



*International Civil Aviation Organization*

**RASG-MID Steering Committee**

**Fifth Meeting (RSC/6)**  
*(Cairo, Egypt, 25 – 27 June 2018)*

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**Agenda Item 3: RSC/6 Work Programme**

**STRATEGY FOR THE ENHANCEMENT OF COOPERATION  
AMONG THE MENA STATES IN THE PROVISION OF  
AIG FUNCTIONS**

*(Presented by Secretariat)*

**SUMMARY**

This paper presents the draft Roadmap concerning the enhancement of cooperation among the Middle East and North Africa (MENA) States in the provision of AIG functions.

Action by the meeting is at paragraph 3.

**REFERENCES**

- ACAC/ICAO AIG Workshop Report, Jeddah, Saudi Arabia, 25-27 April 2017
- DGCA-MID/4 Meeting, Muscat, Oman, 17-19 October 2017
- ICAO Doc 9946 - *Manual on Regional Accident and Incident Investigation Organization*
- RASG-MID/6 Meeting, Manama, Bahrain, 26-28 September 2017
- MID-SST/4 Meeting, Cairo, Egypt, 6-8 February 2018

**1. INTRODUCTION**

1.1 The RASG-MID/6 meeting noted that the ACAC/ICAO AIG Workshop was successfully held in Jeddah, Saudi Arabia, 25-27 April 2017. A new Draft Strategy was developed by the Workshop. The objective of the new Strategy is to contribute to the improvement of aviation safety in the MENA States by enabling States to conduct independent and effective investigations of aircraft accidents and incidents, and support States in fulfilling their investigation obligations as mentioned in Annex 13.

1.2 Accordingly, a draft Roadmap was developed by the AIG Ad Hoc Group, which was formed at the ACAC/ICAO AIG Workshop, to assist States in the implementation of the Strategy. The Roadmap is a living document, which includes Key Performance Indicators (KPIs) developed to monitor implementation and ensure that the agreed Roadmap goals are achieved.

1.3 The draft Roadmap was presented for discussion by RASG-MID/6 meeting that took place in Manama, Bahrain, 26-28 September 2017. The RASG-MID/6 meeting reviewed and supported the new Strategy for final endorsement by the DGCA-MID/4 Meeting, and recommended to further finalize/revise the draft Roadmap.

1.4 The DGCA-MID/4 meeting (Muscat, Oman, 17-19 October 2017) endorsed the Strategy, and agreed with RASG-MID/6 meeting recommendation to further finalize/revise the Roadmap.

## 2. DISCUSSION

2.1 The MID SST/4 meeting (Cairo, Egypt, 6-8 February 2018) recalled that the Strategy for the enhancement of cooperation among the MENA States in the provision of AIG functions at **Appendix A** was endorsed by the DGCA-MID/4 meeting (Muscat, Oman, 17-19 October 2017). The 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. Accordingly, the meeting agreed to the following Draft Decision:

### ***DRAFT DECISION 4/1: ESTABLISHMENT OF THE AIG CORE TEAM***

*That, the AIG Core Team composed of the following experts, is established to develop the Roadmap and to monitor the implementation of the Strategy for the enhancement of Regional Cooperation in the provision of AIG function for the MENA States:*

- *Eng. Ismaeil Mohamed Al Hosani (Chairman)*
- *Mr. Ibrahim Addasi from UAE*
- *Mr. Abdulelah O. Felemban from Saudi Arabia*
- *Mr. Kamil Ahmed Mohammed from Sudan*
- *Mr. Theeb Abdullah Al Otaibi from Saudi Arabia*
- *Mr. Seyed Mohammad Hosein Mousavi Sajad from Iran*
- *Mr. M'barek Lfakir, from Morocco*
- *Mr. Mohamed Chakib from ICAO*

2.2 The meeting reviewed and endorsed the Roadmap for AIG Regional Cooperation and agreed to the following Draft Conclusion.

### ***DRAFT CONCLUSION 4/2: ROADMAP FOR AIG REGIONAL COOPERATION***

*That, the Roadmap for AIG Regional Cooperation at **Appendix B** is endorsed.*

2.3 According to the roadmap for regional cooperation, the AIG Core Team developed a questionnaire on AIG Level 1 cooperation at **Appendix C**

## 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
- a) review and endorse the Roadmap and the questionnaire at **Appendices B and C**, respectively; and
  - b) endorse the Draft Decision 4/1.

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**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.

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ATTACHMENT 1

	<b>Level 1 (Bilateral Agreements)</b>	<b>Level 2 (Regional Cooperation Mechanism)</b>	<b>Level 3 (RAIO)</b>
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.	<ul style="list-style-type: none"> <li>- The syllabus of the basic training is RAIO-centralized.</li> <li>- Advanced and specialized trainings are determined by RAIO</li> </ul>
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	<ul style="list-style-type: none"> <li>- Knowledge and information is stored in data repository managed by a voluntary State</li> <li>- Procedure is common</li> </ul>	<ul style="list-style-type: none"> <li>- Knowledge and information is stored in RAIO-centralized data repository</li> <li>- Procedure is centralized</li> </ul>

	<b>Level 1 (Bilateral Agreements)</b>	<b>Level 2 (Regional Cooperation Mechanism)</b>	<b>Level 3 (RAIO)</b>
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

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**ROADMAP FOR AIG REGIONAL COOPERATION**

Level of Cooperation	Action		Target date	Deliverable	Champion	KPI
	No.	Description				
<b>Level 1</b> 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	1	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	30 Apr. 2018	Survey	AIG Core Team ICAO States	<ul style="list-style-type: none"> <li>Number of States' responses</li> </ul>
	2	Analyze the received responses including the assessment of the effective implementation of the cooperation elements as listed in the Strategy (Level 1)	30 June 2018	Analysis Report	AIG Core Team	<ul style="list-style-type: none"> <li>Number of bilateral agreements per State</li> <li>Level of effective implementation of Level 1 elements</li> <li>Number of States willing to move to Level 2</li> </ul>
<b>Level 2</b> 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 investigation	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	Mar. 2019	RASG-MID/7 Report	ICAO/RASG-MID	Questionnaire endorsed
	6	Endorse the Draft AIG RCM MoU by the DGCA-MID/5 Meeting	May 2019	DGCA-MID/5 Report	ICAO/DGCA-MID/5	AIG RCM MoU endorsed
Remaining level 2 actions will be detailed in due course						

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

**State Name:** .....

**Name of AIG Organization:** .....

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	<p>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?</p> <p>If YES, please provide the total number of signed agreements and list them, then answer the following questions.</p>	
<p>The following questions are to be answered by States who had established agreements with other States or with RAIO. Does the agreement contain a clause for the parties, to:</p>		
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?	
7	Share investigation procedures/policies manuals, guidance material, safety information, etc.?	

No.	Question	State Reply
8	Share accidents and incidents data?	
This question is to be answered by all States (whether they had established 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?	

- END -