2.14 The RSC-MID/6 meeting reviewed and updated the Roadmap for AIG Regional Cooperation as at **Appendix D**, and endorsed the following Draft Conclusion.

DRAFT CONCLUSION 6/1: ROADMAP FOR AIG REGIONAL COOPERATION

That, the Roadmap for AIG Regional Cooperation at Appendix 3U is endorsed

2.15 The RSC-MID/6 meeting noted that the questionnaire on AIG level 1 of cooperation at **Appendix E** was sent to the MENA States through State Letter Ref.: ME 4/1.3-18/074 dated 4 March 2018. The meeting urged the remaining States to send their replies to the ICAO MID Office, as soon as possible.

2.16 It is also to be noted that:

- Replies to the AIG questionnaire were received from eight (8) States, namely Bahrain, Egypt, Iran, Morocco, Saudi Arabia, Sudan, UAE, and Yemen.
- Seven (7) States out of the eight (8) replies have bilateral agreements of cooperation with other States. Only one State (Yemen) does not have a bilateral agreement of cooperation with other States. Two States (Egypt and UAE) mentioned that they have bilateral agreements of cooperation with other States but without indicating the number of agreements
- Six (6) States (Bahrain, Iran, Morocco, Saudi Arabia, Sudan, and UAE) stated clearly that they are willing to move to the level 2 of cooperation in accordance with the Strategy for the enhancement of cooperation among the Middle East and North Africa (MENA) States in the provision of AIG Functions.

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to urge States to:
 - a) provide the ICAO MID Office with the required safety data and analysis pertaining to ANS-related accident, serious incidents and incidents;
 - b) review the information in **Table 1** and take action as appropriate;
 - c) contribute to the work programme of the ASRT and MID-SST; and
 - d) reply to the questionnaire on AIG level 1 of cooperation at **Appendix E** as soon as possible, if not yet done so.

APPENDIX A

TEMPLATE FOR THE COLLECTION OF

ACCIDENT, SERIOUS INCIDENT AND INCIDENT DATA

1	Name of State:			
]	Traffic: Nb. of Departures per year	[2015:]	[2016:]	[2017:]
Т	2	0.1.5	2016	

	Occurrence		2015		2016			2017		
#	Occurrence Category	#	# Serious	#	#	# Serious	#	#	# Serious	#
		Accidents	incidents	Incidents	Accidents	incidents	Incidents	Accidents	incidents	Incidents
1	CFIT									
2	Mid Air collision (MAC)									
3	Fire/Smoke (F- NI)									
4	Runway Incursion- (RI)									
5	SCF-NP									
6	Turbulence Encounter (TURB)									
7	BIRD									
8	Wildlife (Wild)									

States should provide the number of accident, serious incidents, and incidents related to each category mentioned in the template above for the past three years (2015-2017)

Scope: State of Occurrence

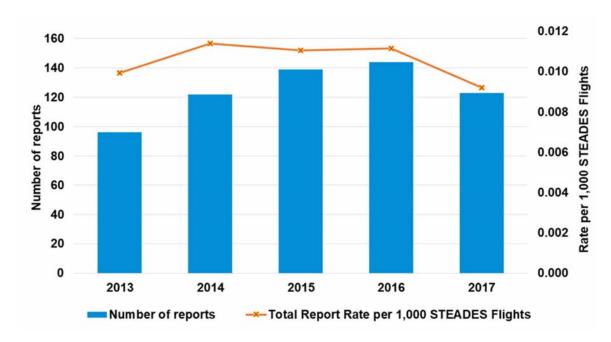
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APPENDIX B

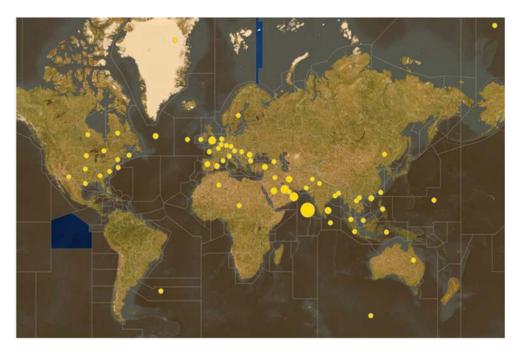
IATA Incidents Reported by Airlines - STEADES Data

Wake Turbulence

The data query resulted in a total of 1,159 reports in 2017. After quality controls were performed, 624 reports were retained for analysis, which equals to 0.01 reports per 1,000 flights or 1 encounter in every 100,000 flights. The figure below shows the number of reports and the rate per 1000 STEADES flights for the period 2013-2017.

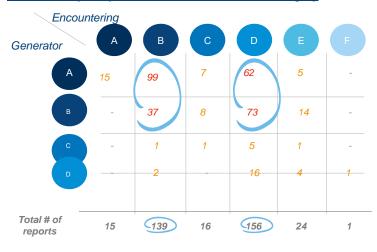


Muscat, Bahrain, Jeddah and Tehran FIRs are the top FIRs in terms of number of reports.



Muscat 12 Bahrain 11 Jeddah 7 7 Tehran

Upper Heavy (CAT B) and Upper Medium (CAT D) aircraft reported the highest number of events Number of reports per Aircraft Wake Turbulence Category



Turbulence RECAT, shows that CAT D and CAT B were the most frequent aircraft categories to report encountering wake turbulence, mainly generated by CATA and CAT B aircrafts, mostly of Moderate & Severe intensity

A pairing based on the Wake

Wake Turbulence generator: top aircraft type by category



The highest number of reports occurred when both aircraft were in level flight 186 reports.

The highest number of injuries occurred in moderate wake turbulence events

Key findings

- Mumbai, Muscat and Bahrain are the top 3 FIRs in terms of number of reports
- Upper Heavy (CAT B) and Upper Medium (CAT D) aircraft reported the highest number of events of wake turbulence encountered
- Wake Turbulence Encountered by CAT B, C and D generated from CAT A and B is mainly Moderate and Severe in intensity
- A380, B777 and B747 are the top three generator of wake turbulence in the dataset analyzed
- B777, A320, A330 and B737 are the top aircraft that encountered wake turbulence in the dataset analyzed
- The highest number of reports occurred when both aircraft were in level flight

APPENDIX C

STRATEGY FOR THE ENHANCEMENT OF COOPERATION AMONG THE MIDDLE EAST AND NORTH AFRICA (MENA) STATES IN THE PROVISION OF AIG FUNCTIONS

1- Background

Whereas it is incumbent on the State in which an accident occurs to institute an inquiry into the circumstances of the accident in conformity with Article 26 of the Convention;

Whereas Assembly Resolution A36-10, inter-alia:

- urges Contracting States to undertake every effort to enhance accident prevention measures, particularly in the areas of personnel training, information feedback and analysis and to implement voluntary and non-punitive reporting systems, so as to meet the new challenges in managing flight safety, posed by the anticipated growth and complexity of civil aviation;
- urges Contracting States to cooperate with ICAO and other States in a position to do so, in the development and implementation of accident prevention measures designed to integrate skills and resources to achieve a consistently high level of safety throughout civil aviation;

Whereas, amendment 15 of Annex 13 (STD 3.2) stipulates that a State shall establish an accident investigation authority that is independent from State aviation authorities and other entities that could interfere with the conduct or objectivity of an investigation;

Whereas, owing to the growing sophistication and complexity of modern aircraft, the conduct of an accident or serious incident investigation requires participation by experts from many specialized technical and operational fields and access to specially equipped facilities for investigation;

Whereas many Contracting States do not have such specialized technical and operational expertise and appropriate facilities;

Whereas the costs of salvage and investigation of major aircraft accidents may place a heavy financial burden on the resources of the State where the accident occurred:

Whereas Assembly Resolution A37-15 (Appendix U), recommends that Contracting States cooperate in the investigation of major aircraft accidents or accidents in which the investigation requires highly specialized experts and facilities;

Whereas, the ICAO Universal Safety Oversight Audit Programme (USOAP) audit findings indicate that a number of States have not been able to implement an effective accident and incident investigation system for their aviation activities;

Recognizing that the USOAP findings have been associated, in general, with a lack of resources (both human and financial), lack of appropriate legislation and regulations, lack of an organization for the investigation of accidents and incidents, lack of a training system for investigators, lack of equipment to conduct investigations and lack of policies, procedures and guidelines for accident and incident investigations;

Recognizing that combined with the expected increase in air transport operations, the relatively unchanged trend in the accident rate over the past several years might lead to an increase in the number of accidents per year;

Recognizing that there are many challenges to effective accident prevention, and that more effective identification and correction of aviation hazards and system deficiencies are required in order to complement regulatory efforts in further reducing the number of worldwide accidents and to improve the accident rate;

Recognizing that a regional investigation system can provide economies of scale by allowing for the sharing of required resources, and that by working together, States of a region or sub-region can have a more persuasive voice on the world stage and can help secure a more favorable climate aimed at a safer international air transportation system;

Acknowledging that during the AIG Divisional Meeting (2008) several States highlighted that, in regions where individual States do not have investigation capability, implementing a regional accident and incident investigation organization (RAIO) would ensure the effectiveness of investigations, reinforce conformity with the provisions of Annex 13, and contribute to the enhancement of aviation safety;

Whereas, Annex 13 (STD 5.1 and 5.1.2) stipulates that the State of Occurrence shall institute an investigation into the circumstances of the accident and serious incident (maximum mass of over 2 250 kg) and be responsible for the conduct of the investigation, but it may delegate the whole or any part of conducting of such investigation to another State or a RAIO by mutual arrangement and consent. In any event, the State of Occurrence shall use every means to facilitate the investigation;

Considering that the DGCA-MID/2 meeting (Jeddah, Saudi Arabia, 20 - 22 May 2013) noted that it is widely considered that implementing a RAIO would ensure the effectiveness of investigations, reinforce conformity with the provisions of Annex 13, and contribute to the enhancement of aviation safety; and accordingly through Conclusion 2/11 endorsed the First version of the Strategy for the establishment of RAIO(s);

Considering the AIG needs and capabilities of the Middle East and North Africa (MENA) States; and the implementation of different levels of cooperation for the provision of AIG services/functions at the regional/sub-regional level; and

Considering the challenges related to the establishment of a RAIO;

A strategy is crucial for the enhancement of cooperation in the provision of AIG services/functions among the Middle East and North Africa (MENA) States.

2- Objective

Contribute to improvement of aviation safety in the MENA States by enabling States to conduct effective and independent investigations of aircraft accidents and incidents; and support States in fulfilling their investigation obligations in Annex 13.

3- Methodology

During the ACAC/ICAO AIG Workshop held in Jeddah, Saudi Arabia, 25-27 April 2017, three (3) levels of cooperation for the provision of AIG services/functions in the MENA States have been defined as follows:

Level 1:

Cooperation among MENA States under the framework of Annex 13 and/ or a standard bilateral MOU to share, on ad-hoc basis, resources, training, information, documentation and capabilities; and strengthen conformity with Annex 13.

Level 2:

Cooperation among MENA States under the framework of a regional cooperation mechanism (well-defined scope and set of coordinated, organized and harmonized procedures and mechanisms) for the conduct of accidents and serious incidents investigations.

Level 3:

Establishment of a RAIO with well-defined mandate, roles and responsibilities, organization (human resources), funding mechanism, etc.; with a centralized decision-making process on RAIO activities.

The Table in **Attachment 1** provides more details about each level.

4- Strategic Plan

- (a) States are urged to develop and further strengthen regional/sub-regional cooperation for accidents and incidents investigation.
- (b) MENA States should take necessary measures to reach at least level 2.
- (c) An implementation Roadmap for MENA States should be developed, under the framework of RASG-MID, to provide the details and timelines related to the implementation of the different levels.
- (d) Key Performance Indicators (KPIs) should be developed for the monitoring of the implementation of the Roadmap to ensure that the agreed goals are achieved.
- (e) The decision on whether to continue towards the establishment of a full MENA RAIO, or to be satisfied with level 2 cooperation, will be taken in due course, depending on the achievement of the expected KPIs/goals.

ATTACHMENT 1

	Level 1 (Bilateral Agreements)	Level 2 (Regional Cooperation Mechanism)	Level 3 (RAIO)
Human resources	Shared between the two States	List of MENA States' investigators available to support States in the conduct of investigations, as required. The State conducting the investigation will hold the cost	Investigators from RAIO will lead/participate in investigation conducted by a member State, The cost share is determined by RAIO
AIG training	Shared between the two States	List of planned training courses in all member States is maintained by a voluntary State. Member States may benefit from training conducted by other member States.	 The syllabus of the basic training is RAIO-centralized. Advanced and specialized trainings are determined by RAIO
Equipment, tools, and technology	Shared between the two States	List of MENA States' special equipment is determined and maintained by a voluntary State for use by all member States, as required. The State conducting the investigation will hold the cost	RAIO-centralized tools and equipment are used by member States. Cost share is determined by RAIO
Accidents and incidents database	Access may be granted to the other State's accident/incident database	Database is shared voluntary and managed by a voluntary State	Database is obliged to be shared and is RAIO-centralized
Data repository	Access may be granted to the other State's data repository	Common data repository is managed by a voluntary State	Data repository is RAIO-centralized
Knowledge, safety information, and procedures	Shared between the two States	 Knowledge and information is stored in data repository managed by a voluntary State Procedure is common 	 Knowledge and information is stored in RAIO-centralized data repository Procedure is centralized

	Level 1 (Bilateral Agreements)	Level 2 (Regional Cooperation Mechanism)	Level 3 (RAIO)
Services of State's National Centers of research, laboratories, institutions, experts, etc. (External to the AIG)	A State can utilize the other State's National Centers	List of MENA States' Centers that can be utilized by any member State. The State conducting the investigation will hold the cost	RAIO-centralized list of Centers. Cost share is determined by RAIO
Investigation regulations	Individual, but a State can benchmark the other State	Harmonized and coordinated by a voluntary State	RAIO-centralized
Oversight of the State investigation authority	Individual, but a State may conduct a peer- review upon the other State request	Pooled peer-review group maintained by a voluntary State	RAIO oversight (either by a RAIO group or by outsourced organization)
Funding of conducting investigations	The State responsible for initiating the investigation holds the cost	The State responsible for initiating the investigation holds the cost	Investigations into certain category of accidents are conducted by RAIO based on published criteria. Cost share is determined by RAIO
Funding of regional investigation organization	-	-	Centralized fund by States' contributions

APPENDIX D

ROADMAP FOR AIG REGIONAL COOPERATION

No. 1 2	Description Develop a questionnaire and disseminate to States through a State Letter for surveying the current status of the MENA States in bilateral cooperation, and their willingness to move to Level 2 Analyze the received responses including the	Target date 30 Sep. 2018	Deliverable Survey	Champion AIG Core Team ICAO States	 KPI Number of States' responses
	Develop a questionnaire and disseminate to States through a State Letter for surveying the current status of the MENA States in bilateral cooperation, and their willingness to move to Level 2 Analyze the received responses including the	2018 31 Oct .	Survey	Team ICAO States	States'
2	Analyze the received responses including the				
	assessment of the effective implementation of the cooperation elements as listed in the Strategy (Level 1)	2018		AIG Core Team	 Number of bilateral agreements per State Level of effective implementation of Level 1 elements Number of States willing to move to Level 2
3	Develop a Draft Questionnaire to survey States AIG capabilities	31 Dec. 2018	Draft Questionnaire	AIG Core Team	
4	Develop a Draft AIG RCM MoU	31 Dec. 2018	Draft AIG RCM MoU	AIG Core Team	
5	Endorsement of the Questionnaire by the RASG-MID/7 Meeting	Apr. 2019	RASG- MID/7 Report	ICAO/RASG- MID	Questionnaire endorsed
6	Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting and ACAO EC	Nov. 2019	DGCA- MID/5 Report and ACAO EC Report	ICAO/DGCA- MID/5 ACAO EC	AIG RCM MoU endorsed
	5	all elements as listed in the Strategy (Level 1) 3 Develop a Draft Questionnaire to survey States AIG capabilities 4 Develop a Draft AIG RCM MoU 5 Endorsement of the Questionnaire by the RASG-MID/7 Meeting 6 Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting and ACAO EC	all Develop a Draft Questionnaire to survey States AIG capabilities 4 Develop a Draft AIG RCM MoU 5 Endorsement of the Questionnaire by the RASG-MID/7 Meeting 6 Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting and ACAO EC 31 Dec. 2018 Apr. 2019 Nov. 2019	all definitions are lettered as a listed in the Strategy (Level 1) 3 Develop a Draft Questionnaire to survey States AIG capabilities 4 Develop a Draft AIG RCM MoU 5 Endorsement of the Questionnaire by the RASG-MID/7 Meeting 6 Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting and ACAO EC 8 Draft AIG Questionnaire 9 Apr. 2019 RASG-MID/7 Report Nov. 2019 DGCA-MID/5 Report and ACAO EC Report	action as listed in the Strategy (Level 1) 3 Develop a Draft Questionnaire to survey States AIG capabilities 4 Develop a Draft AIG RCM MoU 5 Endorsement of the Questionnaire by the RASG-MID/7 Meeting 6 Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting and ACAO EC 8 Draft AIG Questionnaire Pour Report Apr. 2019 8 RASG-MID/7 Meeting RASG-MID/7 MID 8 Report AIG RCM MoU DGCA-MID/5 Report and ACAO EC 8 AIG Core Team 1 CAO/RASG-MID/7 MID 8 RASG-MID/7 MID/5 Report and ACAO EC

APPENDIX E

Questionnaire on Accidents and Incidents Investigation (AIG) Level 1 Cooperation-MENA States

State Name:

No.	Question	State Reply
1	Has the State established an accidents and incidents investigation (AIG) Organisation?	
2	Is the AIG Organisation structured on a form of authority independent from the State's aviation authorities?	
3	Has your AIG Authority/Organization established bilateral agreements (e.g. Memoranda of Understanding (MoUs)) with other States or with AIG Regional Organization (RAIO) for the delegation of whole or any part of conducting accidents and serious incidents investigation? If YES, please provide the total number of signed agreements and list them, then answer the following questions.	
	llowing questions are to be answered by States who had establish he agreement contain a clause for the parties, to:	ned agreements with other States or with RAIO.
3	Support each other with expertise in the event of an accident or serious incident investigation?	
5	Cooperate with each other for the provision of initial, recurrent, and/or OJT training to their investigators?	
6	Support each other with investigation equipment/tools?	

No.	Question	State Reply
7	Share investigation procedures/policies manuals, guidance material, safety information, etc.?	
8	Share accidents and incidents data?	
This qu	uestion is to be answered by all States (whether they had establis	hed agreements or not)
9	Is your State willing to move to the level 2 of cooperation in accordance with the Strategy for the enhancement of cooperation among the Middle East and North Africa (MENA) States in the provision of AIG Functions?	