



**REPORT OF THE SECOND MEETING OF THE
MIDDLE EAST REGIONAL AVIATION SAFETY GROUP**

(RASG-MID/2)

(Abu Dhabi, UAE, 12 – 14 November 2012)

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Approved by the Meeting
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PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Second Meeting of the Middle East Regional Aviation Safety Group (RASG-MID/2) was hosted by the General Civil Aviation Authority (GCAA), UAE, at the *Crowne Plaza Yas Island Hotel* in Abu Dhabi, UAE, from 12 to 14 November 2012.

2. OPENING

2.1 The Meeting was opened by Mr. Mohamed Khonji, ICAO Regional Director, Middle East Office who welcomed all the participants to Abu Dhabi. He expressed ICAO's sincere gratitude and appreciation to UAE for hosting this important meeting in Abu Dhabi and for the generous hospitality extended to all the participants. He thanked especially H.E. Mr. Saif Bin Mohamed Al Suwaidi, Director General, GCAA for his continuous support to the ICAO MID Regional Office.

2.2 In his opening Remarks, Mr. Khonji recalled that the RASG-MID has been established following the ICAO Council directive and the Middle East Directors General of Civil Aviation meeting agreement (DGCA-MID/1, United Arab Emirates, 22-24 March 2011). He highlighted the need to support the ICAO Strategic Objectives and Safety initiatives, in accordance with the Global Aviation Safety Plan (GASP) and associated Global Aviation Safety Roadmap (GASR). He recalled that the RASG/1 Meeting, which was hosted by the Ministry of Civil Aviation of Egypt in Cairo, Egypt, from 18 to 19 September 2011, was a kick-off meeting in order to prepare the ground for the future activity of the Group. In particular, he highlighted that the RASG-MID/1 Meeting reviewed and approved the Terms of Reference of the Group and approved the RASG-MID Procedural Handbook, which includes inter-alia, the Working Arrangements, and Organizational Structure for the RASG-MID.

2.3 Mr. Khonji recalled that the RASG-MID Steering Committee (RSC) and Annual Safety Report Team (ASRT) were established by the RASG-MID/1 Meeting. He underlined that the main objective of the ASRT is to gather safety information from different available sources to determine the main aviation safety risks in the MID Region; and develop the MID Region Safety Report on an Annual basis. He also recalled that a MID Regional Aviation Safety Team (MID-RAST) has been established by the RSC to support the development, implementation and monitoring of the Safety Enhancement Initiatives (SEIs) related to the identified Focus Areas (FAs). He highlighted that the meeting will review the Draft Annual Safety Report, initiate discussions on the main SEIs and Detailed Implementation Plans (DIPs) for the Region, review and update the RASG-MID work programme for 2013, and address other issues such as funding of the RASG-MID activities, SSP/SMS implementation and establishment of RSOOs and RAIOS.

2.4 Finally, Mr. Khonji thanked all Participants for their presence wishing them successful deliberations, productive meeting and a pleasant stay in Abu Dhabi.

2.5 Mr. Ismaeil Mohammed Al Balooshi, Executive Director Aviation Safety Affairs, (GCAA), UAE, on behalf of Mr. Al Suwaidi, extended a warm welcome to all participants to the RASG-MID/2 Meeting and wished them a pleasant stay in UAE. He thanked ICAO for its efforts to

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improve the aviation safety worldwide and for organizing this important meeting in UAE. He emphasized that the key to success is the cooperation and sharing of experience in order to avoid duplication of efforts and contribute to the establishment of a regional performance-based framework for the management of safety.

3. ATTENDANCE

3.1 The meeting was attended by a total of forty (40) participants from nine (9) States (Bahrain, Iran, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan and United Arab Emirates) and nine (9) Organizations/Industries (AACO, ACI, Airbus, Boeing, CANSO, COSCAP-GS, IATA, IFALPA and WFP). The list of participants is at **Attachment A** to the Report.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was chaired by Mr. Ismaeil Mohammed Al Balooshi, Executive Director Aviation Safety Affairs, GCAA, UAE. Mr. Mohamed Khonji, ICAO Middle East Regional Director, acted as the Secretary of the Meeting, assisted by Mr. Jehad Faqir, Deputy Regional Director (DEPRD), Mr. Mohamed Smaoui, Regional Officer, Air Navigation Services/Aeronautical Information Management (ANS/AIM) and Mr. Mashhor Alblowi, Regional Officer, Flight Safety, from the ICAO MID Regional Office and Mr. Guillermo Iovino, Technical Officer, Implementation Support and Development-Safety, Air Navigation Bureau, from ICAO Headquarters, Montreal.

5. LANGUAGE

5.1 The discussions were conducted in the English language and documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

- | | |
|----------------|--|
| Agenda Item 1: | Adoption of the Provisional Agenda and Election of Chairperson |
| Agenda Item 2: | Global developments related to aviation safety |
| Agenda Item 3: | Regional Performance Framework for Safety |
| Agenda Item 4: | RASG-MID Working Arrangements |
| Agenda Item 5: | Coordination between RASG-MID and MIDANPIRG |
| Agenda Item 6: | Future Work Programme |
| Agenda Item 7: | Any other Business |

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7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 The RASG-MID records its actions in the form of Conclusions and Decisions with the following significance:

- a) **Conclusions** deal with matters that, according to the Group’s terms of reference, merit directly the attention of States and its stakeholders/partners, or on which further action will be initiated by the Secretary in accordance with established procedures; and
- b) **Decisions** relate solely to matters dealing with the internal working arrangements of the Group and its subsidiary bodies.

8. LIST OF CONCLUSIONS AND DECISIONS

CONCLUSION 2/1: PROVISION OF SAFETY DATA

CONCLUSION 2/2: FIRST MID REGION ANNUAL SAFETY REPORT

DECISION 2/3: ESTABLISHMENT OF THE MID REGIONAL AVIATION SAFETY TEAM (MID-RAST)

CONCLUSION 2/4: ESTABLISHMENT OF RUNWAY SAFETY TEAMS

DECISION 2/5: ESTABLISHMENT OF THE MID SAFETY SUPPORT TEAM (MID-SST)

CONCLUSION 2/6: REGIONAL COOPERATION FOR THE PROVISION OF ACCIDENT AND INCIDENT INVESTIGATION SERVICES

CONCLUSION 2/7: ACCIDENT AND INCIDENT INVESTIGATION ACTIVITIES AND CAPABILITIES IN THE MID REGION

CONCLUSION 2/8: FUNDING OF THE RASG-MID WORK PROGRAMME

DECISION 2/9: RSC TERMS OF REFERENCE

DECISION 2/10: MID-ASRT TERMS OF REFERENCE

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA AND ELECTION OF CHAIRPERSON

1.1 The meeting reviewed and adopted the Provisional Agenda as at paragraph 6 of the History of the Meeting.

1.2 The meeting recalled that **Capt. Sameh Ahmed El Hefny**, from Egypt was elected as the Chairperson of RASG-MID during the RASG-MID/1 Meeting in September 2011. Since then, Capt. El Hefny has changed posts and accordingly has indicated that he is no longer able to assume the function of RASG-MID Chairperson. The meeting thanked Capt. El Hefny for his good work and leadership of the RASG-MID during the past year.

1.3 Based on a proposal by Saudi Arabia, supported by Oman and Iran, the meeting unanimously elected **Mr. Ismaeil Mohammed Al Balooshi**, Executive Director Aviation Safety Affairs, General Civil Aviation Authority (GCAA), UAE as the new Chairperson of RASG-MID.

1.4 The meeting noted that Mr. Al Balooshi had been acting as the Co-Chairperson of the RASG-MID Steering Committee (RSC) with Mr. Chamsou D. Andjorin, Director Aviation Safety Middle East and Africa, Boeing. Accordingly, the meeting proceeded to the election of a new RSC Co-Chairperson in replacement to Mr. Al Balooshi. Based on a proposal by Oman supported by UAE, the meeting unanimously elected **Mr. Omar R. Kaddouha**, Director of Flight Safety, DGCA Lebanon, as the new Co-Chair of the RSC.

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REPORT ON AGENDA ITEM 2: GLOBAL DEVELOPMENTS RELATED TO AVIATION SAFETY***Global Aviation Safety Plan (GASP)***

2.1 The meeting noted that the Global Air Navigation Plan (GANP) and Global Aviation Safety Plan (GASP), which represent strategic planning documents, include a series of global initiatives for use by States and the International Aviation Community to continuously improve efficiency and safety.

2.2 The meeting was informed that ICAO is working on a revised edition of GASP. It was noted that the proposed revised edition of the GASP provides a proactive strategy to improve aviation safety through the incorporation of the latest developments related to safety management practices, providing a multi-disciplinary and risk-based approach to achieve continuous improvement in global safety performance.

2.3 The revision will promote the use of specific milestones for near, mid and long-term objectives in order to achieve priorities that range from ensuring fundamental safety oversight capabilities, the implementation of State Safety Programs, and supporting the collaborative decision-making environments.

2.4 It was also noted that the revised GASP will better assist in the development of more collective solutions to common safety deficiencies through coordinated activities.

2.5 The meeting was further informed that the revised GASP is expected to be approved and endorsed by the next ICAO General Assembly, in 2013.

RASG experiences in the different ICAO Regions

2.6 The meeting was apprised of the RASG activities in the different ICAO regions.

2.7 The meeting was updated on the methodologies used for the implementation of the GASP process for identifying “Operational” risk areas and how a similar process can be employed to support SARP implementation. It was recalled that the safety performance framework consists of identifying Risk Areas (RAs), proposing Safety Enhancement Initiatives (SEIs), developing Detailed Implementation Plans (DIPs), monitoring the results and providing feedback, thus initiating the cycle again.

2.8 Excerpts from the experience of RASG-PA, RASG-AP, RASG EUR and RASG-AFI were presented for consideration by the RASG-MID/2. Furthermore, it was stressed out that the selected DIPs should be finalized and that the next steps should be to focus on achieving outputs for the DIPs developed for each SEI.

2.9 The meeting recalled that at the RASG-MID/1 Meeting there was an agreement on initiatives in support of implementation of SARPs by States that could be incorporated into the work programme of RASG-MID without duplication of efforts with the existing regional safety bodies. In this respect, it was agreed to separate the “operational” initiatives from the “support” initiatives, the latter being represented by Safety Support Teams (SST).

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2.10 The meeting agreed that the customized analysis of ECCAIRS and USOAP data on the MID region, presented during the RASG-MID/2, constitutes very valuable information that should be included in the next MID Annual Safety Reports as a basis for subsequent actions.

Initiatives to reduce Loss Of Control In-Flight (LOC-I) Accidents

2.11 The meeting recalled that Loss Of Control In-flight (LOC-I) category is responsible for the highest percentage of fatalities—approximately 30% of the total even though less than 5% of all accidents were classified as being related to loss of control.

2.12 The meeting was apprised of ICAO initiatives to reduce safety risks associated with LOC-I. Examples of actions that have been taken by established safety teams in other ICAO Regions to reduce safety risks associated with LOC-I have been also presented.

2.13 The meeting was provided with updated data for the MID Region in regards to USOAP results compared with the world average, based on the results from 180 States audited.

Initiatives to reduce the risk of Runway related Accidents

2.14 The meeting noted that Runway Safety Accidents represent 59% of all accidents accounting for 29% of all fatal accidents and 19% of all related fatalities reported between 2006 and 2010.

2.15 The meeting noted that the ICAO Runway Safety Programme has evolved to include prevention and mitigation measures related to Runway Incursion (RI), Runway Excursion (RE) and other occurrences related to runway safety.

2.16 The meeting was apprised of the outcome of the Global Runway Safety Symposium (GRSS) convened at ICAO HQ in Montreal, 24-26 May 2011 and the Regional Runway Safety Symposium (RRSS) in the MID Region, which took place in Amman, Jordan in May 2012.

2.17 The meeting took into consideration the USOAP results related to Runway Safety in the MID Region, compared to the lack of effective implementation (LEI) values for the world.

Initiatives to reduce the risk of CFIT Accidents

2.18 The meeting was reminded that accident data indicates that Controlled Flight Into Terrain (CFIT) accounts for just over 20% of all fatal accidents. It was highlighted that while ICAO and other organizations have undertaken a number of initiatives over the past 15 years with considerable success, additional efforts should be considered, in order to reduce the number of total accidents through CFIT.

2.19 The meeting was apprised of ICAO and the Flight Safety Foundation (FSF) initiatives to reduce the risk of CFIT accidents. Examples of actions that have been taken by established safety teams in other ICAO Regions to reduce safety risks associated with CFIT have been also presented.

2.20 The meeting agreed to take into consideration other regions' experience when addressing/developing the MID Region SEIs related to CFIT.

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Update on the work of the Safety Information Exchange Study Group

2.21 The meeting noted the work being undertaken by the Safety Information Exchange Study Group (SIXSG).

2.22 The meeting was apprised on the work programme of the SIXSG, which includes the development of safety performance indicators, of safety performance measurement methodologies, the identification of system's capabilities and the coordination with the work being done by the ICAO Safety Protection Task Force.

Safety Information Protection Task Force

2.23 The meeting noted the work being undertaken by the Safety Information Protection Task Force (SIP TF).

2.24 The meeting was apprised on the balance that is required between the need for the protection of safety information versus the need for the proper administration of justice, and to the work being undertaken by the SIP TF to provide recommendations for new or enhanced ICAO provisions and guidance material to the protection of safety information.

2.25 The meeting also noted that the next meeting of the SIP TF is planned to take place at ICAO HQ in January 2013.

Update on USOAP CMA

2.26 The meeting was updated on the activities of the USOAP undertaken during the transition phase, from its commencement in 2011 leading to the full scale implementation of the USOAP CMA (Continuous Monitoring Approach) scheduled for January 2013.

2.27 The meeting noted that the primary activities undertaken during the transition phase of CMA address items such as CMA on line framework, guidance materials including newly titled USOAP Continuous Monitoring Manual (Doc 9735), On-site CMA activities including ICAO Coordinated Validation Missions (ICVMs) and Comprehensive System Approach (CSA) Audits as well as training activities.

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REPORT ON AGENDA ITEM 3: REGIONAL PERFORMANCE FRAMEWORK FOR SAFETY

RASG-MID Steering Committee (RSC) Activities

3.1 The meeting was apprised of a summary of the activities conducted by the RASG-MID RSC since its establishment by the RASG-MID/1 Meeting in September 2011.

3.2 It was highlighted that due to the geographical spread, the RSC has worked essentially through emails and Teleconferences. However, the RSC held its First Meeting in Cairo, Egypt, 18-20 June, 2012, in addition to the limited meeting held in Amman on 7 February 2012.

3.3 To achieve its objectives in accordance with the Terms of Reference approved by RASG-MID, the RSC first adopted the conclusions of the work conducted by the Top Level Safety Team (TLST) on the major safety risks in the region/Focus Areas, and decided to focus on initiatives to address Runway Excursions (RE), Loss Of Control In-flight (LOC-I), and Controlled Flight Into Terrain (CFIT), until the analysis being conducted by the Annual Safety Report Team (ASRT) is completed.

3.4 The meeting noted that the RSC was apprised of the outcome of the Annual Safety Report Team (ASRT) meeting held in Amman on 6 February 2012. In particular it was highlighted that Ms. Ruby Sayyed from IATA had been designated as the Rapporteur of the ASRT. The RSC also designated Coordinators for the 3 Focus Areas (FAs).

3.5 The meeting noted also that the RSC/1 Meeting, through Draft Decision 1/3, agreed to the establishment of the MID Regional Aviation Safety Team (MID-RAST).

3.6 To facilitate and expedite the process, the RSC/1 Meeting agreed that a Coordinator should be temporarily assigned for each of the Focus Areas for the preparation of an initial set of SEIs (5 to 10) and at least two DIPs related to his/her Focus Area in a prioritized manner, for review by the RASG-MID/2 Meeting and eventual inclusion in the RASG-MID 2013 Work Programme.

3.7 The meeting noted that the RSC has attempted to coordinate safety activities for 2012; however, there has been some duplication due to events planned even before the establishment of the RASG-MID. Accordingly, a Schedule of Safety Events for 2012 has been consolidated by the RSC-Limited Meeting.

3.8 In connection with the above, the meeting noted that the RSC has established contact with the TLST and the Gulf Flight Safety Committee (GFSC) to coordinate activities in order to avoid duplication of efforts and to make use of available resources. In this respect, it was re-iterated that, in accordance with the RASG-MID Terms of Reference and Organizational Structure, the RASG-MID is responsible for the development of safety strategies, plans, objectives, initiatives and priorities; and the work of the Contributors (TLST, COSCAP-GS, industry, etc) should be more oriented to provide necessary support to States for the implementation of the RASG-MID strategies, plans, objectives, initiatives and priorities.

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Review of the MID Region Annual Safety Report

3.9 The meeting recalled that the ASRT was established by the RASG-MID/1 Meeting, through Decision 1/3 with the main objective of gathering safety information from different available sources to determine the main aviation safety risks in the MID Region; and developing the MID Region Safety Report on an Annual basis.

3.10 It was noted that the Annual Safety Report comprises of three main Sections:

- a) **Reactive** Information;
- b) **Proactive** Information; and
- c) **Predictive** Information.

3.11 The meeting noted that future RASG-MID Annual Safety Reports will be published annually, providing on-going updates to the air transport community on key safety indicators in the MID Region.

3.12 The meeting noted that the data analysis carried out by the ASRT identified three main risk areas (Focus Areas) which will be addressed under the RASG-MID framework:

- a) Runway and Ground Safety;
- b) In-flight Damage; and
- c) Loss of Control In-flight.

3.13 The meeting agreed that although the analysis carried out by the MID-ASRT showed that CFIT is not part of the three Focus Areas (lower risk area), some CFIT SEIs/DIPs should be included in the RASG-MID Work Programme for 2013.

3.14 It was further noted that the analysis of accidents, incidents, and occurrences, has resulted in the identification of several key contributing factors, including:

- a) Standard Operating Procedure (SOP) deviation or non-compliance
- b) Staff awareness and training
- c) Inefficient Air Traffic Control (ATC) infrastructure and service
- d) Environmental conditions, such as weather and wildlife
- e) Safety culture

3.15 The meeting noted that several SEIs are being proposed by the MID-RAST to address these contributing factors.

3.16 The meeting recognized that (non-punitive) voluntary reporting and safety culture need to be addressed under the RSC. States and airlines have equally been invited to contribute to the MID-ASRT by providing incidents/occurrences data.

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3.17 In connection with the above, the meeting noted that the ICAO MID Regional Office, through State Letter Ref.: AN 11/21.1 -12/100 dated 19 April 2012, invited States to provide their data related to incidents and safety occurrences before 15 May 2012. A similar action has been undertaken by IATA with its member airlines. The following guidelines were recommended for the provision of data:

1. What are the top 5 reported incidents/occurrences that you come across? Can you provide us with details; flight phase, root causes, and actions taken?
2. How many of these reports are closed and how many remain pending without a solution? What is the average response time for investigating any incident or occurrence?
3. How do you rate your voluntary reporting system?
4. What are the main three challenges you face with regards to ensuring that a safety culture is maintained within your organization and within your home base operators?

3.18 It was underlined that all data and information provided by States and airlines would be considered confidential, and only de-identified information and analysis would be reflected in the Annual Safety Report.

3.19 The meeting noted with concern that, only three (3) States (Jordan, Oman and UAE) provided replies to the above-mentioned State Letter. Accordingly, the meeting urged States and partners that have not yet done so, to provide the requested safety data on incidents and occurrences, before **31 December 2012**. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 2/1: PROVISION OF SAFETY DATA

That, States:

- a) *that have not yet done so, be urged to provide their data related to incidents and safety occurrences to the ICAO MID Regional Office before **31 December 2012**; and*
- b) *be invited to encourage their Air Operators to implement Flight Operations Quality Assurance Programme (FOQA) or Flight Data Monitoring Programme and provide Trends derived from such programmes to the ASRT for the identification of operational risks and development of proactive and predictive mitigation measures.*

3.20 Based on all of the foregoing, the meeting reviewed and endorsed the First MID Region Annual Safety Report and agreed that the Report should be posted on a restricted webpage of the ICAO MID Regional Office website. The meeting commended the work of the MID-ASRT and especially its Rapporteur and agreed to the following Conclusion:

CONCLUSION 2/2: FIRST MID REGION ANNUAL SAFETY REPORT

That, the First MID Region Annual Safety Report be made available to the civil aviation community through a restricted webpage on the ICAO MID Regional Office website.

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Regional Activities/Initiatives addressing the identified Focus Areas

3.21 The meeting re-iterated that the working methods of the RASG-MID need to be dynamic and follow a performance-based cycle such as the following:

- a) identify key stakeholders;
- b) gather and analyze data from all available sources;
- c) identify risk areas;
- d) prioritize;
- e) elaborate SEIs;
- f) create DIPs with measurable objectives; and
- g) monitor/adjust the implementation plans by gathering and analyzing data.

3.22 The meeting noted that ICAO has developed a software tool to monitor the development and implementation of SEIs, with a view to support the RASGs in the process of implementation of a performance-based safety framework. It was highlighted that tracking the progress of all ICAO Regions in implementing safety enhancements will also be important to determine the effectiveness of the GASP on both regional and global basis. Information concerning implementation plans is centrally stored on an ICAO network server (the RAST group on the ICAO secure site <http://portal.icao.int>). Thus, regions that choose to use the tool would not only be able to track the development and implementation of their safety initiatives, but also safety initiatives in other regions.

3.23 Details of the tool are outlined in **Appendix 3A** to the Report on Agenda Item 3.

3.24 Based on the RSC/1 outcome, the meeting agreed to the establishment of the MID-RAST, which would be responsible mainly for the development and implementation of SEIs and Detailed Implementation Plans DIPs for the identified Focus Areas. The meeting agreed also that the MID-RAST should decide on the use of the most appropriate tool for the monitoring of the safety performance framework. Accordingly, the meeting agreed to the following Decision:

***DECISION 2/3: ESTABLISHMENT OF THE MID REGIONAL AVIATION
SAFETY TEAM (MID-RAST)***

*That, the MID Regional Aviation Safety Team (MID-RAST) be established with
Terms of Reference as at **Appendix 3B** to the Report on Agenda Item 3.*

3.25 The meeting was apprised of the activities of the MID-RAST during the interim period between the RSC/1 Meeting in June 2012 and the RASG-MID/2 Meeting, in particular the development of SEIs and DIPs.

3.26 With regard to the working methods of the MID-RAST, the meeting agreed that participants should be encouraged to work as informally as possible to have maximum flexibility. Furthermore the meeting noted that **Mr. Haithem J. Gauwas** from Saudi Arabia was elected as the Rapporteur of the MID-RAST; **Mr. Mohamed Al Dossari** from UAE designated as the Coordinator of the Runway and Ground Safety Focus Area; **Ms. Ruby Sayyed** from IATA designated as the Coordinator of the In-flight Damage Focus Area; **Mr. Chamsou Andjorin** from Boeing designated as the Coordinator of the Loss Of Control In-Flight (LOC-I) Focus Area; and **Capt. Richard Hill** from IATA (Etihad Airways) designated as the Coordinator of the Controlled Flight Into Terrain (CFIT) Focus Area.

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3.27 The meeting agreed that future MID-RAST activities shall focus on the prioritization of SEIs and possible merging of DIPs for efficient implementation.

3.28 The meeting noted that few activities addressing the three (3) identified Focus Areas (Runway and Ground Safety, In-flight Damage and Loss Of Control In-Flight (LOC-I)) have been achieved or implemented in the MID Region. In this regard, the meeting was apprised of the outcome of the Middle East Regional Runway Safety Seminar (MID-RRSS) held in Amman, Jordan, 14-16 May 2012. The MID-RRSS outcome included the following:

- States should develop action plans to establish Runway Safety Teams (RSTs). RSTs should be hosted by airports and include, as a minimum, representation from aerodromes, air operators and air traffic controllers;
- ICAO to consider the creation of a Regional RST Go-Team with participation of ICAO Runway Safety partners to assist States with the creation of RSTs;
- Safety Partners to assist/mentor the RSTs by: performing a gap analysis and assessing the areas identified, providing recommendations to support the implementation of RSTs, and supporting RST as appropriate; and
- Organization of another Runway Safety Seminar/Workshop in 2013, inter-alia, to provide additional guidance on the establishment and running of RSTs.

3.29 Based on foregoing , the meeting supported the establishment of RSTs and agreed, accordingly, to the following Conclusion:

CONCLUSION 2/4: ESTABLISHMENT OF RUNWAY SAFETY TEAMS

That, States be urged to establish Runway Safety Teams (RST) hosted by airports and including, as a minimum, representation from aerodromes, air operators and air traffic controllers, before 1 March 2013.

3.30 The meeting noted with appreciation that UAE has established local and a National RSTs.

3.31 The meeting agreed that the remaining recommendations emanating from the MID RRSS would be taken into consideration when developing and prioritizing the Safety Enhancement Initiatives for the MID Region.

3.32 The meeting reviewed a list of mitigation measures related to the Runway and Ground Safety Focus Area as shown in **Appendix 3C** to the Report on Agenda Item 3, and agreed that these measures will be also considered by the MID-RAST when developing/updating the Safety Enhancement Initiatives for the MID Region.

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SEIs and DIPs related to Runway and Ground Safety (RGS)

3.33 The meeting noted that the Pan America (PA) and Asia and Pacific (AP) RASGs SEIs and DIPs were benchmarked, to develop the MID SEIs and DIPs related to the RGS Focus Area. The MID-RAST RGS top priority SEIs and supporting DIPs regarding avoidance of unstable approaches were aligned with RASG-PA.

3.34 The meeting noted that the most frequent contributing factors in Runway Excursion (RE) accidents are “embedded piloting skills” followed by the human factor of “aircraft handling”. The Top Common incidents/occurrences were identified as "Unstable Approach" with main Root Causes “SOP Compliance” and “Training”. In this respect, it was highlighted that "Unstable Approach" appeared as a factor in 29% of the RE accidents.

3.35 The meeting reviewed the SEIs related to RGS at **Appendix 3D** to the Report on Agenda Item 3.

3.36 The meeting reviewed also the two DIPs related to RGS at **Appendix 3E** to the Report on Agenda Item 3, which focus on pilot and ATC training activities. The meeting noted that the MID-RAST has proposed the creation of a MID-RAST Cross-Focus Area Task Force to ensure a standard approach toward pilot, ATC and aerodrome training and adherence to SOPs; and avoid duplication of efforts. However, it was decided that it’s not necessary for the time being to create an additional subsidiary body to meet these objectives. Alternatively, the current working arrangements of MID-RAST, in addition to the Local Runway Safety Teams which will be established at the national level should be used in an efficient manner to cover the above-mentioned tasks.

SEIs and DIPs related to In Flight Damage (IFD)

3.37 The meeting noted that globally there were 9 In-flight Damage accidents in 2009, 9 in 2010, and 5 in 2011.

3.38 The contributing factors to In-Flight Damage based on the analysis of accidents between 2008 and 2011 are summarized in the following table:

Category	Classification
Airline Threats	Aircraft Malfunction: Extensive/Uncontained Engine Failure
	Aircraft Malfunction: Gear / Tire
	Maintenance Events
Environmental Threats	Wildlife/Birds/Foreign Object
	Meteorology: Thunderstorms
Procedural Errors	SOP Adherence / SOP Cross-verification
Aircraft Handling UAS	Unnecessary Weather Penetration
Org Latent Conditions	Design
	Regulatory Oversight
	Safety Management

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3.39 The meeting agreed that as an initial step, the MID-RAST should focus on SEIs under the following three areas:

- SOPs/SOP Adherence; this is a common area under Runway and Ground Safety (RGS) and Loss of Control (LOC-I);
- Wildlife/FOD; under which the MID-RAST will promote practices and tools for mitigation of bird strike and FOD hazards at international airports; and
- Handling Drastic Weather Conditions; under which the MID-RAST will increase awareness on means and tools of handling situations where a natural disaster occurs.

3.40 The meeting reviewed the SEIs and DIPs related to IFD as at **Appendices 3F** and **3G** to the Report on Agenda Item 3, respectively.

3.41 The meeting agreed that the followings are of utmost priority:

a) Wildlife/FOD DIPs:

- conduct a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife;
- establish a regional guidance document that addresses key issues such as vegetation (like tall grass policy); and
- organize a workshop for pilots and Air Traffic Control Officers (ATCOs) to increase awareness on wildlife avoidance during flight.

b) Handling Drastic Weather Conditions:

- collect contingency procedures information and make them available for airline operators, regulators, and ANSPs in one place accessible by everyone; and
- develop a training document for pilots and dispatchers which includes information on past volcanic ash events, experience of regional airlines, and experience of ANSPs.

SEIs and DIPs related to Loss of Control In-flight (LOC-I)

3.42 The meeting noted that Loss of Control In-flight (LOC-I) continues to be the accident category with the highest rate of fatalities and hull losses. Based on an analysis carried out by Boeing for the years 1987 - 2010, it was highlighted that fatality risk from LOC-I constitutes 30% of total fatalities.

3.43 The meeting recalled that LOC-I usually occurs because the aircraft enters a flight regime which is outside its normal envelope, but not always at a high rate, thereby introducing an element of surprise for the flight crew involved. It may involve loss of situational awareness, aircraft systems anomalies, environmental factors, and flight crew competency.

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3.44 The meeting noted that the highest contributing factors to LOC-I are:

- Meteorology such as poor visibility and thunderstorms;
- Aircraft malfunction;
- Manual handling/flight controls;
- Safety management; and
- Flight operations training systems.

3.45 The meeting noted that as part of the mitigation measures to reduce the LOC-I accidents and incidents:

- pilots should be better trained to avoid and recover from excursions from normal flight and loss of control;
- the overall performance of flight crew should be improved to recognize and prevent loss of control accidents, through effective use of automation;
- aviation safety will be advanced by improving flight crew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures; and
- aviation safety will be improved through the use of risk assessment/management methods.

3.46 The meeting reviewed the SEIs and DIPs related to LOC-I as at **Appendices 3H** and **3I** to the Report on Agenda Item 3, respectively.

SEIs and DIPs related to Controlled Flight Into Terrain (CFIT)

3.47 The meeting noted that Controlled Flight Into Terrain (CFIT) also constitutes a high fatality and hull loss accident category. Based on an analysis carried out by Boeing for the years 1987 and 2010, fatality risk from CFIT constitutes 20% of total accidents, and comes second in place after LOC-I in terms of fatality risk.

3.48 It was highlighted that the top contributing factors to CFIT are:

- SOP adherence / SOP cross verification;
- Nav-aids malfunction or non-availability (Airport infrastructure);
- Pilot and controller training and awareness;
- Poor visibility; and
- Safety oversight.

3.49 The meeting reviewed the SEIs and DIPs related to CFIT as at **Appendices 3J** and **3K** to the Report on Agenda Item 3, respectively.

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3.50 Based on all of the foregoing, the meeting thanked the MID-RAST Rapporteur and the Focus Area Coordinators for their valuable efforts in developing the set of SEIs and DIPs; however, the meeting agreed that the SEIs and DIPs should be further reviewed, fine-tuned and prioritized by the MID-RAST. The revised set of SEIs and DIPs should be presented to the RSC/2 meeting for review before the formal endorsement by the RASG-MID/3 Meeting. Nevertheless, the meeting agreed that the implementation of some well identified DIPs should not wait until the RASG-MID/3 meeting and could be included in the RASG-MID work programme for 2013.

3.51 The meeting agreed that a MID-RAST face-to-face meeting should be organized early 2013 in order to advance the work related to the different Focus Areas in a harmonized and prioritized manner.

3.52 The meeting agreed that the publication of Advisory Circulars (ACs)/Advisory Bulletin (AB) should be used by RASG-MID as one of the efficient tools to improve safety in the Region. Accordingly, the meeting agreed on the mechanism for the publication of ACs/ABs as follows:

- need to publish an AC/AB on a specific subject is identified in the process of development of SEIs/DIPs;
- a draft AC/AB is developed by the concerned FA Coordinator and reviewed by the MID-RAST Rapporteur and Members;
- the agreed draft AC/AB is reviewed, updated and approved by the RSC Co-Chairs; and
- the final version of the AC/AB is reviewed and approved by the RASG-MID Chairperson who will send it to the RASG-MID Secretary (ICAO Regional Director) for publication.

SSP/SMS Implementation in the MID Region

3.53 The meeting recalled that ICAO safety management provisions require States to establish a State Safety Programme (SSP) in order to achieve an Acceptable Level of Safety (ALoS) in civil aviation. In addition, States shall require, as part of their SSP, the following service providers to implement a Safety Management System (SMS):

- a) approved training organizations that are exposed to operational safety risks during their air training operations (i.e.: flight training schools);
- b) aircraft operators;
- c) approved aircraft maintenance organizations and organizations responsible for type design and/or manufacture of aircraft (applicability date Nov. 2013);
- d) air traffic service providers; and
- e) certified aerodromes.

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3.54 The meeting recalled that the MIDANPIRG/13 Meeting held in Abu Dhabi, UAE from 22 to 26 April 2012 recognized the difficulties encountered by States in the implementation of SSP requirements and re-iterated that a step-by-step approach should be followed for managing the transition to an SSP environment. Taking into consideration the scope of SSP implementation, which goes far beyond the safety of air traffic services and aerodrome operations, the meeting agreed with MIDANPIRG/13 that SSP implementation should be monitored by RASG-MID. MIDANPIRG will continue to monitor the SMS implementation by the air traffic services and aerodrome operators.

3.55 The meeting agreed that the RASG-MID 2013 Work Programme should include, in addition to the activities targeted toward the identified Focus Areas, supporting activities related to SSP/SMS as well as Accident and Incident Investigation (AIG).

3.56 In connection with the above, the meeting agreed that a specific Team should be established to handle the identified safety issues not directly linked to the agreed Focus Areas, such as SMS/SSP, USOAP-CMA, AIG, English Language Proficiency (ELP), etc. Accordingly, the meeting agreed to the establishment of the MID Safety Support Team (MID-SST) with Terms of Reference (TOR) as at **Appendix 3L** to the Report on Agenda Item 3. **Mr. Ismaeil Abdel Wahed**, Executive Director of Air Accident Investigation, GCAA, UAE was designated as the Rapporteur of the MID-SST.

3.57 Based on the above the meeting agreed to the following Decision:

DECISION 2/5: ESTABLISHMENT OF THE MID SAFETY SUPPORT TEAM (MID-SST)

*That, the MID Safety Support Team (MID-SST) be established with Terms of Reference as at **Appendix 3L** to the Report on Agenda Item 3.*

3.58 The meeting noted that the Air Navigation Commission, at the fourth and fifth meetings of its 190th Session on 8 May 2012, considered proposals developed by the Safety Management Panel (SMP) to transfer the provisions on safety management responsibilities and processes from existing Annexes for consolidation in new Annex 19 — *Safety Management*, and related consequential amendment proposals to existing Annexes. It was highlighted that the proposed Annex 19 and related consequential amendments to Annexes 1, 6, 8, 11, 13 and 14, Volume I were attached to State Letter Ref.: AN 8/3-12/42 dated 29 June 2012.

3.59 The meeting further noted that an unedited advance version of the third edition of the Safety Management Manual (Doc. 9859) is now available on the ICAONET website.

Establishment of RSOOs and RAIOS

3.60 The meeting was apprised of the outcome of the DGCA MID/1 Meeting held in Abu-Dhabi, UAE, 22 – 24 March 2011, related to Regional Safety Oversight Programmes. In particular, the following DGCA-MID/1 Conclusions:

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DGCA-MID/1 CONCLUSION 1/9 - ESTABLISHMENT OF RSOOs AND RAIOS IN THE MID REGION

That, in order to strengthen their safety oversight capabilities and solve common safety-related deficiencies, in an effective, cooperative and sustainable manner, MID States:

- a) cooperate towards the establishment of Regional Safety Oversight Organizations (RSOOs) and Regional Accident and Incident Investigation Organizations (RAIOs); and*
- b) further address the subject within the framework of RASG-MID.*

DGCA-MID/1 CONCLUSION 1/10 - WORKSHOP ON REGIONAL SAFETY OVERSIGHT PROGRAMMES

That, as part of the Regional preparations for the establishment of Regional Safety Oversight Organizations (RSOOs) and Regional Accident and Incident Investigation Organizations (RAIOs), the ICAO MID Regional Office organize a Workshop on Regional Safety Oversight Programmes, in order to address the technical, institutional and financial aspects related to these regional/sub-regional projects.

3.61 The meeting noted that, as a follow-up action to the above DGCA-MID/1 Conclusions, an ACAC/ICAO Seminar/Workshop on Regional Safety Oversight Programmes is scheduled to be held in Rabat, Morocco, 10-12 December 2012. Accordingly, the meeting encouraged States and all partners to participate actively in the Rabat Seminar/Workshop, which would help to develop a MID Region Strategy/Action Plan related to the establishment of RSOO(s) and RAIO(s) in the MID Region.

3.62 The meeting was apprised of the UAE proposal related to better coordination of the Accident and Incident Investigation activities in the MID Region, which may lead to the establishment of a MID Region RAIO. The meeting noted that based on a proposal by UAE, the 40th Executive Council of ACAC held in Rabat, Morocco, 14 - 15 May 2012, agreed to the creation of a 'Task Force' to prepare a study on establishing a 'joint investigation Unit' manpowered by ACAC's members' qualified investigators.

3.63 The meeting noted the stepwise approach proposed by UAE at **Appendix 3M** to the Report on Agenda Item 3 and invited States and International Organizations to provide their comments on the proposed approach to the ICAO MID Regional Office, before **31 January 2013**. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 2/6: REGIONAL COOPERATION FOR THE PROVISION OF ACCIDENT AND INCIDENT INVESTIGATION SERVICES

*That, States and International Organizations provide their comments on the proposed approach for Regional Cooperation for the provision of Accident and Incident Investigation Services at **Appendix 3M** to the Report on Agenda Item 3, to the ICAO MID Regional Office, before 31 January 2013.*

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3.68 The meeting was apprised of the outcome of the Workshop on Investigation Cooperation organized by UAE, Abu Dhabi, 11-12 November 2012, to explore the possibilities for regional cooperation on AIG activities.

3.69 The meeting noted that the Workshop was attended by Experts from eight (8) States (Bahrain, Egypt, Jordan, Kuwait, Lebanon, Oman, Saudi Arabia and UAE) and six (6) Organizations (Airbus, Boeing, COSCAP-GS, IATA, ICAO, Air Accident Investigation-Singapore). It was highlighted that there was a general agreement to move towards Regional Cooperation for AIG activities through the establishment of RAIO(s) in the MID Region. Accordingly, the meeting agreed that this initiative should be included in the RASG-MID work programme.

3.70 The meeting agreed that an SEI related to Regional Cooperation for Accident and Incident Investigation should be added to the list of RASG-MID SEIs. The associated DIPs should be developed in line with the endorsed stepwise approach at **Appendix 3M** to the Report on Agenda Item 3.

3.71 The meeting was of the opinion that the final decision to move ahead with a study related to the establishment of RAIO(s) in the MID Region should be taken during the DGCA-MID/2 meeting, which might agree on the legal framework and funding necessary for the developments of such study/project.

Funding of the RASG-MID Activities

3.72 The meeting was briefed on the Safety Fund (SAFE) established by the ICAO Council in May 2010; in particular, the process followed for its establishment and the classification of contributions. The meeting was informed also about the project prioritizations process and follow-up actions for States willing to submit projects for funding and/or make contributions to the Fund.

3.73 It was highlighted that SAFE serves as a mechanism for the collection and use of voluntary contributions from States and other donors to support ICAO safety programmes in a responsible, consistent, transparent, efficient and timely manner.

3.74 The meeting noted that contributions to SAFE fall under one of the following two classifications:

- a) un-earmarked contributions for safety-related projects that will be identified by ICAO; and
- b) earmarked contributions that are intended for a specific new or existing safety-related project and/or activities.

3.75 The meeting noted that in order to facilitate the project prioritization, a Project Review Committee (PRC) has been established. The PRC has the mandate to review project proposals and make recommendations for allocations under the Safety Fund. Members of the PRC are responsible for providing policy and normative advice on the design of projects; reviewing the submitted projects; as well as making recommendations to the Secretary General on the allocation of funds to projects based on the validity of each proposal and its adherence to funding criteria.

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3.82 The meeting agreed that the draft agenda along with additional details related to the venue and dates of the Summit should be coordinated through the RSC.

3.83 Based on the above, the meeting encouraged all safety partners including IATA, ICAO, AACO, IFALPA, States, and airlines to join efforts and contribute in the preparation of the MID Region Safety Summit and share their expertise and views on key regional safety concerns, mitigation measures, and the way forward. Accordingly, the meeting invited all stakeholders to:

- a) promote the summit and circulate invitations among all stakeholders (local and regional);
- b) support in sponsoring the summit; and
- c) contribute with speakers and topics to the summit.

3.84 The meeting noted with appreciation ACI, AACO, Boeing and WFP offer to support the MID Region Safety Summit.

Call Sign Confusion

3.85 The meeting noted that the use of similar call signs by aircraft operating in the same area often gives rise to potential and actual flight safety incidents. It was highlighted that reports have been raised by airline operators and Air Navigation Service Providers of common incidents related to call-sign conflict in the Middle East.

3.86 The meeting noted that call sign confusion can be either aural or visual, or both. Aural confusion can occur between flight crews and controller – and sometimes between different flight crews. Visual confusion is primarily an ATC problem. It relates to flight progress strips (FPS) and radar displays, where call signs are the primary means of identifying the aircraft.

3.87 The meeting was apprised of the most common causes for call sign confusion and associated consequences.

3.88 Based on the above, the meeting agreed to task the MID-ASRT to conduct a study of call-sign confusion to improve safety levels as part of the safety support activities. The objectives are to collect reliable data over a specified period of time, to ascertain the magnitude of the problem, and confirm the categories of contributing factors causing call-sign confusion. The data collected by the MID-ASRT as well as the initial analysis should then be provided to the MID-SST for appropriate action (i.e.: development of SEIs/DIPs, as appropriate).

3.89 The meeting noted with appreciation that UAE has established a National Working Group (WG) to address the safety issues associated with call sign confusion and is willing to share the outcome of this WG with the MID-ASRT and MID-SST for the benefit of safety in the Region.

3.90 The meeting further noted that necessary coordination with MIDANPIRG might be needed for the implementation of some mitigation measures related to call sign confusion.

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RASG-MID Work Programme for 2013

3.91 The meeting recalled that the RASG-MID 2013 Work Programme should include, in addition to the activities targeted toward the identified Focus Areas, supporting activities related to SSP/SMS as well as Accident and Incident Investigation. The meeting agreed that the safety support activities would be monitored by the MID-SST.

3.92 The meeting agreed that the Schedule of 2013 safety events should be split into two parts. The first part will reflect only the RASG-MID events (involving all RASG-MID members and partners); while the second part will be reserved to the list of other events taking place in the MID Region but involving a limited number of States or a different community.

3.93 Based on the inputs received from the safety partners in the Region, the meeting reviewed and updated the Schedule of 2013 safety events as at **Appendix 30** to the Report on Agenda Item 3. The meeting urged all stakeholders to support the RASG-MID Work Programme for 2013 and carry out necessary coordination with the RSC to avoid duplication of efforts.

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Appendix 3A to the Report on Agenda Item 3

**ICAO TOOL FOR IMPLEMENTATION OF THE
REGIONAL SAFETY PERFORMANCE FRAMEWORK**

1. The Tool provides a process to ensure adherence to Regional Performance Framework and enable ICAO to readily share the outputs between the various RASGs. The APRAST would first identify Safety Enhancement Initiatives (SEIs). These initiatives could be established based on the analysis of data, ICAO initiatives and/or as developed by other organizations/safety teams. While for the most part SEI would be globally applicable, this may not always be the case and the priorities for implementation of SEIs may vary between regions. Recognizing that it will take time to implement SEIs, APRAST could prioritize, using some of criteria below identified SEIs to ensure that those which have the greatest potential for reducing safety risk are examined first. The following information is contained in the SEI template.
 - a) GSI (Global Safety Initiative) Number from the GASP;
 - b) RAST Number in the form of APRAST /(risk areas)/ (i.e. APRAST/CFIT/1);
 - c) Safety Impact (High, Medium or Low) ;
 - d) Changeability (Difficult, Moderate and Easy) taking into consideration the political will, commitment / consensus, resource requirements, availability for implementation, potential blockers – what conditions exist that could prevent implementation;
 - e) Impact-Changeability (IC) Indicator (P1, P2, P3, etc.);
 - f) Priority;
 - g) Possible Champion; and
 - h) Notes.

2. Subsequently, for each SEI a Detailed Implementation Plan (DIP) would be completed which should contain the following additional information:
 - a. Safety Enhancement Action (expanded)
 - b. Statement of Work
 - c. Human Resources
 - d. Financial Resources
 - e. Relation with Current Aviation Community Initiative
 - f. Performance Goal
 - g. Indicators
 - h. Key Milestones

3. Once the Detailed Implementation Plans are completed the outputs for each DIP would be defined utilizing the appropriate template. The Outputs Template contains the following information:
 - a. Description
 - b. Target Initiation Date
 - c. Resources
 - d. Resource Notes
 - e. Timelines
 - f. Action
 - g. Target Completion Date

Note: Sample SEI, DIP and Outputs Templates from the ICAO Tool are outlined hereafter:

Output Template	
Rast No	<input type="text"/>
Output No.	<input type="text"/>
Description	
Target Initiation Date	
Resources	
Resource Notes	
Time Line:	
Actions	
Target Completion Date	

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Appendix 3B to the Report on Agenda Item 3

MID REGIONAL AVIATION SAFETY TEAM (MID-RAST)

TERMS OF REFERENCE

A) Purpose of the MID-RAST:

The MID-RAST is established to support the RASG-MID Steering Committee (RSC) in the development, implementation and monitoring of Safety Enhancement Initiatives (SEIs) related to the identified Focus Areas (FAs).

In order to meet its Terms of Reference, the MID-RAST shall:

- 1) assess work that has already been done under existing regional safety initiatives;
- 2) identify short and medium term regional safety priorities and initiatives;
- 3) identify possible mitigation measures;
- 4) develop SEIs for the identified FAs;
- 5) provide recommended actions through the development of Detailed Implementation Plans (DIPs) for each SEI, in a prioritized manner;
- 6) monitor the implementation of DIPs and provide feedback to the RSC; and
- 7) propose input to the RSC for the development of the RASG-M ID yearly work programme.

B) Composition:

States: Jordan, Lebanon, Oman, Saudi Arabia and UAE

Partners: AACO, IATA, Boeing, ACI, FAA, IFALPA

C) Roles and Responsibilities:

- MID-RAST Rapporteur – Coordinate MID-RAST activities and provide overall guidance and leadership;
- MID-RAST Coordinators – Provide technical expertise and collaborate in the development of SEIs and DIPs related to assigned FA, as requested by the MID-RAST Rapporteur;
- ICAO – Support; and
- Partners – Provide technical expertise and collaborate in the development of material as requested by the MID-RAST Rapporteur.

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Appendix 3C to the Report on Agenda Item 3

Runway Safety: Possible Mitigation Measures
(Extracts from the MID-RRSS 2012 Presentations)

→ From Pilot's Perspectives

- Knowledge of airport surface markings, lights and signs
- Briefing of expected taxi out/in routing
- English language proficiency
- PA, or company calls are to be avoided while taxiing.
- Plan timing and execution of checklists to increase attention when approaching intersections and runway crossings
- Avoid high taxi speed
- Consistent use of internationally agreed standard, phraseology, and procedures
- Enhanced situational awareness, based on the use of one language – aviation English
- Complete information about expected taxi in routing and stand, taxi-out routing and runway well in advance
- Implementation of SMS
- Use maximum available aircraft external lights
- Use of latest generation technology
- Intensified Line Training
- ATC/Pilot awareness program
- Exposure using simulators
- Emphasize maximum performance take-offs
- Human Factors and training
- Information Sharing Platform (exchange of experience)
- Passenger Education on the necessity to divert from “comfort flying” – application of brakes (auto brakes) and full reverse thrust
- When in doubt, seek clarification
- To avoid non essential communication: adopt sterile cockpit concept
- Avoid communication impediments in multi- crew cockpit, define the role of each pilot
- Manage the cockpit workload
- Minimize the number of tasks to be performed when aircraft is moving during taxiing
- Standard operating procedures for: using precision approaches, visual approaches and circling approaches; selecting the most operationally suitable runway, stable approach criteria, and missed approach criteria
- Identify operational issues that can be addressed through training
- Implement an effective incident reporting system
- Use all available technologies to maintain situational awareness on the ground
- Adhere to low visibility procedures, including enhanced crew coordination, when conditions require
- Realistic training for all low visibility operations
- Use accurate aerodrome charts, where available, and essential information on aerodrome conditions
- Use of NOTAMs and real-time radio communication
- Use full runway length operations especially in marginal conditions
- Conduct an airport briefing before every operation
- Develop comprehensive guidance for operations during airport works

→ From Aerodrome Operator's perspectives

- Implementation of signs, markings and lighting in accordance with Annex 14
- Airside Driver Training
- Perform runway inspections on Tower Frequency
- Encourage staff to verify clearances if not perfectly understood
- Close Coordination of airside works with ATC for Work in Progress Meetings
- Safety Induction to all personnel working airside
- Supervision of airside construction work by Safety Personnel
- Work on pull-back basis only under escort of Airport Safety
- Provision of obstacle free overrun areas
- Scheduled runway surface inspections
- Inspection has to include signs, marking, and lighting, FODs, safety areas, Cracks, erosions and rubber accumulation
- Speed should be kept as low as practicable
- Periodical measuring for Runway friction levels (rubber deposits)
- Treatment of contaminated runway if it cannot be avoided (A runway completely or partly covered with standing water - more than 3mm)
- Runway Inspection Vehicles to be equipped with 2 base sets of VHF radio for TWR and GND frequency
- Clarity of runway markings, signs and lights (PAPI, Runway end lights, etc)
- The charts need to show hot Spots, RESA information, etc
- Use Grid map for standby and low visibility
- Continuous practice for appropriate response
- Rescue and Fire Fighting (RFF) ability to locate and access excursion occurrences
- Front line positions for RFF vehicles in case of Low visibility (to intervene on shorter times)
- Continuous personnel training for effective emergency response
- Adequate access roads for RFF Vehicles
- Follow an approved maintenance program to check signage, lights
- Provide signs for flight crews to visually determine runway remaining distance
- Ensure the airfield and RESA conform to ICAO specifications
- Define standard criteria for not operating runway
- Conducting a runway safety awareness campaign that focuses on local issues
- Install SMR with surface movement providing controller with radar picture and equip vehicles with transponders
- Install sufficient barriers to eliminate access to active RWY
- Avoid designs that include crossing a runway to access taxiway or another part of the aerodrome
- Avoid complicated layout
- Outer roads must be provided for vehicles and equipment
- Limit vehicles entering aircraft manoeuvring areas
- Familiarization of Airside Layout, including: Signage Markings, and Lights, Responsibilities of Drivers, Right of way, Hazards of Airside Driving, Light Gun signal from tower, Aviation phraseology, Emergency procedures
- Airports must have adverse weather procedure available during low visibility operation
- Use of checklist for new airport operations
- Establish and host RST with participation of Runway Safety Partners

→ From Air Traffic Controller's perspectives

- Check that signage and markings are ICAO-compliant and visible to pilots and drivers
- Identify potential new technologies that may enhance runway safety
- Ensure that procedures are compliant with ICAO Standards and Recommended Practices (SARPs)
- Initiate local awareness and training to controllers, pilots and personnel driving vehicles on the aerodrome
- Conduct joint awareness sessions/seminars on: Arrival and approach requirements - Runway excursion - stabilized approach - aircraft performance
- Set up familiarization programs where ATCOs and pilots can attend/observe the activities related to ATS and aircraft operations
- Ensure that ATCOs comply with ELP requirements and use ICAO phraseology (Doc4444) during communication with approaching aircraft
- Restrict late runway change and speed control during approach
- Ensure that ATCOs comply with ATS requirements for the reporting of current weather information and runway conditions
- Use of "follow-me" vehicles and Progressive taxi guidance
- Procedures to have controllers instruct pilots to: Enter, Backtrack or line up on runway should be acknowledged by Read Back
- Determine "line-of-sight" can aircraft at opposite ends of the runway see each other
- Identify Hot Spots on applicable aerodrome ground movement charts
- Use standard phraseology between vehicle drivers and ATC
- Assign ground controller with close liaison to aerodrome operations
- Coordinate vehicles & equipment movement periods and restrict any vehicle & equipment during bad weather
- Minimize single controller communication coordination between local, ground and radar controllers
- Manage the use of multiple tower / ground frequencies
- Minimize the occurrences where one controller is responsible for traffic on multiple frequencies
- Controllers are required to manage the movement numbers during capacity constraints
- Controllers are to manage increased number of runway crossings very effectively
- Air Traffic Management are required to develop Standard Operating Procedures for use during airport works
- Follow an approved low visibility procedures
- Routings: Avoid ATC change in routings-short cuts, Avoid changes that result in varying to distance from touchdown
- For runway selection, consider aircraft type, avoid late changes, base on wind or operational suitability
- Stable Approaches; avoid vectoring to short final, vector to intercept the glide slope from below, speed control, avoid high speed approaches, allow for aircraft configuration requirements
- Limit the number of aircraft crossing an active runway
- Select runways based on operational suitability, longest runway, into wind, least cross-wind, least turbulence, etc
- Participate to RST work.

→ Collaborative Approach:

- Exchange information
- Collaborate as early as possible
- Make use of (existing) SMS systems
- Use a holistic approach
- Work in multidisciplinary teams

→ Role of Regulator

- Ensure that the authorization of ANSPs, certification of air operators and airports is in compliance with national regulations and ICAO Standards
- Establish and improve requirements for specific operating procedures related to runway safety
- Establish training and checking requirements for pilots, air traffic controllers and airport personnel
- Ensure necessary standardization of operating procedures for military operations at joint-use airports
- Participate in RST meetings to provide information on regulatory matters, as necessary
- Facilitate the exchange of safety information from the CAA or other relevant agencies that could be of use to the RST
- Intervene, where appropriate, to coordinate with other governmental agencies or external stakeholders to resolve issues that affect runway safety (noise abatement rules, obstructions on the approach path, etc)
- Identify and raise awareness of contributory and causal factors for runway safety issues that could be used as safety performance indicators
- Ensure that lessons learned are disseminated widely to increase understanding of causal and contributory factors and effectively implement runway excursion and incursion prevention measures
- Promote the use of incident reporting systems
- Refer any relevant reports submitted through a national incident reporting system to the respective RSTs
- Provide timely feedback to operational personnel on information gleaned through analysis of incident reports and any related mitigations
- Develop guidance to define and launch Runway Safety Teams
- Harmonize “Runway Safety” definitions, taxonomies and reporting of runway conditions and other safety indicators
- Standardize and improve communication procedures
- Implementation of ICAO Standards to be monitored through the Continuous Monitoring Approach

RAST No	Safety Enhancement Action	GSI	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes	Reference	Link to Other RASGs	Justification (RASG-MID Annual Safety Report - First Edition - June 2012)
MID-RAST/RGS/1	Specific training for pilots and air traffic controllers to avoid unstabilized approaches	9	High	Easy	P1	1	IATA and CANSO	Short Term	Note this is top priority of RAST-PA and RAST-AP. DIP may be coordinated on global level - or benchmarked against other regions. DIP may include awareness workshops, seminar and/or development of additional guidance or awareness information.		RAST-PA/RE/9 (Priority 2 - DIP) and RAST-AP/RE/2 (Priority 1 - DIP)	1st most frequent contributing factor in RE accidents is 'embedded piloting skills' and 2nd most frequent human factor is 'aircraft handling' - See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training. "Unstable Approach" appeared as a factor in 29% of the RE accidents. (Ref RASG-MID ASR - First Edition - 4.2.3.2.1)
MID-RAST/RGS/2	Promote pilot adherence to Standard Operating Procedures for approaches including go-around decision making	9	High	Easy	P1	2	IFALPA	Short Term	The DIP may include examining pilot action on the runway, associated policies and procedures and consideration of existing risk assessment and management processes. Note Annex 6 as reference for other regions.		RAST-PA/RE/4 (Priority 1 - DIP) and RAST-AP/RE/1 (Priority 0)	4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - 'Flight Crew Procedures' meaning non-compliance with SOPs was present in 59 accidents. - See 4.1.2.4.1 and 2 - Top Common incidents/occurrences from MID reports - "Unstable Approach" with Root Cause airport/airline of SOP Compliance and Training.
MID-RAST/RGS/3	Develop guidance material and training programs to support creation of action plans by local aerodrome runway safety teams.	9	High	Moderate	P2	3	ICAO-MID - Nominated State Champion - ACI - COSCAP	Mid-Term	Noting SEIs from other regions it is worthwhile RSTs consider the following: - Air traffic Control Training - general and scenario based - Review of Aerodrome and ATC Standard Operating Procedures including RT Phraseology and Clearance Procedures - Pilot Training - general and scenario based - Scenario Based Training for Tower Controller - Scenario Based Training for Pilots - Note the various ICAO Global and Regional Runway Safety Initiatives related to Runway Safety and RSTs. IFALPA and CANSO may be training resources (see AP SEIs). Teams must be multidisciplinary and include airport operators, airlines, ATC, RFFS, ground handlers, service providers, etc.	Annex 14, ICAO Doc. 9137, IATA, FAA, IFALPA Airport Liaison Program and ICAO Doc 9870 (3.1). GRST outcome to establish RSTs locally and hosted by the airports. - Reference annex 14, ICAO Doc 9137; IATA; FAA; IFALPA Airport Liaison Programme - Euro Control study on Runway Excursions ICAO has established a Runway Safety Site and is establishing a Runway Safety Team Portal and tools for use by Runway Safety Teams.	RAST-PA/RE/11 (Priority 1 - DIP) and RAST-AP/RE/3 (Priority 3) and RAST-AP/RI/4 (Priority 0) to incorporate RAST-AP/RI/1 (Priority 0), RAST-AP/RI/2 (Priority 0), RAST-AP/RI/5 (Priority 0), RAST-AP/RI/6 (Priority 0), RAST-AP/RI/8 (Priority 0) into RST Mandate	
MID-RAST/RGS/4	Promote /monitor Implementation RESA including other means such as arresting systems	1	High	Difficult	P3	4	ICAO-MID - Nominated State Champion	Long Term	DIP will include establishment of supporting regulation and guidance material. Note this will include assessment of physical space as well as technologies adopted into Annex 14 in November 2012 proposed amendment (arresting systems). This SEI will not prevent runway excursions but reduce the consequences of such events.	Annex 14 - Chapter 3 - 3.5 Runway End Safety Area including proposed November 2012 update for arresting systems	RAST-PA/RE/2 (Priority 7) and RAST-AP/RE/5 (Priority 0)	4.1.3.2.1 - Ground damage in 33% of accidents related to inadequate markings or signage or inadequate RESA.
MID-RAST/RGS/5	Timely and accurate notification regarding runway conditions and weather by AIS and ATS units	1	High	Easy	P1	5	ICAO-MID - Nominated State Champion	Short Term	Note process of assessing surface condition and reporting through ATS to flight crew. Adhere to ICAO standard phraseology regarding condition (updated in proposed November 2012 amendments). Ensure reports vetted through ATC based on Aerodrome reporting information and meteorological analysis - and not only repetition of report from previous aircraft.	ICAO Annex 14	RAST-PA/RE/5 (Priority 4) and RAST-AP/RE/6 (Priority 2 - DIP)	4.1.3.2.1 - RE Accidents - 83% occur during landing and 67% during daytime - weather is contributing in 47% (1st rain/2nd windsheer)

RAST No	Safety Enhancement Action	GSI	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes	Reference	Link to Other RASGs	Justification (RASG-MID Annual Safety Report - First Edition - June 2012)
MID-RAST/RGS/6	Regulation, guidance and specific training in relation to maintaining aerodrome runway/taxiway related markings	1	High	Moderate	P2	6	ICAO-MID - Nominated State Champion	Mid-Term	Note EASA maybe working with APAC to develop of supporting survey format. DIP will include development of national regulation, guidance materials and training/awareness initiatives. Note additional SARPs in the recently proposed amendment to Annex 14 (November 2012).	ICAO Annex 14 - Chapter 5 - 5.2 Markings - including provisions for enhanced taxiway centre line marking (Para 5.2.8.4), mandatory instruction marking (5.2.16), mandatory instruction sign (no entry) and characteristics of taxiway edge lights (5.3.1 7.7 and 5.3.1 7.8).	In part to RAST-AP/R1/1 (Priority 0) regarding only Enhanced Surface Marking and Lighting	4.1.3.2.1 - Ground damage in 33% of accidents related to inadequate markings or signage or inadequate RESA.
MID-RAST/RGS/7	Regulation, guidance and specific training in relation to maintaining runways in accordance with Annex 14	1	High	Moderate	P2	7	ICAO-MID - Nominated State Champion	Mid-Term	May include development of necessary publications including national regulation based on ICAO SARPS and guidance material regarding inspection regimes and surface assessments (i.e. friction) - as well as national or local training and safety awareness initiatives.	ICAO Annex 14 - Chapter 10 - 10.2 - Pavements (maintenance and inspection) and ICAO Doc 9137	RAST-PA/RE/8 (Priority 3) and RAST-AP/RE/9 (Priority 0) in relation to "guidance" - RAST-PA/RE/10 (Priority 2) and RAST-AP/RE/10 (Priority 0) in relation to "specific training" - RAST-AP/RE/7 (Priority 0) and RAST-PA/RE/6 (Priority 8) in relation to "improving conditions"	4.1.3.2.1 - bar chart of contributing factors
MID-RAST/RGS/8	Identification of aerodrome Hot Spots and publish Hot Spot data in AIP if necessary.	9	High	Moderate	P2	8	ICAO-MID - Nominated State Champion	Short Term	Possible outcome of RSTs or Safety Action Groups for smaller aerodromes. Regulatory Oversight of Hot Spot analysis and chart development possible if Aerodrome SMS established as of Aerodrome Certification. Hot Spots should be based on analysis of aerodrome hazards and safety events. Development of Hot Spot charts will depend on aerodrome complexity and incident data/analysis. Each aerodrome should positively respond that analysis has been undertaken at a minimum.	ICAO Doc 9870 - Manual on the Prevention of Runway Incursions - 3.4 Hot Spots ICAO Annex 4 - Aeronautical Charts	Loosely to RAST-AP/R1/7 (Priority 0) regarding Taxiway and Runway Configuration	Runway Incursion data not included in RASG-MID ASR - First Edition - however acknowledged by RSC/01 Agenda Item 2 paragraph 2.14

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/01	Promote pilot adherence to Standard Operating Procedures for approaches including go-around decision making		9	High	Easy	P1	1	Short Term
Safety Enhancement Action (expanded)		Pilot adherence to Standard Operating Procedures (SOPs), including stabilized approach criteria and go-around decision making, is key to preventing and reducing the risk of Runway Excursions (RE). The overall strategy in mitigating REs related to pilot adherence of SOPs includes promotion of existing industry initiatives, adequate ICAO SARPs and guidance, appropriate State regulation and guidance as well as appropriate operator policies, procedures and training/awareness programs.						
Statement of Work		In order to proactively reduce identified risks, the RASG-MID established the Middle East - Regional Aviation Safety Team (MID-RAST) to deal with operational safety initiatives, develop Safety Enhancement Initiatives (SEIs) and Detailed Implementation Plans (DIPs) to reduce the risks related to Runway & Ground Safety (RGS) and other identified focus areas. Industry analysis shows that REs are not only the most common but the most deadly type of runway accident. The FSF's Runway Safety Initiative identified that "Go-around not conducted" as the number one risk factor in landing REs. The RASG-MID ASR - First Edition (draft) further identified the most frequent contributing factors in RE accidents as "embedded piloting skills" and "aircraft handling." The most common reported occurrence from MID operators was "Unstable Approach" with root cause of "SOP Compliance and Training." "Unstable Approach" appeared as a factor in 29% of the RE accidents.						
Champion Organization		ICAO, IATA, FSF, IFALPA						
Human Resources		ICAO - International Civil Aviation Organisation (MID and HQ) IATA - International Air Transport Association (MENA and HQ) FSF - Flight Safety Foundation IFALPA - International Federation of Airline Pilot's Association ALPA - Air Line Pilot's Association, International MEBAA - Middle East Business Aviation Association IAOPA - International Council of Aircraft Owners and Pilots Association IBAC - International Business Aviation Council ICCAIA - International Coordinating Council of Aerospace Industries Associations CAAs - Civil Aviation Authorities EWGRS - European Working Group for Runway Safety (EuroControl) aircraft manufacturers other stakeholders						
Financial Resources								
Relation with Current Aviation Community Initiative		ICAO Runway Safety Program ICAO/IATA Runway Excursion Risk Reduction Toolkit FSF Approach and Landing Accident Reduction (ALAR) Toolkit (version June 2010) FSF Runway Safety Initiative (RSI) - "Reducing the Risk of Runway Excursions" FSF Operators Guide to Human Factors in Aviation (FSF European Advisory Committee) FSF Annual Flight Safety Conference (most recent in September 2012) France Directorate General of Civil Aviation - Unstabilized Approaches France Directorate General of Civil Aviation - Stabilised Approaches Good Practice Guide France Directorate General of Civil Aviation - Synthesis on Unstable Approaches EWGRS - European Action Plan for the Prevention of Runway Excursions (pending publication) Airbus - Safety Library - Flight Operations Briefing Notes - Approach Techniques						
Performance Goal		<ul style="list-style-type: none"> • Champion Organisations to confirm Performance Goals • MID-RAST to proposed establishment of cross Focus Area Task Force to support • SEIs related to pilot adherence to SOPs • MID-RAST to promote use of existing Toolkits and resources • ICAO-MID to promote relevant seminars, workshops, courses or necessary training 						
Indicators		see above/below						
Key Milestones		<ul style="list-style-type: none"> • MID-RAST to arrange a meeting for Champion Organisations to confirm Performance Goals, actions and roles • RASG-MID to establish Task Force (see attached scope) • ICAO-MID to promote relevant seminars, workshops, courses or necessary training • MID-RAST to promote use of existing Toolkits and resources • RASG-MID and MID-RAST to consider Cross Focus Area Task Force recommendations in regard to joint training/promotions when appropriate, any required follow-up with States or suggested enhancements to ICAO materials. 						
Potential Blockers		Availability of required human resources from identified organisations						
DIP Notes		<ol style="list-style-type: none"> 1. Promotion/Communication Channels - websites, questionnaires, State Letter, press release, events, training 2. Best practice for training (airlines/training organisations) may include - recurrent training in threat and error management, practice go-arounds including below the approach minimum altitude and after touchdown (before thrust reverser deployment) (see ALAR and ICAO/IATA Toolkits for more recommendations) 3. Best practice for SOP may include - stabilize approach criteria for pilots, no fault go-around policy for unstable approaches, use of approaches with vertical guidance when available (see ALAR and ICAO/IATA Toolkits for more recommendations) 4. Best practice for CAAs may include develop of materials such as France CAA, promotion of existing Toolkits, regulation/guidance for operators to include go-around decision making and stabilized approach criteria 5. Contacts - to be confirmed 						

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/RGS/2	Specific training for pilots and air traffic controllers to avoid unstabilized approaches		9	High	Easy	P1	2	Short Term
Safety Enhancement Action (expanded)		Develop safety seminars for pilot and air traffic controllers to mitigate the causes of unstable approaches in the MID Region.						
Statement of Work		Runway Excursion has been identified as one of the highest safety risk area in the MID Region. In order to proactively reduce this risk, RAST in collaboration industry will develop safety seminars, workshops and training/educational materials for pilots and controllers that will provide specific training and tools to mitigate the causes of unstable approaches						
Champion Organization		ICAO IATA FSF IFALPA IFATCA CANSO						
Human Resources		ICAO - International Civil Aviation Organisation (MID and HQ) IATA - International Air Transport Association (MENA and HQ) FSF - Flight Safety Foundation IFALPA - International Federation of Airline Pilots' Association IFATCA - International Federation of Air Traffic Controllers' Associations CANSO - Civil Air Navigation Services Organisation ALPA - Air Line Pilot's Association, International MEBAA - Middle East Business Aviation Association IAOPA - International Council of Aircraft Owners and Pilots Association IBAC - International Business Aviation Council ICCAIA - International Coordinating Council of Aerospace Industries Associations CAAs - Civil Aviation Authorities EWGRS - European Working Group for Runway Safety (EuroControl) flight data analysis companies (Sagem, ADI, Airface, ect.) local pilot and air traffic controller associations flight academies training centres aircraft manufacturers other stakeholders						
Financial Resources								
Relation with Current Aviation Community Initiative		ICAO Runway Safety Program ICAO/IATA Runway Excursion Risk Reduction Toolkit FSF Approach and Landing Accident Reduction (ALAR) Toolkit (version June 2010) FSF Runway Safety Initiative (RSI) - "Reducing the Risk of Runway Excursions" FSF Operators Guide to Human Factors in Aviation (FSF European Advisory Committee) FSF Annual Flight Safety Conference (most recent in September 2012) France Directorate General of Civil Aviation - Unstabilized Approaches France Directorate General of Civil Aviation - Stabilised Approaches Good Practice Guide France Directorate General of Civil Aviation - Synthesis on Unstable Approaches EWGRS - European Action Plan for the Prevention of Runway Excursions (pending publication) Airbus - Safety Library - Flight Operations Briefing Notes - Approach Techniques						
Performance Goal		<ul style="list-style-type: none"> Champion Organisations to confirm Performance Goals MID-RAST to proposed establishment of cross Focus Area Task Force to support SEIs related to pilot adherence to SOPs MID-RAST to promote use of existing Toolkits and resources ICAO-MID to promote relevant seminars, workshops, courses or necessary training 						
Indicators		See above/below						
Key Milestones		<ul style="list-style-type: none"> MID-RAST to arrange a meeting for Champion Organisations to confirm Performance Goals, actions and roles RASG-MID to establish Task Force (see attached scope) ICAO-MID to promote relevant seminars, workshops, courses or necessary training MID-RAST to promote use of existing Toolkits and resources RASG-MID and MID-RAST to consider Cross Focus Area Task Force recommendations in regard to joint training/promotions when appropriate, any required follow-up with States or suggested enhancements to ICAO materials. 						
Potential Blockers		Availability of required human resources from identified organisations						
DIP Notes		<ol style="list-style-type: none"> Promotion/Communication Channels - websites, questionnaires, State Letter, press release, events, training Best practice for training (airlines/ATC training organisations) may include - recurrent training in threat and error management (see ALAR and ICAO/IATA Toolkits for more recommendations) Best practice for SOP may include - stabilize approach criteria for pilots and use of approaches with vertical guidance when available (see ALAR and ICAO/IATA Toolkits for more recommendations) Best practice for CAAs may include develop of materials such as France CAA, promotion of existing Toolkits, regulation/guidance for operators Contacts - to be confirmed 						

DIP	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes
	Promote SOP Adherence / SOP Cross-Verification	RAST-MID/IFD/01		High				IATA & IFALPA		DIPS might include: 1. Development guidance material for SOPs using examples of best practice examples collected from manufacturers and airlines. 2. Make use of training tools such as Evidence Based Training (EBT) This DIP will also be linked to pilot adherence to SOPs under RGS & CFIT.
	Promote enhanced aircraft maintenance standards	RAST-MID/IFD/02		Medium				IATA & Boeing		DIPS might include: 1. Launch Competency Basec Training (CBT) awareness for maintenance personnel and provide support in the form of "Go Team" visits where required 2. Develop guidance material which includes best practices on enhanced aircraft inspection practices and procedures collected from airlines and manufacture
	Promote practices and tools for mitigation of birdstrike and FOD hazards at regional airports	RAST-MID/IFD/03		High				IATA & ICAO		DIPS might include: 1. Conducting a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife. This survey to include assessment of the States' implementation of ICAO Annex 14 standards in Chapter 9 - 9.4 , and analysis of the data collected. 2. Convening training and workshops for pilots and ATCO to increase awareness on wildlife avoidance during flight 3. Promote voluntary reporting of bird strikes by airlines, airports, and regulators. Various tools are available such as ICAO Bird Strike Information System (IBIS), IATA Bird Strike Database, etc.
	Increase awareness on means and tools of handling situations where a natural disaster occurs	RAST-MID/IFD/04		High				IATA & ICAO		

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
	Promote pilot adherence to Standard Operating Procedures		9	High	Easy	P1	1	Short Term

Safety Enhancement Action (expanded)	<p>Pilot adherence to Standard Operating Procedures (SOPs), including stabilized approach criteria and go-around decision making, is key to preventing and reducing the risk of Runway Excursions (RE), In-Flight Damage (IFD), Loss of Control (LOC-I), and Controlled Flight Into Terrain (CFIT).</p> <p>The overall strategy in mitigating accidents/incidents in all risk areas related to pilot adherence of SOPs includes promotion of existing industry initiatives, adequate ICAO SARPs and guidance, appropriate State regulation and guidance as well as appropriate operator policies, procedures and enhanced training/awareness programs.</p>
Statement of Work	<p>The RASG-MID ASR - First Edition identified the most frequent contributing factors in all the top accidents categories as SOPs and SOPs adherence. This DIP aims at increasing pilot awareness to SOPs requirements, and ensuring that training programs take into consideration feedback from accidents and incidents.</p>
Champion Organization	ICAO, IATA, IFALPA
Human Resources	Airlines, Regulators, Training Academies, International and Regional organizations and associations
Financial Resources	
Relation with Current Aviation Community Initiative	<p>ICAO SARPs</p> <p>Evidence Based Training (EBT)</p> <p>Manufacturere's best practices</p>
Performance Goal	<ul style="list-style-type: none"> • SEIs related to pilot adherence to SOPs • MID-RAST to promote use of existing Toolkits and resources • MID-RAST to promote EBT as a training tool

<p>Indicators</p>	
<p>Key Milestones</p>	<ul style="list-style-type: none"> • MID-RAST to arrange a meeting for Champion Organisations to confirm Performance Goals, actions and roles • Development guidance material for SOPs under the categories of the key risk areas using examples of best practice examples collected from manufacturers and airlines • MID-RAST to convene a workshop for the use of EBT and other training tools to enhance safety • RASG-MID and MID-RAST to consider recommendations from cross Focus Area Task Force regarding any required follow-up with States, enhancements to ICAO materials or promotion of industry best practice
<p>Potential Blockers</p>	<p>Availability of required human resources from identified organisations</p>
<p>DIP Notes</p>	<ol style="list-style-type: none"> 1. Promotion/Communication Channels - websites, questionnaires, State Letter, press release, events, training 2. Best practice for training (airlines/training organisations) may include - recurrent training in threat and error management 3. Best practice for SOP to be taken from manufacturers, IFALPA and airlines 4. Best practice for CAAs in other regions

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Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/IFD/3	Promote practices and tools for mitigation of birdstrike and FOD hazards at regional airports							

Safety Enhancement Action (expanded)	Wildlife strikes involve fatalities, as well as result in substantial aircraft damage that is one of the highest contributing factors for In-Flight Damage accidents, and costs airlines millions of dollars per year
Statement of Work	This DIP aims at improving aviation safety through mitigation of birdstrike and FOD hazards, and lowering of number of accidents/incidents related to wildlife and FOD. The aim is to utilize improved wildlife management techniques and apply training and awareness campaigns.
Champion Organization	IATA & ICAO
Human Resources	Airlines, Regulators, Manufacturers, Airports, International and Regional organizations and associations
Financial Resources	
Relation with Current Aviation Community Initiative	<ol style="list-style-type: none"> 1. RASG-PA initiative in wildlife control 2. IATA Bird Strike Database
Performance Goal	<ul style="list-style-type: none"> • SEIs related to wildlife/FOD • MID-RAST to promote use of existing Toolkits and resources • MID-RAST to promote regional standards and guidance material tailored to the climate/environment/species of the MID Region
Indicators	

Key Milestones	<ol style="list-style-type: none">1. Conduct a survey and assessment of airports in the region to identify and understand animal habitat around airports, and methods used by the airport for controlling hazardous wildlife2. Establish a regional guidance document that addresses key issues such as vegetation (like tall grass policy)3. Convene a workshop for pilots and ATCO to increase awareness on wildlife avoidance during flight4. Develop regular communication to stakeholders showing trends and indicators from available databases (global and regional)
Potential Blockers	Availability of required human resources from identified organisations Timely collection of data and information
DIP Notes	<ol style="list-style-type: none">1. Promotion/Communication Channels - regular newsletter2. Best practice from manufacturers3. Best practice for CAAs (in MID or in other regions)

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Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/IFD/4	Increase awareness on means and tools of handling situations where a natural disaster occurs							

Safety Enhancement Action (expanded)	Drastic weather condition have always resulted in operational restrictions and safety concerns. Examples of such conditions include natural disasters such as Volcanic ash, Tsunamis and cyclons. Weather conditions have been identified as one of the major contributing factors for In-Flight Damage.
Statement of Work	This DIP aims at improving handling situations where a natural disaster occurs, and lowering the number of accidents/incidents caused by lack of information on how to manage situations of natural disasters or drastic weather conditions.
Champion Organization	IATA & ICAO
Human Resources	Airlines, Regulators, Manufacturers, Airports, International and Regional organizations and associations
Financial Resources	
Relation with Current Aviation Community Initiative	<ol style="list-style-type: none"> Volcanic Ash TF Advisories, circulars, information circulated by ICAO, IATA, IFALPA, and manufacturers
Performance Goal	<ul style="list-style-type: none"> SEIs related to weather MID-RAST to promote use of existing Toolkits and resources MID-RAST to increase awareness through the availability of information and training tools
Indicators	
Key Milestones	<ol style="list-style-type: none"> Collect contingency procedures information and make them available for airline operators, regulators, and ANSPs in one place accessible by everyone. Develop a training document for pilots and dispatchers which includes information on past volcanic ash events, experience of regional airlines, and experience of ANSPs. Set-up the structure for a regional call center that during natural disasters will become available to convene conference calls, share information, and circulate up-to-date publications and NOTAMs similar to the model of AIS AGORA or CFMU NOP Portal.

Potential Blockers	Availability of required human resources from identified organisations Hosting documents on-line Management of an interactive portal for sharing of information during a natural disaster
DIP Notes	<ol style="list-style-type: none">1. Promotion/Communication Channels - websites, questionnaires, State Letter, press release, events, training2. Best practice for handling natural disasters or drastic weather conditions can be obtained from manufacturers3. Best practice from other regions

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LOC-I - SEIs

DIP	RAST No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	IC Indicator	Priority	Possible Champion	Time Frame	Notes
	RAST-MID/LOC-I/1	Pilots will be better trained to avoid and recover from excursions from normal flight and loss of control.	FAA AFS-400, Air Transport Association Training Committee, National Air Carrier Association (NACA), Regional Airline Association, manufacturers, pilot associations, Principal Operations Inspectors (POI's), Directors of Safety, flight operations and training departments, NASA, aircraft manufacturers, flight simulation device manufacturers, training centers, existing training aids, and other materials						FAA, Flight Standards (AFS)	Long	
	RAST-MID/LOC-I/2	To improve the overall performance of flight crews to recognize and prevent loss of control accidents, through effective use of automation.	ATA, FAA, RAA, NACA, ALPA, AIA/manufacturers						Air Transport Association (ATA)	Short	
	RAST-MID/LOC-I/3	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.	AIA (LOOC), ATA, RAA, ALPA, APA, manufacturers						ATA	Long	
	RAST-MID/LOC-I/4	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.	AIA (LOOC), ATA, RAA, ALPA, APA, manufacturers						ATA	Long	
	RAST - MID/LOC-I/5	Aviation safety will be improved through the use of risk assessment/management methods.	(ASY) (LOOC), FAA, Flight Safety Foundation, CAMI, ATA, AIA, DOD, and ALPA.						ASY	Long	
	RAST-MID/LOC-I/6	The establishment, maintenance, and appropriate use of flight crew SOP's in accordance with AC 120 71 (Standard Operating Procedures for Flight Deck Crewmembers) will improve aviation safety.	ATA (LOOC), RAA, manufacturers, operators, and labor unions						ATA	Medium	

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/1	Pilots will be better trained to avoid and recover from excursions from normal flight and loss of control.			commercial and corporate operators using smaller aircraft				36 Months

Safety Enhancement Action (expanded)	Pilots will be better trained to avoid and recover from excursions from normal flight and loss of control.
Statement of Work	<p>Advanced Maneuvers Training (AMT) refers to training to prevent and recover from hazardous flight conditions outside of the normal flight envelope, such as, inflight upsets, stalls, ground proximity and wind shear escape maneuvers, and inappropriate energy state management conditions.</p> <p>The purpose of this project is to collect and provide advanced maneuver training material and to encourage Part 121 operators to use these materials to implement advanced maneuver ground training and flight training using appropriate flight training equipment. Emphasis should be given to stall onset recognition and recovery, unusual attitudes, upset recoveries, effects of icing, energy awareness and management, and causal factors that can lead to loss of control.</p> <p>Additionally, research should be conducted to determine how existing flight simulation devices can be used effectively in AMT.</p>
Champion Organization	FAA, Flight Standards (AFS)
Human Resources	FAA AFS-400, Air Transport Association Training Committee, National Air Carrier Association (NACA), Regional Airline Association, manufacturers, pilot associations, Principal Operations Inspectors (POI's), Directors of Safety, flight operations and training departments, NASA, aircraft manufacturers, flight simulation device manufacturers, training centers, existing training aids, and other materials
Financial Resources	The total cost estimate for the project is about 3 person-years and \$500,000, which could be shared by the operators, manufacturers, pilot associations and government.
Relation with Current Aviation Community Initiative	
Performance Goal	<ol style="list-style-type: none"> 1. Goal: Reduce occurrence of LOC accidents. 2. Goal: Develop and make available AMT material for use in Part 121 approved training programs 3. Goal: All Part 121 operators incorporate AMT in their approved training programs 4. Goal: Research will identify methods to improve use of flight simulation devices in AMT

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOCI/1	Pilots will be better trained to avoid and recover from excursions from normal flight and loss of control.			commercial and corporate operators using smaller aircraft				36 Months
	Indicators	1. Indicator: A measurable reduction of loss of control incidents and accidents related to excursion from normal flight. 2. Indicator: Availability of the AMT material within 24 months of CAST "G" approval. 3. Indicator: Operators incorporate AMT material within 24 months of CAST G approval. 4. Indicator: Industry acceptance and implementation of research results.						
	Key Milestones	The following milestones are based on the date of CAST "G" approval (months): <ul style="list-style-type: none"> • Distribute currently available • Airplane Upset Recovery Training Aid ASY-200 G + 6 • AMT material on WWW AFS-20 G + 24 • Publish HBAT AFS-200 G + 24 • Track adoption of AMT ATA G + 27, 30, 33, 36 • Publish research results AFS-400 G + 36 						
	Potential Blockers							
	DIP Notes							

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/2	To improve the overall performance of flight crews to recognize and prevent loss of control accidents, through effective use of automation.			overall aviation community				

Safety Enhancement Action (expanded)	To improve the overall performance of flight crews to recognize and prevent loss of control accidents, through effective use of automation.
Statement of Work	<p>To reduce loss of control accidents, Part 121 air carriers will be encouraged to adopt consensus policies and procedures relating to mode awareness and energy state management, as appropriate to their respective operations.</p> <p>This is a revision of a previously approved DIP. Incident data has shown that flight deck automation is a core issue that needs to be addressed. Accordingly, the PARC/CAST Flight Deck Automation Working Group has been formed to develop recommendations for training, design change, and automation philosophies. This activity is expected to take approximately three years to complete. To enhance safety in the interim, the CAST recommended a tactical approach to develop and distribute policies and procedures relating to mode awareness and energy state management, and thereby realize the short-term benefits from the Loss of Control JSAT/JSIT. This revised SE-30 DIP addresses the approved tactical approach.</p>
Champion Organization	Air Transport Association (ATA)
Human Resources	ATA, FAA, RAA, NACA, ALPA, AIA/manufacturers.
Financial Resources	The total estimated cost would be 2 person-years.
Relation with Current Aviation Community Initiative	
Performance Goal	Mitigate the effects of mode confusion and energy state management as contributing factors in loss of control accidents.
Indicators	A measurable reduction of loss of control incidents and accidents related to automation.
Key Milestones	
Potential Blockers	
DIP Notes	

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/3	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.			All operators				

Safety Enhancement Action (expanded)	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.
Statement of Work	
Champion Organization	ATA
Human Resources	Approximately two men-year per organization. AIA (LOOC), ATA, RAA, ALPA, APA, manufacturers, etc
Financial Resources	
Relation with Current Aviation Community Initiative	
Performance Goal	Goal: Improve flightcrew and other operator employee's performance through timely dissemination of essential safety information and procedures.
Indicators	Indicator: No Part 121 accidents related to lack of available essential safety information.
Key Milestones	The following milestones are based on the date of CAST "G" approval: <ul style="list-style-type: none"> • Develop processes to disseminate essential safety information AIA G + 12 months • Develop pilot enhancement system ALPA G + 12 months
Potential Blockers	
DIP Notes	

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/4	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.			All operators				

Safety Enhancement Action (expanded)	Aviation safety will be advanced by improving flightcrew and other operator employees' performance through timely identification and dissemination of essential safety information and procedures.
Statement of Work	The purpose of this project is to ensure that essential safety information and operational procedures generated by airplane manufacturers are included in companies' operating manuals, training programs for pilots and other appropriate employee groups, in daily operations. Operators should also develop a means to improve the performance of those flightcrew members that meet the minimum criteria, but have shown a limited proficiency.
Champion Organization	ATA
Human Resources	Approximately two-man years to develop. ALPA (LOOC), ATA, APA, RAA, etc
Financial Resources	
Relation with Current Aviation Community Initiative	
Performance Goal	
Indicators	
Key Milestones	The following milestones are based on the date of CAST "G" approval: <ul style="list-style-type: none"> • Develop processes to disseminate essential safety information AIA G + 12 months • Develop pilot enhancement system ALPA G + 12 months
Potential Blockers	
DIP Notes	

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/5	Aviation safety will be improved through the use of risk assessment/management methods.							

Safety Enhancement Action (expanded)	Aviation safety will be improved through the use of risk assessment/management methods.
Statement of Work	The purpose of this project is to identify or develop and implement methods for operators, regulators, and manufacturers to prioritize safety related decisions. The project will improve methods of risk assessment for operational issues related to service bulletins, aircraft accident/incident analysis, flight critical safety information, and recurring intermittent failures related to dispatch.
Champion Organization	ASY
Human Resources	4 man-years funded by each organization involved in the development and implementation of the risk assessment/management information. (ASY) (LOOC), FAA, Flight Safety Foundation, CAMI, ATA, AIA, DOD, and ALPA
Financial Resources	Approximately \$150,000 for administrative costs.
Relation with Current Aviation Community Initiative	
Performance Goal	<p>Safety Enhancement Goal: Develop and implement risk assessment and management methods to prioritize safety related decisions.</p> <ol style="list-style-type: none"> 1. Goal: Compile and assess guidance materials related to risk assessment and risk management tools to prioritize safety related decisions for operational issues. 2. Goal: Develop guidance materials for operators, regulators, and manufacturers on risk assessment and risk management tools to prioritize safety related decisions for operational issues. 3. Goal: Operator Directors of Safety, or equivalents, should ensure all appropriate managers implement and use the risk assessment tools to prioritize safety related decisions developed in output 2.

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame												
MID-RAST/LOCI/5	Aviation safety will be improved through the use of risk assessment/management methods.																			
Indicators	<p>Indicator: Reduction in accidents related to operational risk factors.</p> <ol style="list-style-type: none"> Indicator: Applicable risk assessment and management information is compiled. Indicator: Guidance material is developed. Indicator: Operators, regulators, and manufacturers implement the risk management material. 																			
Key Milestones	<p>The following milestones are based on the date of CAST "G" approval:</p> <table border="0"> <tr> <td>Products</td> <td>LOOC</td> <td>Milestone</td> </tr> <tr> <td>• Collect, analyze, and assess existing risk management programs</td> <td>ASY</td> <td>G + 12 mo</td> </tr> <tr> <td>• Develop risk management methods to prioritize safety related decisions</td> <td>ATA</td> <td>G + 24 mo</td> </tr> <tr> <td>• Operators implement the use of risk management methods</td> <td>ATA</td> <td>G + 36 mo</td> </tr> </table>								Products	LOOC	Milestone	• Collect, analyze, and assess existing risk management programs	ASY	G + 12 mo	• Develop risk management methods to prioritize safety related decisions	ATA	G + 24 mo	• Operators implement the use of risk management methods	ATA	G + 36 mo
Products	LOOC	Milestone																		
• Collect, analyze, and assess existing risk management programs	ASY	G + 12 mo																		
• Develop risk management methods to prioritize safety related decisions	ATA	G + 24 mo																		
• Operators implement the use of risk management methods	ATA	G + 36 mo																		
Potential Blockers																				
DIP Notes																				

Detailed Implementation Plan								
Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/6	The establishment, maintenance, and appropriate use of flight crew SOP's in accordance with AC 120 71 (Standard Operating Procedures for Flight Deck Crewmembers) will improve aviation safety.			International or Non FAR-121 operators				

Safety Enhancement Action (expanded)	The establishment, maintenance, and appropriate use of flight crew SOP's in accordance with AC 120 71 (Standard Operating Procedures for Flight Deck Crewmembers) will improve aviation safety.
Statement of Work	The purpose of this project is to ensure that all airline operators publish and enforce clear, concise, and accurate flight crew standard operating procedures (SOP). These procedures should include expected procedures during pre/post flight and all phases of flight i.e.: checklists, simulator training, PF/PNF duties, transfer of control, automation operation, rushed and/or unstabilized approaches, rejected landings and missed approaches, in-flight pilot icing reporting, and flightcrew coordination. Operator instructors and check airman should ensure these SOP's are trained and enforced in their aircrew proficiency and standardization programs.
Champion Organization	ATA
Human Resources	Outputs 1-3 – estimated at 3 man-years Output 4 – estimated at ¼ man-year per operator
Financial Resources	Total Cost - \$550,000
Relation with Current Aviation Community Initiative	
Performance Goal	<p>Safety Enhancement Goal: To improve aviation safety through SOP's, each operator should establish, maintain, and use flightcrew SOP's in accordance with AC 120-71.</p> <ol style="list-style-type: none"> 1. Goal: Review Part 121 operators' SOP's relative to Loss of Control JSAT intervention information and make recommendations for improvement. 2. Goal: Revise AC 120-71 per recommendations from Output 1. 3. Goal: Revise FSAT 00-08 to supplement revisions in Output 2. 4. Goal: Operators adopt the revised LOC related SOP information.

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/LOC/6	The establishment, maintenance, and appropriate use of flight crew SOP's in accordance with AC 120 71 (Standard Operating Procedures for Flight Deck Crewmembers) will improve aviation safety.			International or Non FAR-121 operators				
Indicators	<p>Indicator: A reduction of LOC incidents and accidents related to SOP's.</p> <ol style="list-style-type: none"> Indicator: Recommendations provided to AFS-200 Indicator: AC 120-71 revised and published. Indicator: FSAT 00-08 revised and published. Indicator: Operator's training programs and manuals are revised to include this information. 							
Key Milestones	<p>The following milestones are based on the date of CAST "G" approval:</p> <p>Products LOOC Milestones</p> <ul style="list-style-type: none"> • Review operator SOP's and JSAT interventions ATA G + 6 months • Revise AC 120-71 AFS-200 G + 12 months • Revise FSAT 00-18 AFS-200 G + 12 months • Revise operator training programs and manuals ATA G + 24 months 							
Potential Blockers								
DIP Notes								

CFIT - SEIs

DIP	RAST No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Possible Champion	Time frame	Notes
	RAST-MID/CFIT/1	Specific ALAR/CFIT Training for Pilots			Medium					Medium	
	RAST-MID/CFIT/2	Crew Resource Management Training for pilots and controllers			Medium					Medium	
	RAST-MID/CFIT/3	Introduction of RNAV(GNSS) / RNP-AR procedures to apply to all runways not currently served by precision approach procedures	SE09	12	High	Difficult	P3	3		Medium	
	RAST-MID/CFIT/4	TAWS Implementation Software Load to 218 or greater Plus GPS	TAWS 218 +GPS Implementation	12	High	Difficult	P3	3		Long	
	RAST - MID/CFIT/5	Marketing CFIT Prevention	IFALPA Implementation Guide		Medium	Easy	P4			Long	
	RAST-MID/CFIT/6	Fatigue Risk Management Training	IFALPA Implementation Guide	9	Medium	Moderate	P5	6		Short	
	RAST-MID/CFIT/7	Review SOPs For Flight Crews		1	High	Difficult	P3	9		Long	
	RAST - MID/CFIT/8	Minimum Safe Altitude Warning System (MSAW)	SE09	12	Medium	Difficult	P6	8		Long	
	RAST-MID/CFIT/9	FOQ/FOM programs		1	High	Difficult	P3	9		Long	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/1	Specific ALAR/CFIT Training for Pilots			Medium				Medium

Safety Enhancement Action (expanded)	Promote specific ALAR/CFIT prevention training and procedures to be included in operators approved training curriculums, emphasizing pilot situational awareness and escape procedures for flight crews to use in the event of a terrain warning indication.
Statement of Work	Controlled Flight Into Terrain (CFIT) has been identified as one of the risk areas in the MID region. CFIT is a significant cause of commercial aviation equipment loss and fatalities, worldwide. CFIT accidents could be substantially reduced if all operators and training centers in the MID region developed CFIT prevention procedures and add them to their approved initial and recurrent training curriculums.
Champion Organization	ICAO/CANSO
Human Resources	CAA's, ANSP's, IATA and industry partners.
Financial Resources	

<p>Relation with Current Aviation Community Initiative</p>	<ul style="list-style-type: none"> •Flight Safety Foundation (FSF) has recently updated (April 2010.) the ALAR Toolkit that includes CFIT education and Training. •SKYbrary - CFIT (http://www.skybrary.aero/index.php/Category:Controlled_Flight_Into_Terrain)
<p>Performance Goal</p>	<p>Goal 1: A substantial reduction of CFIT accidents involving air transport operators in the MID region. Goal 2: CFIT training and guidance material provided to all air transport operators and Training Centres.</p>
<p>Indicators</p>	<p>Indicator 1: Operator CFIT accident rate in the MID region decreases by 80% Indicator 2: Increase in number of operators and Training centres in the MID region that are conducting CRM/situational awareness training.</p>
<p>Key Milestones</p>	<ul style="list-style-type: none"> •CAA’s conduct a review of all operators CFIT training programs (December 2014) •CFIT Education and Training Guidance Material Available on to all operators and Training Centres (December 2014) •Operators and training centers will incorporate CFIT training into their training programs. (June 2015)
<p>Potential Blockers</p>	<ul style="list-style-type: none"> •Availability of CAA/State resources. •Operators, States and ANSP may not recognize the safety benefits
<p>DIP Notes</p>	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/2	Crew Resource Management Training for pilots and controllers			Medium				Medium

Safety Enhancement Action (expanded)	Include specific CRM/situational awareness training and procedures to all pilots and air traffic controller training curriculums, emphasizing pilot and controller situational awareness with respect to CFIT.
Statement of Work	Crew Resource Management/Controller Resource Management (CRM) training, situational awareness and CFIT prevention are closely linked. This project will reduce CFIT accidents by promoting comprehensive pilot and air traffic controller CRM training programs.
Champion Organization	ICAO/CANSO
Human Resources	CAA's, ANSP's, IATA and industry partners.
Financial Resources	

<p>Relation with Current Aviation Community Initiative</p>	<ul style="list-style-type: none"> •RASG-PA website (http://www.mexico.icao.int/RASGPA/Training/) •FSF virtual library (http://flightsafety.org/) •ALAR Briefing Note – Crew Resource Management (http://flightsafety.org/files/alar_bn2-2-crm.pdf) •Airbus (http://www.airbus.com/en/corporate/ethics/safety_lib/) •Boeing operators (www.myboeing.com) •SKYbrary - Team Resource Management (http://www.skybrary.aero/index.php/TRM) •SKYbrary - Crew Resource Management (http://www.skybrary.aero/index.php/CRM)
<p>Performance Goal</p>	<p>Goal 1: A substantial reduction of CFIT accidents involving air transport operators in the MID region. Goal 2: CRM/situational awareness training and guidance material provided to all air transport operators and Air Traffic Personnel.</p>
<p>Indicators</p>	<p>Indicator 1: Operator CFIT accident rate in the MID region decreases by 80% Indicator 2: Increase in number of operators and Air Traffic Personnel that are conducting CRM/situational awareness training.</p>
<p>Key Milestones</p>	<ul style="list-style-type: none"> •Operators will incorporate CFIT Risk Reduction training into their CRM training program. (December 2014) •ANSP will incorporate CFIT training into their CRM training program. (December 2014)
<p>Potential Blockers</p>	<ul style="list-style-type: none"> •Availability of CAA/ANSP/State resources. •Operators, States and ANSP may not recognize the safety benefits
<p>DIP Notes</p>	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/3	Introduction of RNAV(GNSS) / RNP-AR procedures to apply to all runways not currently served by precision approach procedures	SE09	12	High	Difficult	P3	3	Medium

Safety Enhancement Action (expanded)	Introduction of RNAV(GNSS) / RNP-AR approaches and removal of traditional non-precision approaches. This is to ensure that the latest performance based navigation technology is utilized, at such airfields, to provide the highest level of safety during the conduct of an approach and landing towards the runway.
Statement of Work	In an attempt to preclude future CFIT accidents, design an implementation plan to ensure that RNAV(GNSS) and RNP-AR approach design and procedures are adequate and provide sufficient altitude protection during the approach and landing phase and this, around all domestically and internationally identified, Higher Risk Airports served by NPA. Also ensure that pilots and controllers training and guidance in the use of RNAV(GNSS) & RNP-AR is adequate, current, uniformly conducted and support the optimum utilization of automation resources so that individuals can take a monitoring role.
Champion Organization	IATA/CANSO
Human Resources	CAA Operational Support Service Procedure Designers Air Navigation Service Providers (ANSP)
Financial Resources	

<p>Relation with Current Aviation Community Initiative</p>	<ul style="list-style-type: none"> • IATA & ICAO are jointly developing a CFIT toolkit addressing the CFIT contributing factors • CAST safety enhancements addressing the CFIT contributing factors • Partnership between airlines and RNP-AR consulting firms such as Quovadis/Airbus & Etihad Airways for the creation of RNP-AR approaches at specific airfields. These new technology approaches, designed by Airbus' Performance Based Navigation (PBN) subsidiary, Quovadis, utilize 'continuous descent' operations and optimised trajectories. This will enhance flight safety which is at the heart of the RNP-AR Implementation Plan effort.
<p>Performance Goal</p>	<p>Goal 1: Implementation Plans to be complete in December 2013</p> <p>Goal 2: Keeping in mind that GNSS with Baro-VNAV is the key enabling technology, PBN and APV operations (APproaches with Vertical guidance) implementation to be complete:</p> <ul style="list-style-type: none"> - 30% in Dec 2015 - 70% in Dec 2018 - 100% in Dec 2020 <p>Goal 3: Before year 2020, reduce CFIT accidents/incidents by 80%, at these airfields during the conduct of ground-based non-precision approaches.</p> <p>Goal 4: APV to apply to all runways not currently served by precision approach procedures</p> <p>Goal 5: Promote stable approaches through APV</p>
<p>Indicators</p>	
<p>Key Milestones</p>	<p>WHAT IS ACHIEVABLE?</p> <ol style="list-style-type: none"> 1-FOQA to monitor data (consistency and accuracy of the Operator's fleet for each selected high risk/special airport) and provide it to Flight Operations Dept. 2-Identify the airports which require specifically RNP-AR approaches within 6 months. 3- State sponsored procedural design
<p>Potential Blockers</p>	<ul style="list-style-type: none"> • Operators may not recognize the safety enhancements benefits • Operators may not be able to afford the required technology • Operators may have difficulties funding the development of the procedures or planning the required training due to technology or downtime limitations
<p>DIP Notes</p>	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/4	TAWS Implementation Software Load to 218 or greater Plus GPS	TAWS 218 +GPS Implementation	12	High	Difficult	P3	3	Long

Safety Enhancement Action (expanded)	Set industry goal to systematically prioritise and implement TAWS software standard 218 or greater plus GPS. Benefits include 1. More reliable and accurate and earlier forward looking EGPWS database and warnings. 2. Reduced unwanted warning events.
Statement of Work	Controlled Flight Into Terrain (CFIT) accidents where a properly functioning aircraft under the control of a fully qualified and licensed crew is flown into terrain with no apparent awareness on the part of the crew, could be substantially reduced or eliminated with the addition of GPS navigation data to the TAWS equipment. Additionally, timely revisions to TAWS terrain databases should be required
Champion Organization	IATA
Human Resources	ICAO, IATA, IFALPA
Financial Resources	
Relation with Current Aviation Community Initiative	RASG-MID has identified CFIT as a very significant risk to operations in the MID area, particularly in Iran, Yemen and Oman
Performance Goal	Goal 1. Persuade regulators to mandate and/or operators to adopt on aircraft above 5700KG with more than 30 seats TAWS standard 218 with GPS or better. Goal 2: A reduction of 80% in ten years of CFIT accidents involving operators in MID EAST Goal 3: Post CFIT Education and Training Guidance Material on the RASG-MID Website.

Indicators	Indicator 1: CAAs tracking implementation. Indicator 2: Operator CFIT accident rate in MID EAST is continuously reduced toward the goal. Indicator 3: CFIT training material posted on the RASG-MID Website prior to completion of Output 1.
Key Milestones	<ul style="list-style-type: none">• CAA's conduct a review of all operators TAWS standard and CFIT training programs .SCA + 6 months• CFIT education and training guidance material available on the web, SCA +2 months• Operators and training centres will incorporate CFIT training into their training programmes. SCA +12 months
Potential Blockers	Availability of CAA resources Operators may not recognise the safety enhancement benefits
DIP Notes	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/5	Marketing CFIT Prevention	IFALPA Implementation Guide		Medium	Easy	P4		Long

Safety Enhancement Action (expanded)	Facilitating implementation CFIT related RAST
Statement of Work	Raising awareness of CFIT threats, prevention initiatives, mandated regulatory actions, available technology, enhanced procedures and toolkits for implementation.
Champion Organization	IATA/State Regulators
Human Resources	IATA/FSF/Manufacturers/State Regulators
Financial Resources	To be established
Relation with Current Aviation Community Initiative	Various industry body, regulator, manufacturer and operator marketing of safety and efficiency initiatives and implementation toolkits
Performance Goal	Goal 1: Production of marketing material and toolkits for all available initiatives within 3 months of each initiative completion Goal 2: Distribution of marketing material and toolkits to all applicable operators in coordinated fashion to meet individual initiative time targets. Goal 3: Facilitate use of toolkits and collate operator feedback

Indicators	
Key Milestones	<p>The following milestones are to be adopted for the marketing of CFIT prevention:</p> <ul style="list-style-type: none">• Identification of Steering Committee• Implementation Plan Development• Format of marketing established• Identify skills necessary for material production• Identify resources necessary• Obtain necessary financial resource• Collate output from individual initiatives• Establish content of toolkits and marketing material• Production of toolkits and marketing material• Distribution of toolkits and marketing material
Potential Blockers	<ul style="list-style-type: none">• Lack of human resource with necessary skill set• Lack of financial resource• Time to agree content and format of material• Lack of coordination as marketing covers all other CFIT initiatives• Ongoing coordination and management of marketing lacks resource
DIP Notes	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/6	Fatigue Risk Management Training	IFALPA Implementation Guide	9	Medium	Moderate	P5	6	Short

Safety Enhancement Action (expanded)	Stakeholders who are involved in the rostering and crewing, pilots and safety management need to understand the risks and effects of fatigue on the alertness of the operators (pilots) during the critical phases of a flight.
Statement of Work	Entities need to establish a risk-based approach to fatigue. This will include the management of fatigue reports and the necessary framework to manage proactive efforts of managing risk in the Middle East region.
Champion Organization	IFALPA
Human Resources	ICAO, IATA, IFALPA
Financial Resources	
Relation with Current Aviation Community Initiative	Transport Canada has a comprehensive FRMS toolbox for aviation ICAO, IATA and IFALPA have a joint FRMS implementation Guide

Performance Goal	Goal 1: Embody FRMS within the SMS Goal 2: Increase the awareness of fatigue related issues Goal 3: Reduce the severity of fatigue related safety reports
Indicator	Indicator 1: Implementation of FRMS within the operators' SMS Indicator 2: Measure the percentage of attendance rate for FRMS training Indicator 3: Measure the rating of fatigue reported by flight crew.
Key Milestones	The following milestones are based on the date of Steering Committee Approval (SCA) (months): <ul style="list-style-type: none">• Embodiment of an FRMS within the context of the organization's SMS SCA+12• Formalization of FRMS training syllabus for key staff SCA+12• Creation of a consistent method of measuring fatigue SCA+12
Potential Blockers	<ul style="list-style-type: none">• Lack of FRMS regulations, the historical driver for crewing limits• Adequate flight crew resources to meet potential shortfall• Current flight time limitations which may allow fatiguing duties• Only empirical method of calculating fatigue
DIP Notes	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/7	Review SOPs For Flight Crews		1	High	Difficult	P3	9	Long

Safety Enhancement Action (expanded)	Provide pilots with robust Standard Operating Procedures to increase the level of terrain awareness in tandem with aircraft systems advancement.
Statement of Work	Develop and implement SOP'd based on best industry standards to help ensure a high level of terrain awareness among pilots during all flight phases. These SOP's should take full advantage of the latest enhancements to the aircraft systems in addition to lessons learnt from CFIT incidents and accidents (evidence based).
Champion Organization	Proposed IATA
Human Resources	ETIHAD Airways , FSF ,CFIT JSIT, Manufacturers
Financial Resources	
Relation with Current Aviation Community Initiative	Pilot training and recurrent programs

Performance Goal	<p>Reduce the number of Human Performance related CFIT events thru implementation of new SOP</p> <p>Reduction in the CFIT related FDM events</p> <p>Reduction of ASR's related to CFIT</p> <p>Acceptance and implementation of common SOP by manufacturer and operators</p> <p>Categorization of Airports CFIT risk thru standardized scheme with related actions</p> <p>Implementation of RNP for all operators as standard</p> <p>Mandatory RNP approach for a particular CFIT category</p>
Indicators	
Key Milestones	<p>PLAN DEVELOPMENT</p> <ul style="list-style-type: none"> • Research of HumanFactors related to CFIT (12 Months) • Create a CFIT Index for Airports (6 Months) • Design SOP as a result of research considering CFIT Index. (12 Months) • Implement SOP thru legislation (24 Months) • Identify Constraints/Obstacles thru feedback and revise if required. (6 Months) • Monitor Policy thru regular exchange of data (Yearly)
Potential Blockers	<ol style="list-style-type: none"> 1. Operators might face restrictions if policy becomes mandatory 2. Operators may not recognise the safety enhancement benefits 3. Operators may not invest in system enhancements due to the cost factor. 4. Operators may be based in countries where the regulators do not actively enforce the implementation of CFIT related systems / policies / procedures. <p>With the continuous evolution of CFIT related aircraft systems, adequate training and SOP enhancement and monitoring is a must.</p>
DIP Notes	

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/8	Minimum Safe Altitude Warning System (MSAW)	SE09	12	Medium	Difficult	P6	8	Long

Safety Enhancement Action (expanded)	To ensure that ground-based radars and their associated by-products provide the necessary levels of terrain
Statement of Work	In an attempt to preclude future CFIT accidents, design an implementation plan to ensure that ground-based radars, their by-products (surveillance, MSAW, etc.) are adequate and provide altitude protection in all phases of flight in and around as many controlled airports as practicable including all domestically identified high risk / special airports. Also ensure that controller training and guidance in the use of MSAW is adequate, current and uniformly conducted.
Champion Organization	States, CANSO
Human Resources	ICAO, CANSO , ANSP, CAAs/Regulators
Financial Resources	

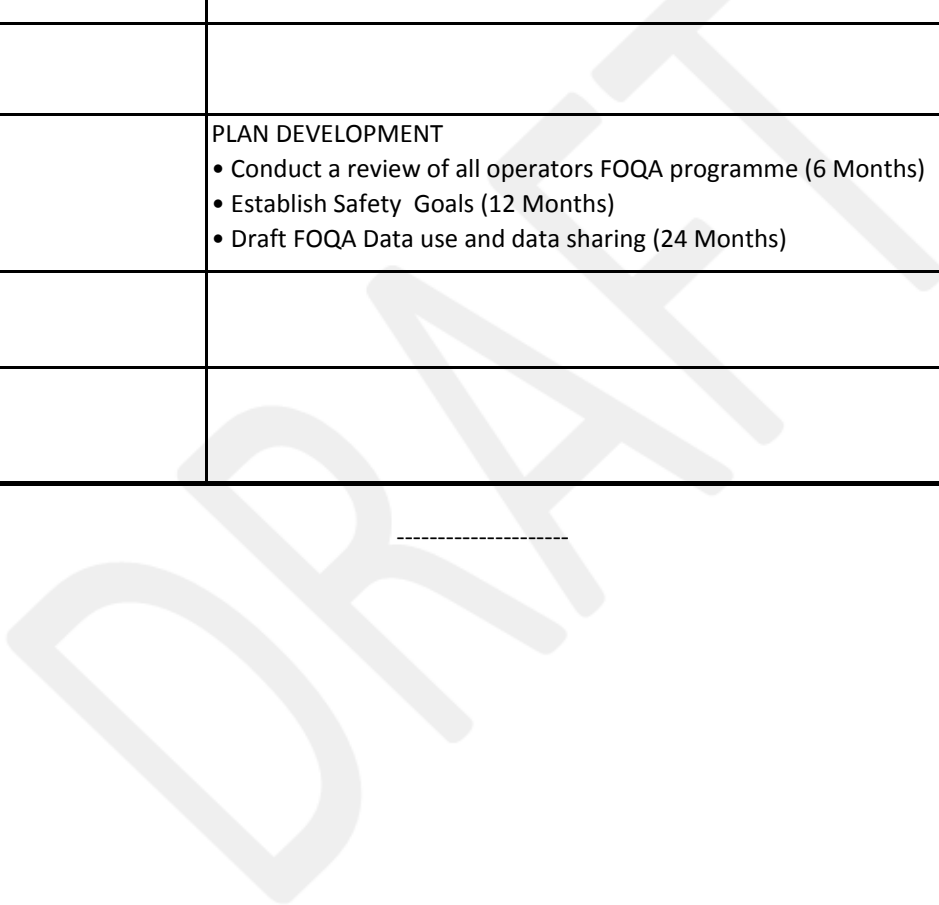
<p>Relation with Current Aviation Community Initiative</p>	<p>The current FAA Operations Support Service (AOS) / Aviation System Standards (AVN) program to streamline the process of comparing new and old NOAA Digital Terrain Maps (DTM) and flight-checking each terminal MSAW facility [every 540 days] will complement this MSAW Implementation Plan effort.</p>
<p>Performance Goal</p>	<p>Goal 1: Install MSAW function on ground-based radar in terrain critical airports. Goal 2: Provide the necessary level of MSAW training to all Air Traffic Controllers regarding MSAW operation, and usage.</p>
<p>Indicators</p>	<p>Indicator 1: Number of radar installations with MSAW functionality Indicator 2: The number of occurrences of MSAW nuisance warnings and MSAW system deactivations is either reduced to a minimum or corrected so as to ensure zero occurrences.</p>
<p>Key Milestones</p>	<p>The following milestones are based on the date of Steering Committee Approval (SCA) (months):</p> <ul style="list-style-type: none"> • Installation if MSAW functionality SCA+24 • Installation if MSAW functionality SCA+24
<p>Potential Blockers</p>	<p>Governmental budgetary allocation. Terrain mapping. Lack of ATC training and standards.</p>
<p>DIP Notes</p>	<p>Some states would need funding from international agencies such as ICAO or the UN development fund.</p>

Detailed Implementation Plan

Rast No	Safety Enhancement Action	Reference	GSI	Safety Impact	Changeability	Indicator	Priority	Time Frame
MID-RAST/CFIT/9	FOQ/FOM programs		1	High	Difficult	P3	9	Long

Safety Enhancement Action (expanded)	Give operators the tools to enable them to identify safety issues and trends, and identify and initiate corrective actions prior to an accident occurrence.
Statement of Work	Develop and implement a mutually agreed methodology to use de-identified Flight Operations and Quality Assurance (FOQA), information for the purpose of proactively identifying safety related issues and corrective actions. Key to the development and implementation of this project is to ensure that legislative, regulatory and contractual actions are taken which prevent misuse of information. Included in this development and implementation of proactive safety programs are the development of analytical tools which will enable the identification of system safety deficiencies and corrective actions.
Champion Organization	Proposed IATA
Human Resources	Operators, CAAs, FSF ,CFIT
Financial Resources	

<p>Relation with Current Aviation Community Initiative</p>	<p>A number of years ago, as US aviation industry began exploring the potential safety benefits of FOQA programs, an industry/government FOQA Task Forces were formed. In the years since its formation, the FOQA program became mandatory in almost all the Country</p>
<p>Performance Goal</p>	<p>For these Outputs to be successful in achieving the goal, Operators need to establish FOQA programs in accordance with their Safety management system. Accident and event rate continuous decrease towards the established safety goals.</p>
<p>Indicators</p>	
<p>Key Milestones</p>	<p>PLAN DEVELOPMENT</p> <ul style="list-style-type: none"> • Conduct a review of all operators FOQA programme (6 Months) • Establish Safety Goals (12 Months) • Draft FOQA Data use and data sharing (24 Months)
<p>Potential Blockers</p>	
<p>DIP Notes</p>	



MID SAFETY SUPPORT TEAM (MID-SST)

TERMS OF REFERENCE

A) Purpose of the MID-SST:

The MID-SST is established to support the RASG-MID Steering Committee (RSC) in the development, implementation and monitoring of Safety Enhancement Initiatives (SEIs) related to identified safety issues not directly linked to the agreed Focus Areas.

In order to meet its Terms of Reference, the MID-SST shall:

- 1) develop SEIs and mitigation measures through Detailed Implementation Plans (DIPs) related to safety matters, such as:
 - a) State Safety Programs (SSP) and Safety Management Systems (SMS) implementation;
 - b) Safety Oversight;
 - c) English Language Proficiency (ELP); and
 - d) Accident and Incident Investigation (AIG).
- 2) provide recommended actions through the development of DIPs for each SEI, in a prioritized manner;
- 3) monitor the implementation of DIPs and provide feedback to the RSC; and
- 4) propose input to the RSC for the development of the RASG-MID yearly work programme.

B) Composition:

The MID-SST is composed of Members designated by the following States and Partners:

States: Bahrain, Iran, Qatar, Lebanon and UAE

Partners: AACO, Boeing, COSCAP-GS, IATA and WFP.

C) Roles and Responsibilities:

- MID-SST Rapporteur – Coordinate MID-SST activities and provide overall guidance and leadership;
- ICAO– Support; and
- Partners – Provide technical expertise and collaborate in the development of material as requested by the MID-SST Rapporteur.

RASG-MID/2
Appendix 3M to the Report on Agenda Item 3

**APPROACH FOR REGIONAL COORDINATION FOR
THE PROVISION OF ACCIDENT AND INCIDENT INVESTIGATION SERVICES**

Stage A (this Stage might take up to three years):

1. Establish and approve a list of research institutions and centers, within the member states, specialized in metallurgy, electronics, human factors, flight recorders, composites, etc.
2. Establish and approve a list of investigators, along with their capabilities that other States may utilize in case of an accident.
3. Establish and approve a list of member States' national, as well as international, recognized recorders (FDR & CVR) readout and analysis centers.
4. Establish a common training program to the member States' investigators taking into consideration the continuation, advanced and specialized courses.
5. Organize and host Seminars/Workshops to address issues associated with AIG regional coordination and reach a common understanding for improving regional coordination and efforts.
6. Establish a Regional Air Safety Investigation Society similar to the International Air Safety Investigators 'ISASI' and Asian Societies of Air Safety Investigators 'AsiaSASI'.
7. At the end of this Stage all interested States will agree if there is a need to move to the next Stage.

Stage B (This Stage will be initiated in case Stage A is successfully completed):

1. Sign MOUs between and among the interested parties, for closer coordination.
2. Create a taskforce that will coordinate efforts.
3. Organize a study that will provide a better understanding of the detailed issues.
4. The financial aspects of the project should be thoroughly addressed in the study.
5. Promulgate joint regulations and publications to enable the member States utilize any of the individual member's mutual agreements with a third party State especially in activities pertinent to underwater wreckage recovery, toxicology testing, aviation pathology, etc.

6. At the end of this Stage all interested States will agree if there is a need to move to the next Stage which will be to agree to move ahead with the establishment of Regional Accident and Incident Investigation Organization(s) in the Middle East Region.

Stage C:

1. Initiate processes in accordance with Doc 9946 to establish the MID-RAIO(s).

RASG-MID/2
Appendix 3N to the Report on Agenda Item 3

**ACCIDENT AND INCIDENT INVESTIGATION
ACTIVITIES AND CAPABILITIES IN THE MID REGION**

STATE _____

Date / /

1. Please provide the contact details of the Accident Investigation focal point within your State.
2. Has the State formally designated and established an organizational structure (specific agency, commission, board or other body) for the investigation of aircraft accidents and serious incidents, supported by appropriate legislative framework?
3. Does the legislation provide for the independence of the accident investigation authority in charge of conducting aircraft accident and serious incident investigations?
4. Has the State established a process for funding the accident investigation authority to investigate accidents and serious incidents which fall into its area of responsibility?
5. Does the State have sufficient human resources to meet its national and international obligations related to aircraft accident investigations?
6. Does the State have its own appropriately qualified personnel identified and charged with aircraft accident and serious incident investigation duties?
7. How many trained accident investigators are employed by the Organisation that performs accident and incident investigation within your State?

8. Does your organisation perform necessary investigation related training?

9. Has the State/investigation authority established minimum qualifications and experience requirements for aircraft accident investigators?

10. If the State does not have its own appropriately qualified personnel, does the State have arrangements (i.e. memoranda of understanding [MOUs]) with other States or with regional organizations to obtain the necessary personnel in an expeditious manner in the event of an accident?

11. Does the investigation authority provide investigators with appropriate equipment to enable the conduct of investigations?

12. Does your organisation have the capability to download DFDRs and/or CVRs?

13. Does your organisation have any type of laboratory assisting your investigations?

14. Has the State established and implemented a mandatory incident reporting system to facilitate the collection of information on actual or potential safety deficiencies?

15. Has the State established and implemented voluntary occurrence reporting system, managed at the State level, to facilitate the collection of information that may not be captured by a mandatory incident reporting system?

16. Has the State promulgated legislation and procedures for ensuring that its voluntary occurrence reporting system is non-punitive and for ensuring protection to the sources of the information?

17. Has the State established an accident and incident database for facilitating the effective analysis of information obtained, including that from its accident and incident reporting systems?

18. Is the database created in a standardized format to facilitate data exchange (is the taxonomy compatible with ADREP/ECCAIRS)?

19. Does the State analyse the information contained in its accident/incident reports and the database to determine any preventive actions required?

20. How many occurrences have you investigated in :

2009 _____ 2010 _____

2011 _____ 2012 _____

RASG-MID/2
Appendix 30 to the Report on Agenda Item 3

**2013 RASG-MID Safety Related Events In Middle East Calendar
As of 13 November 2012**

PART A

RASG-MID EVENTS

<i>January 2013</i>				
Dates	Organizers	Activity	Location	Target Attendance
27-28	COSCAP-GS	ICAO requirements in terms of USOAP finding follow and CMA	Dubai	MID States Department Managers and technical staff (Airworthiness, OPS, PEL)
<i>February 2013</i>				
10-14	COSCAP-GS	3 days Workshop on SMS implementation & 2 days OJT	Dubai	MID States Department Managers and technical staff (Airworthiness, OPS, PEL)
25-27	SST Oman	Safety Management Workshop (will be combined with IATA/ICAO/CANSO Safety culture and SMS on 21 March 2013)	Muscat	MID States and Industry
<i>March 2013</i>				
4-6	RSC	ASRT, RAST and RSC limited meetings	Amman	
10-14	COSCAP-GS	5 days training on PBN/RNP requirements and approval procedures	TBC	MID States CAA and Industry
18-20 TBC	COSCAP-GS/BOEING	Aging Aircraft Seminar	Dubai	MID States CAA and Industry
21	IATA/ICAO/CANSO	Safety Culture and SMS	TBC	MID States and Industry
24-26	ICAO/ COSCAP-GS	ICAO Airworthiness Manual	Dubai	MID States CAA and Industry

April 2013				
21-23 (3 days)	COSCAP-GS in cooperation with AIRBUS	Maintenance Program (Reliability Program) MMEL/MEL Review /Approval	Dubai	MID States CAA and Industry
5days TBC	WFP	Safety Awareness Campaign : 1. SMS full course; 2. SSP full course; and 3. Runway Incursion , Runway Excursion COSCAP Trainings	Dubai	MID States, Airlines, Airports, Authorities
28- 1 May TBC	RASG-MID	Annual MID Safety Summit	TBC	All RASG-MID Stakeholders
May 2013				
5-14 (8 days TBC)	FAA/EC/ICAO COSCAP-GS	Inspectors Training System (ITS)	Dubai	MID States –CAA inspectors
2 days TBC	RAST RGS	Runway Safety Seminar Workshop on wildlife/FOD management	TBD	
June 2013				
3-5 (TBC)	ICAO	RSC/2 Meeting	Cairo	
July 2013				
August 2013				

<i>September 2013</i>				
2 Days TBC	WFP	LOC Training	UAE	MID Airlines, Airports, Authorities
<i>October 2013</i>				
<i>November 2013</i>				
11-13 (TBC)	ICAO	RASG-MID/3 Meeting	TBD	
<i>December 2013</i>				

PART B
OTHER EVENTS IN THE REGION

<i>January 2013</i>				
Dates	Organizers	Activity	Location	Target Attendance
2 days	WFP	Aviation Security	Sudan	Regulators, Industry
13-14	COSCAP-GS	Workshop on CAA Training Manual (comments and approval by the States)	Dubai	COSCAP-GS member States (extension to GCC members)
20-21	Dubai Civil Aviation Authority	Aviation Safety Culture	Dubai	
<i>February 2013</i>				
18-21 (4 days)	COSCAP-GS	Regulator Audit techniques	Kuwait	Bahrain CAA
24-25	COSCAP-GS	Workshop on Airworthiness guidance material (including new Airworthiness Handbook)	Dubai	COSCAP-GS member States (extension to GCC members)
<i>March 2013</i>				
<i>April 2013</i>				
3 days TBC	COSCAP/EASA	Basic Training Course on EASA regulations OPS/PEL; Member States regulations and procedures (compared to EASA regulations structure).	Dubai	
15-17 TBC	ICAO	DGCA-MID/2 Meeting	Jeddah, Saudi Arabia	
<i>May 2013</i>				

<i>June 2013</i>				
3 days TBC	COSCAP/EASA	Basic Training Course on EASA Regulations OPS/PEL; and Member States regulations and procedures (compared to EASA regulations structure).	Dubai	
<i>July 2013</i>				
<i>August 2013</i>				
<i>September 2013</i>				
3 days TBC	COSCAP/EASA	Basic Training Course Parts 2111451661147. EASA regulations; and Member States regulations and procedures (compared to EASA regulations structure).	TBC	
<i>October 2013</i>				
<i>November 2013</i>				
<i>December 2013</i>				
15-19 (TBC)	ICAO	MIDANPIRG/14 Meeting	Jeddah	

RASG-MID/2
Report on Agenda Item 4

REPORT ON AGENDA ITEM 4: RASG-MID WORKING ARRANGEMENTS

4.1 The meeting recalled that the RSC was also established by the RASG-MID/1 Meeting, through Decision 1/2. The meeting reviewed and endorsed the RSC Terms of Reference (TOR) as updated by the RSC/1 Meeting as at **Appendix 4A** to the Report on Agenda Item 4. Accordingly, the meeting agreed to the following Decision:

DECISION 2/9: RSC TERMS OF REFERENCE

*That, the RSC Terms of Reference be updated as at **Appendix 4A** to the Report on Agenda Item 4.*

4.2 The meeting recalled that the MID-ASRT was established by the RASG-MID/1 Meeting, through Decision 1/3. The meeting reviewed and endorsed the MID-ASRT TOR as updated by the RSC/1 Meeting as at **Appendix 4B** to the Report on Agenda Item 4. Accordingly, the meeting agreed to the following Decision:

DECISION 2/10: MID-ASRT TERMS OF REFERENCE

*That, the MID-ASRT Terms of Reference be updated as at **Appendix 4B** to the Report on Agenda Item 4.*

4.3 The meeting recalled also that as part of the RASG-MID working arrangements, the MID-RAST was established.

4.4 Based on the above, the meeting noted that an updated RASG-MID Organizational Structure has been included in the revised RASG-MID Procedural Handbook at **Appendix 4C** to the Report on Agenda Item 4, which includes also the updated RSC TOR.

4.5 The meeting noted that based on the outcome of the RSC/1 Meeting (para. 4.24) the ICAO MID Regional Office issued State Letter Ref.: AN 11/21.1-12/196 dated 1 July 2012 inviting States and partners to designate Focal Points for the different RASG-MID Subsidiary bodies. Accordingly, the meeting reviewed and updated the list of designated MID-ASRT and MID-RAST Focal Points at **Appendix 4D** to the Report on Agenda Item 4, and urged those States and stakeholders that have not yet done so, to provide the contact details of their designated Focal Points to the ICAO MID Office before **31 December 2012**.

RASG-MID/2
Appendix 4A to the Report on Agenda Item 4

RASG-MID STEERING COMMITTEE (RSC)

TERMS OF REFERENCE

A) Purpose of the RSC:

The RSC is established to act as an advisory body to the RASG-MID, guide its work and ensure that safety initiatives are accomplished in a timely, effective and efficient manner.

In order to meet its Terms of Reference, the RSC shall:

- 1) assess work that has already been done under existing regional safety initiatives;
- 2) identify short and medium term regional safety priorities and initiatives;
- 3) coordinate the activities of the RASG-MID and all GASP/GASR safety related initiatives and adjust strategy as necessary;
- 4) undertake any action required to ensure that the RASG-MID achieves its objective to reduce aviation risks and minimize or avoid duplication of efforts in the MID Region;
- 5) provide regular safety environment assessments to the RASG-MID;
- 6) coordinate establishment of the Regional Aviation Safety Teams (RASTs) that need to be established to address these initiatives, provided that:
 - i. the RSC completes an analysis of the identified key risk areas against work that has already been done in the region to ensure harmonization and avoid duplication;
 - ii. the RSC assumes the role of maintaining accountability for the established Teams ensuring that they meet their deliverables; and
 - iii. all aviation stakeholders, including Industry and International Organizations, have an active participation in the established Teams.
- 7) monitor the progress of work and provide guidance to the established RASTs; and
- 8) propose the RASG-MID work programme.

B) Composition:

The RSC is to be composed of:

- a) The RSC Co-Chairpersons.
- b) RASG-MID Chairperson and Vice-Chairpersons.
- c) RASG-MID Secretary (supported by appropriate Experts from the ICAO MID Regional Office and ICAO HQ, as required).
- d) RASG-MID Members/Alternates from the following States:
 - Bahrain;
 - Egypt;
 - Jordan;
 - Iran;
 - Oman;
 - Qatar;
 - Saudi Arabia; and
 - UAE

e) RASG-MID Representatives/Alternates from the following Partners:

- AACO Arab Air Carrier Organization;
- ACAC Arab Civil Aviation Commission;
- ACI Airports Council International;
- BOEING Boeing Commercial Airplane Company;
- COSCAP-GS Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States;
- FAA-USA Federal Aviation Administration – United States of America;
- FSF Flight Safety Foundation;
- IATA International Air Transport Association;
- IFALPA International Federation of Airline Pilots Association;
- MEASR-TLST Middle East Aviation Safety Roadmap - Top Level Safety Team; and
- WFP (UN) World Food Programme (United Nations).

Note: The composition of the RSC might be updated over time to include only Member States and Partners that could participate actively in the RSC and contribute to its work.

C) Frequency of meetings:

- at least one meeting per year (between RASG-MID meetings); and
- teleconferences as required.

D) Roles and Responsibilities:

- ICAO MID Regional Office – Secretariat;
- ICAO HQ – Support; and
- Partners – Commit resources, provide technical expertise and collaborate in RASG-MID initiatives.

RASG-MID/2
Appendix 4B to the Report on Agenda Item 4

MID ANNUAL SAFETY REPORT TEAM (MID-ASRT)

TERMS OF REFERENCE

A) Purpose of the MID-ASRT:

The MID-ASRT is established to:

- 1) gather safety information from different available sources to determine the main aviation safety risks in the Middle East Region;
- 2) organize the Annual Safety Report in three main Sections, one for each safety information category:
 - a) Reactive Information;
 - b) Proactive Information; and
 - c) Predictive Information.
- 3) based on the risk areas identified in the annual report, make recommendations to the RASG-MID for safety enhancement initiatives; and
- 4) prepare a draft progress report to the ANC based on the Annual Safety Report, the safety enhancement initiatives and detailed implementation plans.

B) Composition:

The MID-ASRT is composed of Members designated by the following States and Partners:

States: Bahrain, Egypt, Kuwait, Saudi Arabia and UAE

Partners: AACO, Boeing, COSCAP-GS, IATA, MEASR-TLST and WFP.

C) Roles and Responsibilities:

- MID-RAST Rapporteur – Coordinate MID-ASRT activities and provide overall guidance and leadership;
- ICAO – Support; and
- Partners – Provide technical expertise and collaborate in the development of material as requested by the MID-ASRT Rapporteur.

INTERNATIONAL CIVIL AVIATION ORGANIZATION



REGIONAL AVIATION SAFETY GROUP – MIDDLE EAST (RASG-MID)

PROCEDURAL HANDBOOK

SECOND EDITION – NOVEMBER 2012

RASG-MID PROCEDURAL HANDBOOK - GENERAL

INTRODUCTION

FOREWORD

1.1 The Regional Aviation Safety Group-Middle East (RASG-MID) Procedural Handbook is a publication prepared by the ICAO Secretariat and adopted by the RASG-MID. Its purpose is to provide, for easy reference, a consolidation of material, particularly of a procedural nature, about the work of the RASG-MID. It contains the Terms of Reference (TOR) of the Group, the working arrangements and other internal procedures and practices governing the conduct of business.

1.2 The Handbook has a series of loose-leaf pages, organised in Section headings. A Table of Contents is provided which serves also as a subject index and as a checklist for the current pages.

1.3 Replacement pages and/or updated editions will be issued as necessary. Additional material will be incorporated in the existing Sections or will be the subject of new Sections, as required.

1.4 The Procedural Handbook will be distributed to Members and Observers of the Group, the ICAO Secretariat, and to other States, international organizations and stakeholders participating in meetings, contributing to, or having interest in the work of the Group and/or its Contributory Bodies.

1.5 An electronic copy of the Procedural Handbook will also be available in PDF format, on the ICAO Middle East Regional Office website: <http://www.icao.int/mid> under RASG-MID.

RASG-MID PROCEDURAL HANDBOOK

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1. BACKGROUND

1.1. On 6 October 2009, the ICAO Air Navigation Commission reviewed a proposal for the establishment of Regional Aviation Safety Groups (RASGs) and decided that the concept of RASGs be transmitted to States and appropriate international organizations for comments before a recommendation was made to the Council. It was highlighted during the discussions that the proposal for RASGs would not fundamentally change the efforts that are presently underway in several ICAO regions. A State letter dated 16 December 2009 sought comments from States and selected international organizations on the need for uniform establishment of RASGs in all regions, and provided suggested terms of reference and work programme of the RASGs. The comments by States were very supportive of the establishment of RASGs. Consequently, the ICAO Council at the fourth meeting of its 190th Session held on 25 May 2010:

- a) approved the establishment of the following RASGs: RASG-MID for the Caribbean, South American, and North American regions (including Central America); RASG-EUR for the European region; RASG-APAC for the Asia Pacific regions; RASG-AFI for the African region and RASG-MID for the Middle East region, with the aim of supporting a regional performance framework for the management of safety;
- b) agreed to the terms of reference of the RASGs as detailed in the Appendix to the paper;
- c) agreed that the report of RASG meetings, similar to reports of planning and implementation regional groups (PIRGs), would be reviewed by the ANC on a regular basis and by the Council as deemed necessary;
- d) approved the inclusion of the sentence “coordinate with respective RASG on safety issues” in the terms of reference of all PIRGs, viz APANPIRG, APIRG, EANPG, GREPECAS, MIDANPIRG and NAT SPG; and
- e) requested the ANC to report to the Council any duplication in the activities of the PIRGs and the RASGs.

1.2. The main purpose of the Regional Aviation Safety Group–Middle East (RASG-MID) would be to develop an integrated, data-driven strategy and implement a work programme that supports a regional performance framework for the management of safety. This approach is designed to reduce the commercial aviation fatality risk in the MID region and promote States and industry safety initiatives in harmony with the ICAO Global Aviation Safety Plan (GASP) and Global Aviation safety Roadmap (GASR).

1.3. Further, the 37 Session of the ICAO General Assembly, Montreal 28 September to 8 October 2010 agreed to Assembly Resolution A37-4.

Quote from Assembly Resolution **A37-4: ICAO global planning for safety:**

Recognized that safety is a shared responsibility involving ICAO, Contracting States and all other stakeholders;

Recognized that regional aviation safety groups should be implemented by ICAO, taking into account the needs of the various regions and building on the already existing structures and forms of cooperation;

Stressed the need for continuous improvement of aviation safety through a reduction in the number of accidents and related fatalities in air transport operations in all parts of the world, particularly in States where safety records are significantly worse than the worldwide average;

Urged Contracting States, regional safety oversight organizations and international organizations concerned to work with all stakeholders to implement the GASP objectives and GASR methodology objectives and to implement these methodologies to reduce the number and rate of aircraft accidents.

2. TERMS OF REFERENCE

2.1 MEMBERSHIP

2.1.1 Contracting States entitled to participate as members in the RASG-MID meetings are those whose territories or dependencies are located partially or wholly within the area of accreditation of the ICAO Middle East Regional Office; i.e.: Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen.

2.1.2 Other Contracting States and non-Contracting States are entitled to participate in RASG-MID meetings as observers. The aircraft operators, international organizations, maintenance and repair organizations, regional and sub-regional organizations, training organizations, aircraft manufactures, airport and air navigation service providers and any other allied organizations/representatives will be invited to attend the RASG-MID meetings in the capacity of observers.

2.1.3 The following stakeholders are the permanent Observers to RASG-MID:

AACO	Arab Air Carrier Organization
ACAC	Arab Civil Aviation Commission
ACI	Airports Council International
AIRBUS	Airbus Aircraft Manufacturer
BOEING	Boeing Commercial Airplane Company
CANSO	Civil Air Navigation Services Organization
COSCAP-GS	Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States
EASA	European Aviation Safety Agency
Embraer	Embraer Aviation International
FAA-USA	Federal Aviation Authority – United States of America
FSF	Flight Safety Foundation
IACA	International Air Carrier Association
IATA	International Air Transport Association
IBAC/MEBAA	International Business Aviation Council/ Middle East Business Aviation Association
IFALPA	International Federation of Airline Pilots Association
IFATCA	International Federation of Air Traffic Controllers Association
MEASR-TLST	Middle East Aviation Safety Roadmap - Top Level Safety Team
WFP (UN)	World Food Programme (United Nations)

2.1.4 The members and observers will serve as partners of RASG-MID and their joint commitment is fundamental for success in improving aviation safety worldwide.

2.2 THE TERMS OF REFERENCE OF THE GROUP ARE:

- a) to support the implementation of the Global Aviation Safety Plan (GASP) and the associated Global Aviation Safety Roadmap (GASR) in the MID Region by ensuring effective coordination and cooperation between all stakeholders and monitoring progress in the implementation of the GASP and GASR; and
- b) to support the establishment and operation of a performance-based safety system for the Region, using the GASP and GASR, and building on the work already done by States and regional organizations.

2.3 IN ORDER TO MEET THE TERMS OF REFERENCE, THE GROUP SHALL:

- a) analyze safety information and hazards to civil aviation at the regional level and review the action plans developed within the region to address identified hazards;
- b) facilitate the sharing of safety information and experiences among all stakeholders;
- c) ensure that all safety activities at the regional and sub-regional level are properly coordinated to avoid duplication of efforts;
- d) reduce duplication of efforts by encouraging collaboration, cooperation and resource sharing;
- e) conduct follow-up to GASP/GASR activities as required;
- f) coordinate with MIDANPIRG on safety issues; and
- g) provide feedback to ICAO to continually improve and ensure an up-to-date global safety framework.

3. WORKING ARRANGEMENTS

3.1. Relations with States

3.1.1 States located geographically in the MID Region and States having aircraft on their register, which operate in the MID Region, shall be kept fully informed of activities of the RASG-MID. To achieve this objective, States should receive, on a regular basis:

- a) the proposed agenda for meetings of the Group;
- b) the reports on meetings of the Group; and, as appropriate; and
- c) the summaries or reports on meetings of its contributory bodies.

3.1.2 States should ensure necessary co-ordination and follow-up of the Group's activities within their Administrations.

3.1.3 The Group may obtain information from MID provider States on specific questions and offer them advice in the form of specific proposals for action.

3.2 Relations with other Bodies and Organizations

3.2.1 The Group shall keep itself informed of the activities of other aviation bodies and organizations to the extent that such activities are likely to be of interest to the Group.

3.2.2 When necessary, the Group shall provide information and advice to such bodies and organizations, if this is required, in order to:

- a) avoid duplication of studies and/or effort; and
- b) engage their assistance in matters which, while having a bearing on aviation safety, are outside the competence of ICAO and/or the terms of reference of the RASG-MID.

3.3 Administration of the Group

3.3.1 The RASG-MID shall be administered as follows:

- a) by a Chairperson elected from the Representatives designated by **Member States** of the Group. A First Vice-Chairperson shall also be elected from the said Representatives; and a Second Vice-Chairperson shall be elected from the **partners**.
- b) by the ICAO Regional Director, Cairo who serves as Secretary. In the execution of his duties the Secretary will be supported by appropriate Experts from the ICAO MID Regional Office and ICAO HQ, as required.

3.3.2 The Chairperson, in close co-operation with the Secretary, shall make all necessary arrangements for the most efficient working of the Group. The Group shall at all times work with a minimum of formality and paper work (paperless meetings).

3.3.3 Between meetings of the Group, some subjects may be dealt with by correspondence and/or teleconferencing among appointed Representatives through the ICAO MID Regional Office.

3.4 Meetings of the Group

3.4.1 Based on the advice of the Members of the Group and of the Secretary, the Chairperson shall decide on the date and duration of meetings of the Group.

3.4.2 Meetings shall normally be convened at the location of the ICAO Regional Office in Cairo, Egypt. If a State offers to host a meeting, it shall coordinate with the Secretary of the Group as early as possible, but in any case at least six (06) months in advance and, shall be responsible for providing a venue, services and all costs of travel, accommodation and subsistence allowance for Secretariat attendees.

3.5 RASG-MID Steering Committee (RSC)

3.5.1 A RASG-MID Steering Committee (RSC) composed of representatives from States, international/regional organizations and industry is established to act as an advisory body to the RASG-MID, guide its work and ensure that safety initiatives are accomplished in a timely, effective and efficient manner. To this end, the RSC shall:

- a) assess work that has already been done under existing regional safety initiatives;
- b) identify short and medium term regional safety priorities and initiatives;
- c) coordinate the activities of the RASG-MID and all GASP/GASR safety related initiatives and adjust strategy as necessary;
- d) undertake any action required to ensure that the RASG-MID achieves its objective to reduce aviation risks and minimize or avoid duplication of efforts in the MID Region;
- e) provide regular safety environment assessments to the RASG-MID;
- f) coordinate establishment of the Regional Aviation Safety Teams (RASTs) that need to be established to address these initiatives, provided that:
 - i. the RSC completes an analysis of the identified key risk areas against work that has already been done in the region to ensure harmonization and avoid duplication;
 - ii. the RSC assumes the role of maintaining accountability for the established Teams ensuring that they meet their deliverables; and
 - iii. all aviation stakeholders, including Industry and International Organizations, have an active participation in the established Teams.
- g) monitor the progress of work and provide guidance to the established RASTs; and
- h) propose the RASG-MID work programme.

RASG-MID Steering Committee (RSC) Membership

3.5.2 The RASG-MID Steering Committee (RSC) is composed of:

- a) The RSC Co-Chairpersons;
- b) RASG-MID Chairperson and Vice-Chairpersons;
- c) RASG-MID Secretary (supported by appropriate Experts from the ICAO MID Regional Office and ICAO HQ, as required);

d) RASG-MID Members/Alternates from the following States:

- Bahrain;
- Egypt;
- Jordan;
- Iran;
- Oman;
- Qatar;
- Saudi Arabia; and
- UAE

e) RASG-MID Representatives/Alternates from the following Partners:

- AACO Arab Air Carrier Organization;
- ACAC Arab Civil Aviation Commission;
- ACI Airports Council International;
- BOEING Boeing Commercial Airplane Company;
- COSCAP-GS Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States;
- FSF Flight Safety Foundation;
- IATA International Air Transport Association;
- IFALPA International Federation of Airline Pilots Association;
- MEASR-TLST Middle East Aviation Safety Roadmap - Top Level Safety Team; and
- WFP (UN) World Food Programme (United Nations).

Note: The composition of the RSC might be updated over time to include only Member States and Partners that could participate actively in the RSC and contribute to its work.

3.5.3 The RASG-MID Steering Committee (RSC) Co-Chairpersons will be elected as follows:

- One Co-Chairperson from member States; and
- One Co-Chairperson from an RSC International Organization/Industry (Partners).

Note: An Alternate should be elected from the member States and another Alternate from the Partners, in order to replace the Co-Chairperson(s), in case of absence.

3.6 Establishment of subsidiary bodies

3.6.1 To assist in its work and support the development, implementation and prioritization of RASG-MID safety initiatives, the Group may create subsidiary bodies (Safety Teams) charged with preparatory work on specific subjects requiring expert advice for their resolution.

3.6.2 The Safety Teams will operate in coordination with and under the guidance of the RSC. They should accomplish their tasks by developing mitigation strategies based on gathering and processing safety data and information. These mitigation strategies shall be focused on the Global Aviation Safety Plan (GASP), corresponding Global Safety Initiatives (GSIs) and associated Global Aviation Safety Roadmap (GASR).

3.6.3 Participation in Safety Teams should be by specialists in the subjects under consideration. Such specialists should have relevant experience in the field concerned.

3.6.4 Secretaries of Safety Teams established by the Group will be appointed by the Secretary of the Group.

3.6.5 The duration of Safety Teams activities will be established by the RSC.

3.7 Reporting lines

3.7.1 The reports of the RASG-MID meetings, similar to reports of planning and implementation regional groups (PIRGs), would be reviewed by the ANC on a regular basis and by the Council as deemed necessary.

4. PROCEDURE FOR THE CONDUCT OF MEETINGS OF THE RASG-MID

4.1. General

4.1.1 The RASG-MID shall at all times work with a minimum of formality and paper work (paperless meetings). To achieve this aim, the rules of procedure for the conduct of meetings should be as flexible and simple as possible. The Group is expected to conduct its business by consensus of all interested parties. The following provisions do not include therefore any procedures for handling motions or voting.

4.1.2 Reports on meetings should not include formal Statements by members or other participants. However, specific divergent views expressed in relation to decisions taken or conclusions reached shall be recorded as an integral part of the report.

4.2 Convening of meetings

4.2.1 At each of its meetings the Group should endeavour to agree on the date, duration and venue of its next meeting.

Note: The convening of at least one meeting every 12 months would generally suffice. However, for the interest of safety in order to safeguard the development and implementation of coherent and orderly safety initiatives/actions, in the interest of States and airspace users in the MID Region, the Group may determine the need for any additional meeting that may arise.

4.2.2 A convening letter for a meeting shall be issued by the Secretary of the Group, normally 90 days prior to the meeting. The convening letter should include the agenda, together with explanatory notes prepared by the Secretary in order to assist participants in preparing for the meeting.

4.3 Establishment of the Agenda

4.3.1 The Secretary, in consultation with the Chairperson of the RASG-MID shall establish a draft agenda on the basis of the work programme adopted and the documentation available.

4.3.2 At the opening of the meeting any State, international/regional organization or a stakeholder may propose the inclusion of additional items on the agenda, and this shall be accepted if the majority of States attending the meeting so agree.

4.4 Languages

4.4.1 The language of the meetings of the RASG-MID and its subsidiary bodies (Safety Teams) shall be English.

4.4.2 The reports on meetings and supporting documentation for meetings of the Group and its subsidiary bodies (Safety Teams) will be prepared in English.

4.5 Officers and Secretariat of the RASG-MID

4.5.1 In order to ensure the necessary continuity in the work of the Group and unless otherwise determined by special circumstances, the Chairperson, the First Vice-Chairperson and Second Vice-Chairperson of the Group should assume their functions at the end of the meeting at which they are elected and serve for three cycles unless otherwise re-elected, in that case the term would be limited to one additional cycle only.

4.5.2 States designated as Members of the Group may at any time request that the election of the Chairperson and/or Vice-Chairpersons be included on the agenda.

4.5.3 The Secretary of the Group who is the ICAO Regional Director, Cairo will also serve as Secretary of the meetings. He will be assisted by Experts from the ICAO Regional Office and ICAO HQ, as required.

4.6 Roles and Responsibilities

Chairperson(s)

4.6.1 The Chairperson will:

1. call for RASG-MID meetings;
2. chair the RASG-MID meetings;
3. keep focus on high priority items;
4. ensure agendas meet objectives to improve safety;
5. provide leadership for ongoing projects and accomplishments;
6. promote consensus among the group members;
7. coordinate RASG-MID activities closely with the Secretariat and follow-up meeting outcomes and actions; and
8. promote RASG-MID and lobby for contributors.

Secretariat

4.6.2 The Secretariat will support the Chairperson by providing administrative, coordination and technical support to the RASG-MID. In particular, The Secretariat will:

1. coordinate meeting logistics with meeting host(s);
2. develop meeting agendas;
3. ensure meeting agendas, documentation and summaries are provided to members;
4. ensure meeting summaries, notices, and related documents are posted in a timely manner on the RASG-MID section of the ICAO MID Regional Office website;
5. track, monitor and facilitate action items and report status to the Group;
6. ensure alignment of RASG-MID activities with the GASP/GASR;

7. maintain communication with the Co-Chairs, and RASG-MID members;
8. identify required administrative support; and
9. manage the RASG-MID work programme.

Members:

4.6.3 Representatives of States designated as Members of the Group shall assume the duties and responsibilities of ensuring the normal conduct of business of the Group. Members should attend regularly all the meetings of the Group and maintain the continuity of the Group's work in the interval between meetings. This may take the form of assignment of specific tasks to selected individual Members.

4.6.4 Representatives of international/regional organizations and industry (partners) should participate actively in the meetings of the Group activity, provide technical expertise and collaborate in RASG-MID initiatives.

Note: a) Each RASG-MID member State should designate a Member, an Alternate and Adviser(s); and each Partner should designate a Representative and an Alternate, able to support RASG-MID goals and objectives. If designated representation changes, any proposed replacement must be submitted to the RASG-MID Secretary.

4.6.5 RASG-MID members/partners will:

- a) come to the RASG-MID meetings prepared, and provide active support by deliberating and identifying issues;
- b) support goals and objectives by maintaining timely and active communication between administration/organization represented and RASG-MID; and
- c) share safety improvements with RASG-MID members.

Non-Member Participant and Guest Observers:

4.6.6 Non-Member Participant: Individual(s) who would be invited at the discretion of the RASG-MID Secretary, in collaboration with the Chairperson, to participate in RASG-MID activities and meetings, without voting authority, to enhance the quality and effectiveness of RASG-MID.

4.6.7 Guest Observer: An individual or group who is invited at the discretion of the RASG-MID Secretary, in collaboration with the Chairperson, to strictly observe a RASG-MID meeting or activity.

4.7 Supporting documentation

4.7.1 Documentation for meetings of the RASG-MID should be prepared by the Secretariat, States designated as Members of the Group and the Permanent Observers of the Group.

4.7.2 Supporting documentation shall be presented in the form of:

- a) Discussion Papers: are papers prepared on an ad hoc basis in the course of a meeting with the purpose of assisting participants in their discussions on a specific matter or in the development of conclusions for the draft report of the meeting.

- b) Information Papers: are papers prepared on an ad hoc basis in the course of a meeting with the purpose of assisting participants in their discussions on a specific matter or in the development of conclusions for the draft report of the meeting.
- c) Working Papers: constitute the main basis of the discussions on the various items on the agenda.
- d) PowerPoint Presentations: may be delivered to support the above in a, b and c; also to add additional information and knowledge of certain important issue(s).

4.7.3 Working Papers shall be presented in a standardized format. Each paper should be limited to one agenda item or sub-item and contain, as appropriate, introduction of the matter, brief discussion and conclusions with specific proposals for action.

4.8 Conclusions and Decisions of the Meetings

4.8.1 Action taken by the Group shall be recorded in the form of:

- a) Conclusions; and
- b) Decisions.

4.8.2 Each Conclusion and Decision formulated by the Group should respond clearly to the following four questions (4-Ws):

Why	Why this Conclusion or Decision is needed (subject)
What	What action is required (State Letter, survey, proposal for amendment, seminar, etc)
Who	Who is the responsible of the required action (ICAO, States, etc)
When	Target date

4.8.3 Conclusions deal with matters which, in accordance with the Group's terms of reference, merit directly the attention of States, or on which further action is required to be initiated by the Secretary in accordance with established procedures.

4.8.4 Decisions relate to the internal working arrangements of the Group and its subsidiary bodies.

4.9 Conduct of business

4.9.1 The meetings of the RASG-MID shall be conducted by the Chairperson or, in his absence, by the First or Second Vice-Chairperson of the Group, in that order.

4.9.2 At the first sitting of each meeting, following the opening by the Chairperson, the Secretary shall inform participants of the arrangements made for the conduct of the meeting, its organization and of the documentation available for consideration of the different items on the agenda.

4.9.3 The Group shall at each of its meetings review its previous meeting outstanding Conclusions/Decisions and Action Plan in order to keep them current and their number at a minimum consistent with the progress achieved in implementation.

4.10 Reports

4.10.1 Reports on meetings shall be of a simple layout and as concise as possible and shall include:

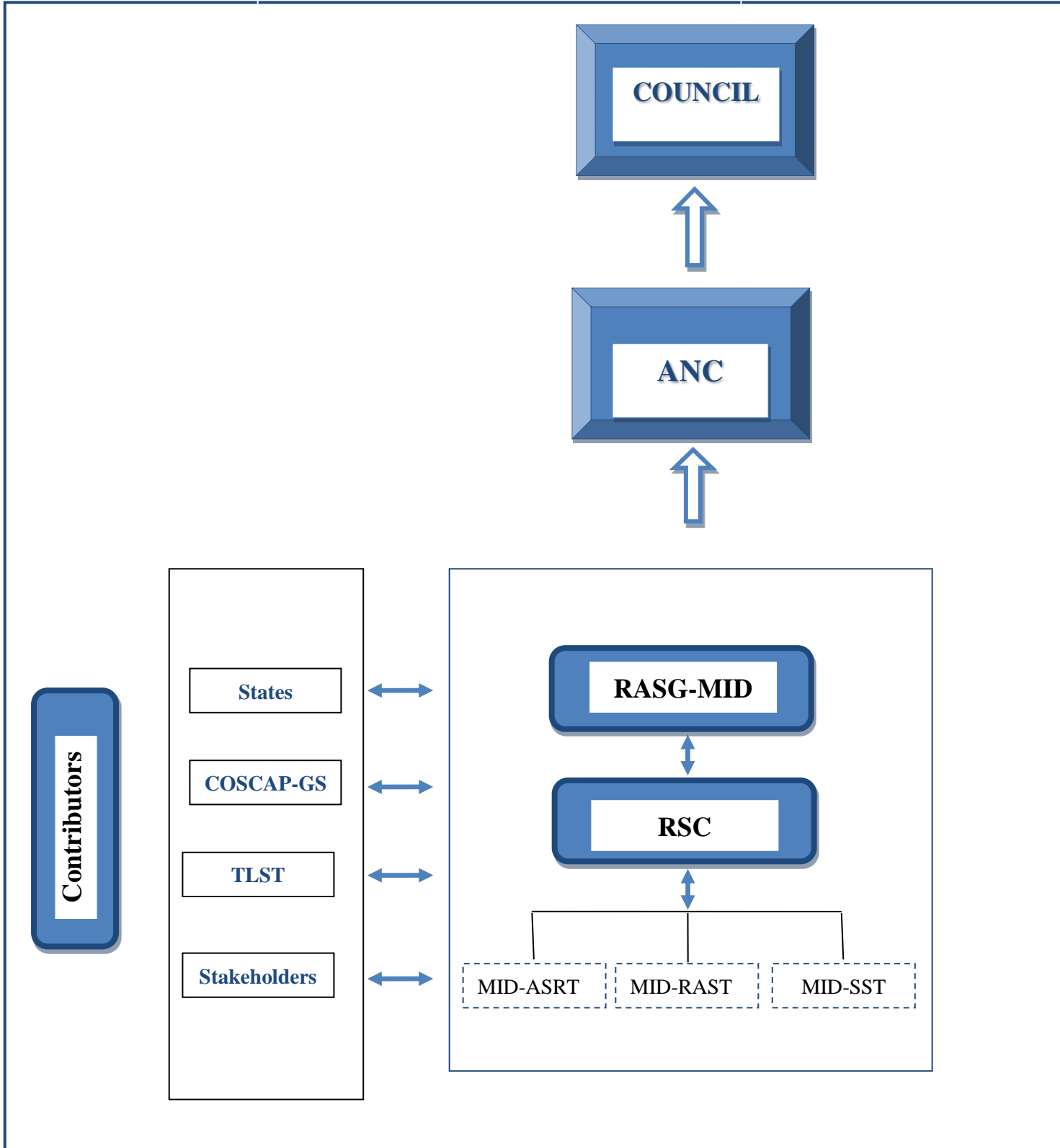
- a) a brief history of the meeting (duration, attendance, agenda and list of Conclusions and Decisions);
- b) a summary of the discussions by the Group on the different items of the agenda including, for each of them, the relevant Conclusions and/or Decisions; and
- c) the work programme and future action by the Group.

4.10.2 A draft report in English will be prepared by the Secretariat for approval by the Group before the closing of each meeting.

4.10.3 The report shall be posted on the ICAO MID website and also be circulated, to all Member States, to Permanent Observers and concerned stakeholders.

5. RASG-MID ORGANIZATIONAL STRUCTURE

RASG-MID ORGANIZATIONAL STRUCTURE



RASG-MID/2
Appendix 4D to the Report on Agenda Item 4

LIST OF DESIGNATED MID-ASRT FOCAL POINTS

States/Organization	Focal Points Names & Titles	Focal Points Contacts	Remarks
Iran	Mr. Mehdi Aliasgari Director General of Safety & AIG Department	Fax: +98 21 66018659 Tel: +98 21 61022119 E-mail: m-aliasgari@cao.ir	
	Mr. Shahin Jafari		
Jordan	Eng. Saleh Alamoush Director Airports Safety and Standards	Tel/Fax: 962 6 4897483 Mobile: 962 7 77934030 Email: dairstand@carc.gov.jo	
Oman	Eng Nasser Hamdan Al-Kindy Director of ANS Department	Fax: 968 24519707 Tel: 968 24519277/968 99358805 Email: n.alkindy@caa.gov.om	
Qatar	Mr. Preben Jensen Senior ANS Inspector/Safety Coordinator	Fax: 974 44654761 Tel: 974 44557206 Mobile: 974 55936942 Email: preben.jensen@caa.gov.qa	
UAE	Captain Saeed Ur Rahman Manager Safety Risk Specialist	Tel: 971 4 2111 569 Email: saeedr@gcaa.gov.ae	
AACO	Mr. Rashad Karaky, MBA, AVSEC PM Manager – Economics & Technology Management Beirut - LEBANON	Fax: 961 1863 168 Tel: 961 1861 297/8/9 Ext. 5 Mobile: 961 3 163318 Email: rkaraky@aaco.org etm@aaco.org	

BOEING	Mr. Chamsou Deen Andjorin, Director Aviation Safety Middle East and Africa	Tel: 971561741500 E-mail: chamsou.d.andjorin@boeing.com	RSC Co-Chair
COSCAP-GS	Mrs. Nadia Konzali Project Coordinator Airworthiness Expert COSCAP-GS-ICAO-TCB GCAA, UAE	Tel: 971 2 4054267 Mobile : 971 50 3281510 E-mail : nadia.konzali@coscap-icao.org	
IFALPA	Capt. Rola Hoteit Regional Vice President Middle East	Tel: 961 1811899 Mobile: 9613707320 Email: farolk@hotmail.com	
IATA	Ms. Ruby Sayyed Assistant Director SO&I	Tel: 9626 580 4254 Mob: 962 799 444 252 Email: sayyedr@iata.org	MID-ASRT Rapporteur
	Mr. Patrick Muller Executive Vice President	Tel: 974 446 26 000 Mobile: 974 55 78 081 Email: pmuller@qatarairways.com.qa	<i>MID-ASRT Member (Doha International Airport)</i>
	Captain R. Dharamraj Senior Manager Safety, Quality & Standards	Tel: 974 44629707 Mob: 974 5554 9854 Email: smsqs@qatarairways.com.qa	<i>MID-ASRT (Qatar Airways)</i>

LIST OF DESIGNATED MID-RAST FOCAL POINTS

States/Organization	Focal Points Names & Titles	Focal Points Contacts	Remarks
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Qatar	Mr. Preben Jensen Senior ANS Inspector/Safety Coordinator	Fax: 974 44654761 Tel: 974 44557206 Mobile: 974 55936942 Email: preben.jensen@caa.gov.qa	
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UAE	Mr. Gustavo J. Barba Roman Manager Regulations & Policies	Tel: 971 4 2111692 Email: gbarba@gcaa.gov.ae	
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BOEING	Mr. Chamsou Deen Andjorin, Director Aviation Safety Middle East and Africa	Tel: 971561741500 E-mail: chamsou.d.andjorin@boeing.com	RSC Co-Chair
COSCAP-GS	Mrs. Nadia Konzali Project Coordinator Airworthiness Expert COSCAP-GS-ICAO-TCB GCAA, UAE	Tel: 971 2 4054267 Mobile : 971 50 3281510 E-mail : nadia.konzali@coscap-icao.org	

IFALPA	Capt. Rola Hoteit Regional Vice President Middle East	Tel: 961 1811899 Mobile: 9613707320 Email: farolk@hotmail.com	
IATA	Ms. Ruby Sayyed Assistant Director SO&I	Tel: 9626 580 4254 Mob: 962 799 444 252 Email: sayyedr@iata.org	MID-ASRT Rapporteur
	Capt. Richard Hill (RASG-MID Vice-Chairman) Chief Operating Officer	Tel: 971 (2511) 2200 Mobile: 971 (50) 818 1214 Email: RHill@etihad.ae	Second Vice Chair of RASG-MID, Member of MID-RAST, and Coordinator for CFIT (<i>Etihad Airways</i>)

RASG-MID/2
Report on Agenda Item 5

REPORT ON AGENDA ITEM 5: COORDINATION BETWEEN RASG-MID AND MIDANPIRG

5.1 The meeting was apprised of the outcome of the Thirteenth Meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/13) held in Abu Dhabi, UAE, 22 - 26 April 2012, related to safety to improve the process of coordination of activities between RASG-MID and MIDANPIRG and avoid duplication of efforts.

5.2 The meeting noted that MIDANPIRG/13 raised concerns about the English Language Proficiency (ELP) of the ground support services personnel which was considered as a contributing factor to the runway safety occurrences. Taking into consideration the agreed mechanism for coordination between MIDANPIRG and the RASG-MID, the meeting agreed with MIDANPIRG/13 that the issue of ELP for ground support services personnel be addressed within the framework of RASG-MID. In this respect, the meeting agreed that necessary mitigation measures related to ELP of the ground support services personnel be considered for inclusion in the SEIs/DIPs related to Runway and Ground Safety (RGS). In this respect, the meeting noted that some mitigation measures related to the use of standard phraseology by the ground support services (Development of Guidance material and training) have been already included in the current Draft SEIs/DIPs related to RGS.

5.3 Taking into consideration that the scope of SSP implementation goes far beyond the safety of air traffic services and aerodrome operations, the meeting agreed with MIDANPIRG that SSP implementation should be monitored by RASG-MID. MIDANPIRG will continue to monitor the SMS implementation by the air traffic services and aerodrome operators and RASG-MID should monitor the SMS implementation by:

- approved training organizations that are exposed to operational safety risks during their air training operations (i.e.: flight training schools);
- aircraft operators; and
- approved aircraft maintenance organizations and organizations responsible for type design and/or manufacture of aircraft (applicability date Nov. 2013).

5.4 Based on the above, the meeting agreed that:

- SSP implementation, ELP and Accidents and Incidents Analysis be addressed within the framework of RASG-MID;
- SMS implementation as well as Runway Safety issues be included in the Work Programmes of both RASG-MID and MIDANPIRG, for some period; and
- RVSM safety monitoring continues to be part of MIDANPIRG Work Programme.

RASG-MID/2
Report on Agenda Item 6

REPORT ON AGENDA ITEM 6: FUTURE WORK PROGRAMME

6.1 In accordance with the RASG-MID Procedural Handbook and taking into consideration the work programmes and expected inputs of the different regional bodies/stakeholders involved in Aviation Safety, the meeting agreed that the RASG-MID/3 Meeting be tentatively scheduled to be held from **11 to 13 November 2013**. The venue will be Cairo, unless a State is willing to host the meeting.

6.2 Considering that the invitation letter for the RASG-MID/3 Meeting should be issued at least 3 months prior to the meeting (by August 2013), the meeting agreed that the RSC/2 Meeting be held in Cairo from **3 to 5 June 2013**.

6.3 The meeting agreed also that an “informal” RSC-limited meeting to be held in March-April 2013 to follow-up the implementation of the RASG-MID Work Programme for 2013. This meeting should be hosted by a RASG-MID Member State or partner.

RASG-MID/2
Report on Agenda Item 7

REPORT ON AGENDA ITEM 7: ANY OTHER BUSINESS

7.1 In accordance with the RASG-MID Procedural Handbook, the meeting recalled that each RASG-MID member State should designate a Member, an Alternate and Adviser(s) able to support RASG-MID goals and objectives. It was also agreed that the Partners should designate their Representatives and Alternates to the RASG-MID.

7.2 The meeting recalled that the RASG-MID list of Members, Alternates and Advisers should be updated on a regular basis.

7.3 The meeting reviewed and updated the list of RASG-MID, Members, Alternates, Advisers; and Partners' Representatives and Alternates as at **Appendix 7A** to the Report on Agenda Item 7.

7.4 The meeting was apprised of the Airport Council International (ACI) safety activities conducted within the framework of the ACI Airport Excellence for Safety Programme (APEX). It was highlighted in this respect that the Memorandum of Cooperation (MOC) signed between ACI and ICAO on 15 June 2012 supports the development of the ACI APEX. The meeting noted that ACI conducted, six (6) safety reviews in different airports from the ICAO AFI, APAC, EUR/NAT and NACC Regions and is planning to conduct safety reviews in India, Romania and Saudi Arabia in 2013.

RASG-MID/2
Appendix 7A to the Report on Agenda Item 7

LIST OF RASG-MID MEMBERS/ALTERNATES/ADVISERS

13 November 2012

No	STATE	MEMBER	ALTERNATE	ADVISER(S)
1	BAHRAIN	Mr. Hussain Ahmed Al Shuail Director Corporate Planning , Quality assurance & Safety Fax : +973 – 17321194 Tel : +973- 17321151 E. mail: halshuail@caa.gov.bh	Mr. Abdullatif Ahmed Bucheeri Senior Standard & Licensing Specialist Office Tel: +973- 17321118 Mobile: +39456519 E. Mail : aabdulrahman@caa.gov.bh	
2	EGYPT	Mr. Magdi Kamal El Din Ryad Egyptian Civil Aviation Authority Ciaro Airport Road Cairo – Egypt Mobile : 010 1769608 E-mail: capt.magdyryad.caa@link.net	Mr. Mohamed Abbas Soliman Vice President Security, Airports and ANS Egyptian Civil Aviation Authority Cairo International Airport Road Cairo - EGYPT Fax: 202 22688375 Tel: 202 22677382 Mobile: 2012 20091998 E-mail: md.soliman@gmail.com and mohamed.abbas@civilaviation.gov.eg	
3	IRAN	Mr. Mehdi Aliasgari Director General of Safety & AIG Department Fax: +98 21 66018659 Tel: +98 21 61022119 E-mail: m-aliasgari@cao.ir		
4	IRAQ			

RASG-MID/2-REPORT
APPENDIX 7A

7A-2

No	STATE	MEMBER	ALTERNATE	ADVISER(S)
5	JORDAN	<p>Eng. Saleh Alamoush Director Airports Safety & Standards P.O.Box 7547 Amman 11110 Jordan Fax/Tel: +962 6 4897483 Mobile: +962 77 7934030 E-mail: dairstand@carc.gov.jo</p>	<p>Dr. Mohammad Al-Husban Director Airworthiness Standards P.O.Box 7547 Amman 11110 Jordan Fax: +962 6 4874710 Tel: +962 6 4887042 Mobile: +962 77 7720266 E-mail: diraws@carc.gov.jo</p>	<p>Eng. Yahia Bataineh Chief Airworthiness Engineering P.O.Box 7547 Amman 11110 Jordan Fax: +962 6 4874710 Tel: +962 6 4892282 Ext 3726 Mobile: +962 77 9546727 E-mail: chiefaed@carc.gov.jo</p> <p>Capt. Mohammad Al-Shredah Chief Transport P.O.Box 7547 Amman 11110 Jordan Fax: +962 6 4872173 Tel: +962 6 4884832 Mobile: +962 79 7389607 E-mail: chief.transport@carc.gov.jo</p> <p>Eng. Muneeb Al-Ali Chief Safety & Standards ANS Systems P.O.Box 7547 Amman 11110 Jordan Fax/Tel: +962 6 4874710 Mobile: +962 79 7714877 E-mail: atmsafety@carc.gov.jo</p>
6	KUWAIT			
7	LEBANON			
8	LIBYA			
9	OMAN	<p>Eng. Abdullah Omar AlOjaili Asst. Director General for Safety Public Authority for Civil Aviation Fax: +968 24510824 Tel: +968 24519315 Mobile: +968 99360133 E-mail: alojaili@caa.gov.om</p>	<p>Mr. Nasr Ghalib Al-Busaidy Director Quality Assurance Public Authority for Civil Aviation Tel: +968 24518991 Mobile: +968 99024991 E-mail: nasr@caa.gov.om</p>	<p>Mr. Abdullah Nasser Al-Harthy Senior Air Traffic Controller Public Authority for Civil Aviation Fax: +968 24 51 89 90 Tel: +968 24 51 92 01 Mobile: +968 99 47 68 06 E-mail: abdullah_nasser@caa.gov.om</p>
10	QATAR	<p>Mr. Preben Jensen Senior ANS Inspector/Safety Coordinator Fax: +974 44654761 Tel: +974 44557206 Mobile: +974 55936942 Email: preben.jensen@caa.gov.qa</p>		

NO	STATE	MEMBER	ALTERNATE	ADVISER(S)
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13	SYRIA			
4	UAE	Mr. Ismaeil Mohammed Al Balooshi Executive Director Aviation Safety Affairs Sector General Civil Aviation Authority P. O. Box 30500 Dubai - United Arab Emirates Fax: +971-4-2820847 Tel: +971-4-2111702 E-mail: ibalooshi@gcaa.gov.ae	Mr. Mohammed Faisal Al Dossari Acting Director Air Navigation & Aerodromes Dept Air Navigation & Aerodrome Department of Security and Infrastructure P.O. Box 6558 Abu Dhabi, UNITED ARAB EMIRATES Fax: 971 2405 4406 Tel: 971 2405 4395 Mobile: 971 50442 6979 Email: aldossari@gcaa.gov.ae	
15	YEMEN			

LIST OF PARTNERS' REPRESENTATIVES/ALTERNATES

NO	PARTNER	REPRESENTATIVE	ALTERNATE
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4	AIRBUS		
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7	COSCAP-GS	Nadia Konzali Project Coordinator Airworthiness Expert COSCAP-GS-ICAO-TCB GCAA P.O.Box No. 6558 Abu Dhabi – UAE Tel: +971 2 4054267 Mobile : +971 50 3281510 E-mail : nadia.konzali@coscap-icao.org	
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NO	PARTNER	REPRESENTATIVE	ALTERNATE
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10	FSF		
11	IATA	Ruby SAYYED Assistant Director Safety, Operations & Infrastructure International Air Transport Association (IATA) King Abdallah II St., Al Shaab Roundabout P.O.Box 940587 Amman 11194 - JORDAN Fax: +962 6 593 9921 Tel: +962 6 580 4200 Ext. 1215 &1216 Mobile: +962 79 9444 252 E-mail: SayyedR@iata.org	
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RASG-MID/2
Attachment A to the Report

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