



REPORT OF THE RASG-MID/5

(Doha, Qatar, 22 – 24 May 2016)

تقرير الاجتماع الخامس للمجموعة الإقليمية لسلامة الطيران بالشرق الأوسط

(الدوحة _ قطر، 22 _ 24 مايو 2016)

Qatar Civil Aviation Authority (QCAA)

الهيئة العامة للطيران المدنى



INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE FIFTH MEETING OF THE REGIONAL AVIATION SAFETY GROUP – MIDDLE EAST

(RASG-MID/5)

(Doha, Qatar, 22-24 May 2016)

The views expressed in this Report should be taken as those of the Regional Aviation Safety Group and not of the Organization. This Report will, however, be submitted to the ICAO Council and any formal action taken will be published in due course as a Supplement to the Report.

Approved by the Meeting and published by authority of the Secretary General

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PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Fifth meeting of the Regional Aviation Safety Group – Middle East (RASG-MID/5) was hosted by Qatar Civil Aviation Authority, Doha, Qatar, at the Sharq Village and Spa in Doha, 22-24 May 2016.

2. OPENING

- 2.1 Mr. Mohamed Khalifa Rahma, Regional Director, ICAO Middle East (MID) Regional Office welcomed all the participants and expressed ICAO's sincere gratitude and appreciation to Qatar Civil Aviation Authority (QCAA) for the generous hospitality extended to all participants. Mr. Rahma highlighted that the RASG-MID has been established with a main objective to enhance safety in the MID Region by supporting and monitoring the implementation of the Global Aviation Safety Plan (GASP) objectives, ensuring that all safety activities at the regional and sub-regional level are properly coordinated and encouraging effective coordination and cooperation between all stakeholders.
- 2.2 Mr. Rahma underlined that the priorities identified by the RASG-MID in the MID Region Safety Strategy helped all stakeholders to work towards the achievement of the agreed safety targets. However, there is still room for improvement, but this necessitates the cooperation/collaboration to address the main challenges in the Region.
- 2.3 On behalf of H.E. Mr. Jassim Seif Al Sulaiti, Minister of Transport and Communication and H.E. Mr. Abdulla Bin Nasser Al Subaey, Chairman of QCAA, Capt. Abdulrahman Al-Hammadi, Director of Air Safety Department, QCAA welcomed all the participants to Qatar. Capt. Al-Hammadi highlighted that the GASP includes key aviation policy principles to assist ICAO Regions, Sub-regions and States with the preparation of their regional and State aviation safety plans; and in view of meeting the GASP objectives, the RASG-MID is engaged in planning for the implementation strategy for the enhancement of safety in the MID Region and addressing the regional challenges.
- 2.4 Mr. Ismaeil Mohammed Al Blooshi, Chairperson of RASG-MID, Assistant Director General, Aviation Safety Affairs Sector, General Civil Aviation Authority, UAE, thanked QCAA for hosting the RASG-MID/5 meeting. He invited all aviation stakeholders to have an active role within the framework of RASG-MID in order to achieve the RASG-MID's objectives.

3. ATTENDANCE

3.1 The meeting was attended by a total of fifty nine (59) participants from eleven (11) States (Bahrain, Egypt, Iran, Iraq, Kuwait, Oman, Qatar, Saudi Arabia, Sudan, UAE and United States) and eight (8) International Organizations/Industries (ACAC, ACI, Airbus, CANSO, COSCAP, IATA, IFATCA and MIDRMA). 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 Blooshi, Assistant Director General, Aviation Safety Affairs Sector, General Civil Aviation Authority, UAE.

4.2 Mr. Mohamed Khalifa Rahma, ICAO Middle East Regional Director acted as the Secretary of the meeting, assisted by the following ICAO MID Regional Officers:

Mr. Mohamed Smaoui - Deputy Regional Director (DEPRD)

Mr. Adel Ramlawi - Regional Officer, Aerodrome and Ground Aids (AGA)

Mr. Mashhor Alblowi - Regional Officer, Flight Safety (FLS)

Mr. Elie El Khoury - Regional Officer, Air Traffic Management/Search and Rescue

(ATM/SAR)

4.3 The meeting was also supported by Mr. Catalin Radu, Deputy Director for Aviation Safety, Air Navigation Bureau (ANB) and Mr. Michiel Vreedenburgh Chief, Implementation Planning and Support Section (Safety) from ICAO Headquarters in Montreal.

5. LANGUAGE

5.1 Discussions were conducted in English and documentation was issued in English.

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Provisional Agenda

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: Update from and Coordination with MIDANPIRG

Agenda Item 6: Future Work Programme

Agenda Item 7: Any other Business

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 DRAFT CONCLUSIONS AND DRAFT DECISIONS

CONCLUSION 5/1: ICAO USOAP-CMA IMPLEMENTATION

CONCLUSION 5/2: IATA-IOSA PROGRAMME

CONCLUSION 5/3: USE OF ECCAIRS

DECISION 5/4: FOURTH MID ANNUAL SAFETY REPORT

DECISION 5/5: ESTABLISHMENT OF AIA WG CORE TEAM

DECISION 5/6: iSTARS ADREP OCCURRENCE DATA FORM

CONCLUSION 5/7: PROVISION OF SAFETY DATA USING iSTARS APPLICATION

DECISION 5/8: RASG-MID SAFETY ADVISORY-PERIODIC SURVEILLANCE

AUDIT OF AERODROME INFRASTRUCTURE AND MAINTENANCE

DECISION 5/9: AIRPLANE STATE AWARENESS (ASA)-LOW AIRSPEED ALERTING

DECISION 5/10: STANDARD OPERATING PROCEDURES EFFECTIVENESS AND

ADHERENCE

DECISION 5/11: AIRPLANE STATES AWARENESS (ASA) -TRAINING FLIGHT CREW

TRAINING (APPROACH TO STALL & UPSET RECOVERY)

VERIFICATION AND VALIDATION

DECISION 5/12: SST REVISED TERMS OF REFERENCE (TORS)

CONCLUSION 5/13: ACAC/ICAO AIG WORKSHOP

DECISION 5/14: REVISED MID REGION SAFETY STRATEGY

DECISION 5/15: ENDORSEMENT OF RASG-MID PROCEDURAL HANDBOOK-

THIRD EDITION

DECISION 5/16: RSC TERMS OF REFERENCE (TORS)

CONCLUSION 5/17: REVISION OF THE RASGS TERMS OF REFERENCE

CONCLUSION 5/18: REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS)

OCCURRENCES

PART II: REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE PROVISIONAL AGENDA

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

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REPORT ON AGENDA ITEM 2: GLOBAL DEVELOPMENT RELATED TO AVIATION SAFETY

The subject was addressed in PPT/1, WP/2, WP/3 and WP/4 presented by the Secretariat. The meeting was apprised of the latest developments related to safety at the Global level, including the global accident rates based on preliminary 2015 data, the updated GASP, Amendment No. 1 to Annex 19, the new RASGs web site and the ICAO global and regional implementation support programmes, including the new iMPLEMENT tools for safety analysis, prioritization, monitoring and reporting.

Update of the Global Aviation Safety Plan (GASP)

- 2.2 The meeting noted that the proposed draft 2017-2019 Edition of the Global Aviation Safety Plan (GASP), envisaged to be approved by the Council during its 208th Session in May/June 2016 and to be presented for endorsement at the 39th Session of the Assembly (27 September 7 October 2016), reflects changes made pursuant to the recommendations of the 38th Session of the Assembly, as well as those of the Second High-level Safety Conference 2015 (HLSC 2015). It includes the newly developed Global Aviation Safety Roadmap (GASR). It also contains updates made to improve the document structure and content while maintaining its stability in the safety policy, strategy and priorities for ongoing implementation. Accordingly, the meeting:
 - a) encouraged States to support the endorsement of the 2017 2019 Edition of the GASP (Doc 10004) during the next Assembly;
 - b) requested States to establish regional and national priorities and targets consistent with the GASP objectives and the operational safety needs; and
 - c) invited States to provide ICAO feedback on the new Global Aviation Safety Roadmap and suggestions for the future 2020 2022 Edition of the GASP.

Progress Report on the Implementation of the ICAO USOAP-CMA

- 2.3 The meeting was apprised of a progress report on the implementation and activities of the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA) during 2015, and planned for 2016. It was highlighted that the average Effective Implementation (EI) rate for the MID Region had not improved over the last year, and that implementation of most Corrective Action Plans (CAPs) had not started. The possibility of a State's EI rate reducing following an ICAO audit, if a State did not maintain or improve its safety oversight system, was forewarned. Lastly, although ICVMs theoretically could only result in EI rate increases, Significant Safety Concerns (SSC) could be identified during the validations process.
- 2.4 The resolution of the SSC in Lebanon was applauded resulting in the MID Region not having any outstanding SSC. UAE having the highest EI rate globally was also commended.
- 2.5 Based on the above, the meeting agreed to the following Conclusion:

CONCLUSION 5/1: ICAO USOAP-CMA IMPLEMENTATION

That, States:

a) be urged to prioritise and take action as needed to improve their safety oversight system, with particular attention to:

- i. the implementation of Corrective Action Plans (CAP) and reporting the progress on the On-line Framework (OLF); and
- ii. the completion of the self-assessments and uploading of the relevant evidences on the OLF;
- b) are encouraged to request assistance from ICAO, as required.

Enhancing Support for Safety Management Implementation

- 2.6 The meeting noted that the first amendment to Annex 19 will become effective on 11 July 2016 with an applicability date of 7 November 2019. The meeting was informed that ICAO is working on the following tasks to enhance the support for the implementation of State Safety Programmes (SSPs) and Safety Management Systems (SMS), to be available by July 2017:
 - a) a revision to the Safety Management Manual (SMM) (Doc 9859);
 - b) an update to the ICAO Safety Management website;
 - c) an update to the ICAO Safety Management Standardized Training Programme; and
 - d) an update to the iSTARS SSP Gap Analysis tool and a new SMS Gap Analysis tool.
- Additional plans include the delivery of a webinar in July 2016 to communicate ICAO's enhanced support of safety management implementation, and the delivery of three regional symposia, followed by a series of regional safety management seminars, commencing early 2018. The plans for updating and including the USOAP SSP-related protocol questions (PQs) in the scope of USOAP activities have also been agreed based on the implementation support plans.
- 2.8 The meeting noted with appreciation that the MID Region recorded a good progress related to the use of the iSTARS gap analysis tool.
- 2.9 The meeting urged States to:
 - a) continue the implementation of SSP and report on progress using the SSP Gap Analysis Tool on iSTARS/SPACE and completing the USOAP PQ selfassessments on the OLF;
 - b) identify any additional areas of clarification needed or additional subjects that need to be covered in the 4th edition of the SMM;
 - c) assist the Secretariat in identifying appropriate SSP examples and tools for inclusion in the update to the ICAO safety management website;
 - d) identify potential instructors for the ICAO Safety Management for Practitioners Course that meet the qualifications; and
 - e) inform ICAO of any additional activities which could be provided to support the implementation of SSP.

Review of RASG-MID/4 Report by the ANC

- 2.10 The subject was addressed in WP/5 presented by the Secretariat. The meeting noted that the ANC reviewed the Report of the RASG-MID/4 meeting (Jeddah, Saudi Arabia, 30 March-1 April 2015) through AN-WP/8984 and approved the actions recommended therein. It was noted with appreciation that the RASG-MID had made great progress and had achieved some very important milestones in terms of cooperation, analysis, reporting and the development of guidance material appropriate to the MID Region.
- 2.11 The ANC commended the RASG-MID for the quality and publication of the Third MID Region Annual Safety Report and for the issuance of the MID Region Safety Strategy.
- 2.12 The ANC highlighted that the work on Low Airspeed Alerting Provisions was excellent material and referred this work to the Airworthiness Panel (AIRP) for further review.
- 2.13 With respect to RASG-MID Conclusion 4/14, regarding the IATA Operational Safety Audit (IOSA) Programme, it was felt that the use of the term "acceptable means of compliance" was not appropriate and that the wording of the Conclusion may be misleading. The IOSA compliance does not replace a State's oversight activities but rather provided complementary information.
- 2.14 In connection with the above, and based on the outcome of the RSC/4 meeting (Cairo Egypt, 15 17 December 2015), the meeting agreed to the following Conclusion, which replaces and supersedes the RASG-MID Conclusion 4/14:

CONCLUSION 5/2: IATA-IOSA PROGRAMME

That, States be encouraged to use all sources of safety data for the conduct of their safety oversight activities, including the IATA IOSA results, which provide complementary information for the safety oversight activities; and send their feedback to the ICAO MID Office by 15 October 2016.

RASG Organizational Guidelines

2.15 The meeting noted that new RASG Organizational Guidelines have been developed by ICAO Headquarters and agreed that the RASG-MID Procedural Handbook might need some amendments to be aligned with the new Guidelines.

RASG Activities in other Regions

2.16 The meeting was apprised of the RASG activities in other Regions.

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REPORT ON AGENDA ITEM 3: REGIONAL PERFORMANCE FRAMEWORK FOR SAFETY

Follow-up on the RASG-MID Conclusions and Decisions

- 3.1 The subject was addressed in WP/6 presented by the Secretariat. The meeting reviewed the progress made for the implementation of the RASG-MID/4 Conclusions and Decisions as at **Appendix 3A**.
- 3.2 The meeting agreed that Conclusion 4/2 related to mandatory and voluntary reporting is still valid, reiterated it and agreed that it should be followed up by a State Letter:

CONCLUSION 4/2: MANDATORY AND VOLUNTARY REPORTING SYSTEMS

That, States, be invited to take necessary measures to:

- a) enhance their mandatory reporting system; and
- b) establish, if not already done, an effective voluntary confidential and nonpunitive reporting system, to enhance the collection of data on hazards and associated safety risks that may not be captured by the mandatory reporting system.

Review and Endorsement of the Fourth MID Annual Safety Report (MID-ASR)

- 3.3 The subject was addressed in WP/7 and PPT/2 presented by the MID-ASRT Rapporteur. Based on the analysis of the reactive safety information for the period 2010-2014, and in accordance with the agreed matrix used for the assessment of the different accident categories (frequency x severity), the accident categories are classified in the following order:
 - 1- Runway Safety (RS);
 - 2- Loss of Control In Flight (LOC-I);
 - 3- System Component Failure-power plant (SCF-PP);
 - 4- Controlled Flight Into Terrain (CFIT); and
 - 5- System Component Failure-Non power plant (SCF-NP).
- 3.4 The meeting agreed that SCF-PP and SCF-NP be combined into one risk area (SCF). In addition, taking into consideration that the only CFIT accident in the MID Region occurred in 2010, the meeting agreed that CFIT would not be considered anymore as one of the Focus Areas but rather as an Emerging Risk. Accordingly, the main Focus Areas in the MID Region are:
 - 1- Runway Safety (RS);
 - 2- Loss of Control In Flight (LOC-I); and
 - 3- System Component Failure (SCF).
- 3.5 Based on the above, the meeting tasked the MID-RAST to develop new SEIs and DIPs to address the System Component Failure (SCF) in order to be presented to the RSC/5 meeting end of 2016. In this regard, it was noted that Boeing will be the Champion for the SCF with the support of IATA and ICAO. Boeing will coordinate with Airbus and EMBRAER and provide the manufactures support and recommendations/guidance related to SCF.
- 3.6 The meeting recalled that according to the analysis of the previous Edition of the MID-ASR, the System Component Failure or Malfunction (SCF), Near Midair Collision (NMAC) and Laser attacks were considered as Emerging Risks. However, based on the results of the Fourth

MID-ASR, and taking into consideration the risks associated with Remotely Piloted Aircraft System (RPAS)/Drones, the meeting agreed that the Emerging Risks in the MID Region are as follows:

- 1- Controlled Flight Into Terrain (CFIT);
- 2- Near Midair Collision (NMAC);
- 3- Laser attacks;
- 4- RPAS/Drones; and
- 5- Wildlife and FOD.
- 3.7 The meeting noted with appreciation that Bahrain (champion), Qatar and UAE, will support the development and implementation of SEI to address the risks associated to RPAS/Drones.
- 3.8 With respect to reporting of accidents and serious incidents, it was underlined that ECCAIRS should be used for the reporting of accidents and serious incidents to ICAO. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 5/3: USE OF ECCAIRS

That, States that have not yet done so, be urged to use ECCAIRS for the reporting of accidents and serious incidents; and send their feedback to the ICAO MID Office by 15 October 2016.

- 3.9 According to the results of the ICAO USOAP-CMA, it was noted that the average overall Effective Implementation (EI) in the MID Region is **68.23%**, which is above the world average **62.62 %**. However, five (5) States (Egypt, Jordan, Lebanon, Libya and Syria) have an EI below **60%**.
- 3.10 With respect to the SSC in Lebanon related to OPS-AOC, the meeting was informed that an ICVM was conducted in Beirut, Lebanon, 9-13 May 2016, to verify actions taken by the State to resolve the SSC. Accordingly, based on the results of the ICVM and the outcome of the SSC Committee at ICAO-HQ, the meeting noted with satisfaction that the SSC has been removed. The meeting thanked the ICAO MID Office for the support provided to Lebanon for the removal of the SSC.
- 3.11 The meeting noted that with respect to the predictive safety information section of the MID-ASR, it is underlined that SSP implementation is still one of the main challenges in the Region, which requires States to share their experiences including challenges and best practices in order to properly provide recommended actions to support and expedite SSP implementation at the regional level.
- 3.12 Based on the foregoing, the meeting reviewed and endorsed the MID-ASR and urged States and all Stakeholders to provide necessary safety data to the MID-ASRT for the development of the next Edition of the Annual Safety Report. Accordingly, the meeting agreed to the following Decision:

DECISION 5/4: FOURTH MID ANNUAL SAFETY REPORT

That, the Fourth Edition of the MID Annual Safety Report (ASR) is endorsed and be published on the ICAO MID website.

Accidents and Incidents Analysis Working Group (AIA WG)

- 3.13 The subject was addressed in WP/8 presented by the AIA WG Chairman. The meeting noted that the First meeting of AIA WG (AIA WG/1) was held at the ICAO Middle East Regional Office in Cairo, Egypt, 29-31 March 2016.
- 3.14 It was noted that ICAO iSTARS (ADREP et al.) application contains an aggregation of different accident and incident data sources. This application is used for the development of the ICAO Safety Reports. It's a web-based platform for the reporting and analysis of safety information and provides quasi real-time information on occurrences as reported by various official and media sources. The data in the application is updated automatically every 24 hours. It was highlighted that the data fields provided by those sources cover information about the flight history, the aircraft, the operator and the location of occurrence, and that more data fields would be needed to allow for useful safety analysis.
- 3.15 It was highlighted that, currently there are no features allowing users to create or modify occurrences in iSTARS ADREP application/database. The meeting noted that the application is being enhanced by ICAO-HQ to include the following features:
 - 1) an occurrence data form containing a limited number of fields, for the collection and analysis purposes;
 - 2) auto-population mechanism of fields based on the aircraft registration number;
 - 3) create and upload function to allow authorized users to add data;
 - 4) editing and reviewing function to allow authorized users (creators and selected reviewers) to modify existing data, correct or add missing information; and
 - 5) validation function to allow the regional office (on behalf of the RASG) in coordination with concerned States to validate the information.
- 3.16 Based on the above, and in order to fulfil the mandate assigned to the AIA WG (collection/reporting, validation and analysis of data), the meeting agreed that a Core Team led by the Chairman of the AIA WG be established to advance the work of the AIA WG between the face-to-face meetings. Accordingly, the meeting agreed to the following Decision:

DECISION 5/5: ESTABLISHMENT OF AIA WG CORE TEAM

That, the AIA WG Core Team composed of the following experts, is established to advance the work of the AIA WG between the face-to-face meetings:

- Mr. Adnan Mohamed Malak from Saudi Arabia (Chairman);
- Ms. Leena Ahmed Al Koohej from Bahrain;
- Mr. Amr Mokhtar from Egypt;
- Mr. Hassan Rezaeifar from Iran;
- Dr. Abdallah Falah Suleiman Al-Samarat from Jordan;
- Mr. Kamil Ahmed Mohamed from Sudan;
- Ms. Rose Al Osta from IATA;
- Capt. Fadi Khalil from IFALPA; and
- Mr. Mashhor Alblowi from ICAO.

- 3.17 The meeting reviewed the draft Form "iSTARS ADREP Occurrence Data Form", which includes the data fields to be used for adding/modifying accidents/incidents data through iSTARS ADREP application as at **Appendix 3B**. It was highlighted that in order to foster and facilitate the reporting, the form contains a very limited number of mandatory fields; the rest of the information would be generated automatically by the application (based on the aircraft registration) or entered at a later stage. The meeting noted that the Form is being finalized by the AIA WG Core Team.
- 3.18 With respect to the processes to be implemented for the creation of an occurrence, addition and amendment of data to existing occurrences as well as for the validation process, it was noted that for each action/function, there's a need to clearly define the WHO, WHAT and HOW. For the validation process, there will be different layers of validation (initial validation and final validation), which will involve ICAO, the AIA WG Core Team, the concerned State and the RASG-MID. It was highlighted that the validation process related to voluntary safety information might also be different from the process related to mandatory information.
- 3.19 For the purpose of analysis, it was agreed that the *iSTARS ADREP Occurrence Data Form* should include fields related to the main root cause and contributing factors. The meeting noted that Standard and limited lists of main root causes and contributing factors are being developed by the AIA WG Core Team. A step-by-step approach will be followed for the development of the analysis function.
- 3.20 Based on the foregoing, the meeting agreed to the following Decision:

DECISION 5/6: iSTARS ADREP OCCURRENCE DATA FORM

That, the AIA WG Core Team:

- a) further review and finalize the iSTARS ADREP Occurrence Data Form;
- b) develop guidelines for the use of the Form;
- c) establish a validation process of data provided; and
- d) develop standard and limited lists of main root causes and contributing factors to be included in the Form.
- 3.21 The meeting noted that the new application including *iSTARS ADREP Occurrence Data Form* is being developed for the MID Region will be used as a prototype for other regions.
- 3.22 The meeting recognized the difficulties facing some States and stakeholders to share data related to accidents/incidents through iSTARS ADREP application, due to national policy. Accordingly, the meeting encouraged States and stakeholders to support the AIA WG activities and provide/share available data related to safety occurrences, and agreed to the following Conclusion:

CONCLUSION 5/7: PROVISION OF SAFETY DATA USING iSTARS APPLICATION

That, States be urged to allow their regulators and service providers (ANSPs, Aerodrome Operators, Airlines, etc.) to provide/share available data related to safety occurrences using the dedicated iSTARS application.

Update on Development and Implementation of SEIs & DIPs related to RGS

3.23 The subject was addressed in WP/10 presented by the RGS WG Chairperson.

MID-RAST/RGS/2

3.24 The meeting noted with appreciation that the DIP actions have been fully completed. It was recalled that the MID-RAST/RGS/2 focuses on the development of guidance material and training programmes to support the creation of action plans by the Runway Safety Team (RST) and that UAE is the Champion of this SEI. A summary of actions related to the MID-RAST/RGS/2 DIP is at **Appendix 3C.**

MID-RAST/RGS/3

- 3.25 The MID-RAST/RGS/3 focuses on the development of guidance material and training programmes to support Aerodrome Infrastructure and Maintenance Management. It was noted with appreciation that UAE, the Champion of this SEI, has completed four (4) out of the five required actions of this DIP.
- 3.26 A summary of actions related to the MID-RAST/RGS/3 DIP is at **Appendix 3D**.
- 3.27 The meeting reviewed and endorsed the Safety Advisory related to periodic surveillance audits of aerodrome infrastructure and maintenance. Accordingly, the meeting endorsed the RASG-MID Safety Advisory at **Appendix 3E** and agreed to the following Decision:

DECISION 5/8: RASG-MID SAFETY ADVISORY-PERIODIC SURVEILLANCE AUDIT OF AERODROME INFRASTRUCTURE AND MAINTENANCE

That, the RASG-MID Safety Advisory at **Appendix 3E** is endorsed and be published by the ICAO MID Office.

MID-RAST/RGS/4

3.28 The MID-RAST/RGS/4 focuses on Aerodrome Safeguarding. Egypt is the Champion of this DIP with the support of UAE and Sudan. The meeting noted that work is in progress for the development of a Safeguarding Guidance Toolkit and that a Regional Workshop on Aerodrome Safeguarding is planned for July 2016. A summary of the planned actions related to the MID-RAST/RGS/4 DIP is at **Appendix 3F**.

MID-RAST/RGS/5

3.29 The MID-RAST/RGS/5 focuses on Wildlife Management and Controls. Sudan is the Champion of this DIP supported by Bahrain, Egypt, Oman, UAE and IFATCA. A summary of the planned actions related to the MID-RAST/RGS/5 DIP is at **Appendix 3G**.

MID-RAST/RGS/6

3.30 The MID-RAST/RGS/6 focuses on Laser Attacks. Egypt is the Champion of this DIP supported by Bahrain, Sudan and UAE. A summary of the planned actions related to the MID-RAST/RGS/6 DIP is at **Appendix 3H**.

3.31 In connection with the above, the meeting appreciated the progress achieved in the implementation of the SEIs and DIPs related to RGS and commended the work of Egypt, Sudan, UAE and the RGS Working Group. The meeting agreed that effort should be pursued to complete the pending actions in a timely manner.

Aerodrome Certification and Runway Safety Issues

3.32 The subject was addressed in WP/11 presented by the Secretariat.

Aerodrome Certification

3.33 The meeting reviewed the status of implementation of Aerodrome Certification at **Appendix 3I**. It was highlighted that 31 out of the 59 MID States International Aerodromes have been certified. This number represents 53% of the International Aerodromes listed in the MID ANP. This percentage exceeds the MID Safety Strategy target of 50% for year 2015. However, the meeting agreed that more efforts are needed to meet the Strategy target of 75% for year 2017.

Runway Safety Team and Go-Team

- 3.34 The meeting noted that the DGCA-MID/3 meeting (Doha, Qatar, 27-29 April 2015) supported the RASG-MID/4 Conclusion 4/9 encouraging MID States to foster the implementation of Runway Safety Teams (RST) and request Runway Safety Go-Team visits, as needed.
- 3.35 The meeting noted with appreciation that, as a follow-up to the RS Go-Team Visit to Khartoum, the UAE GCAA conducted a training course on Aerodrome Airside Operations in Khartoum, Sudan, 6 -10 September 2015. Also, the Egyptian Civil Aviation Authority conducted a Training Workshop on Aerodrome Safeguarding from 29 to 31 March 2016 to the Sudanese Civil Aviation Authority of Sudan (SCAA).
- 3.36 Upon request from Kuwait Directorate General of Civil Aviation (DGCA), the second RS Go-Team visit was successfully conducted, to Kuwait International Airport from 15 to 18 February 2016. The meeting noted that Bahrain, Jordan, Oman, Qatar and Saudi Arabia indicated interest to receive the MID RS Go-Team. The RS Go-Team visit to Jordan is tentatively planned for the first week of September 2016.
- 3.37 The meeting reiterated that States should take necessary actions to ensure establishment of RST at international aerodromes and request RS Go-Team visit, as required.

Heliports

- The meeting noted that the ICAO MID Regional Office has successfully conducted the ICAO Heliport Seminar (IHS), graciously hosted by UAE, in Dubai from 8 to 10 December 2015. The Seminar highlighted the need for Heliport safety oversight and provided an overview of the operator's perspectives. The IHS work programme and outcomes are available at the ICAO MID Regional Office website: http://www.icao.int/MID/Pages/2015.aspx.
- 3.39 The outcomes of the IHS included the following recommendations:
 - encourage States to implement ICAO provisions related to Heliports (Annex 14 Volume II) through national Regulations and Safety Oversight. This should include implementation of adequate SMS;

- 2) encourage States to establish and maintain database for Heliports. This should include monitoring new Heliports construction;
- 3) invite ICAO to consider inclusion of core training elements (CAA inspectors & Heliport operator) as part of the Heliport Design and services Manual; and
- 4) report the outcome of this Seminar to RASG-MID and share with the other RASG's.
- 3.40 The meeting was apprised of the outcomes of the Fifth meeting of the MIDANPIRG Steering Group (MSG/5), held in Cairo, Egypt, 18-20 April 2016, related to the establishment of heliports database.

First Edition of the Procedures for the Air Navigation Services – Aerodromes (PANS-Aerodromes – Doc 9981)

3.41 The meeting noted that, the MSG/5 meeting supported the organization of a Seminar/Workshop on the implementation of PANS-Aerodromes (Doc 9981) in 2017 (Conclusion 5/1 refers). The meeting noted that, for an improved efficiency, the Seminar/Workshop might be held back-to-back with the RGS WG/3 meeting and urged States to participate actively in the Seminar/Workshop on implementation of PANS-Aerodromes.

Loss of Control In Flight (LOC-I)

- 3.42 The subject was addressed in WP/9 presented by the RAST Rapporteur. The meeting reviewed the progress made with regard to the implementation of the LOC-I DIPs as at **Appendix 3J**.
- 3.43 With regard to the RAST-MID/LOC-I/1 DIP "Airplane State Awareness (ASA)-Low airspeed alerting", the meeting noted that further to the work previously done related to Low Airspeed Alerting Provisions, which was commended by the ANC and referred to the Airworthiness Panel (AIRP) for further review, a RASG-MID Safety Advisory was developed by the MID-RAST as at **Appendix 3K**.
- 3.44 With respect to the RAST-MID/LOC-I/2 DIP "Standard Operating Procedures effectiveness and adherence", the RASG-MID Safety Advisory at **Appendix 3L** was developed to improve flight crew adherence to SOPs and reduce the risk of lost awareness of airplane state.
- 3.45 For the RAST-MID/LOC-I/3 DIP "ASA-Training-Flight Crew Training Verification and Validation", the RASG-MID Safety Advisory at **Appendix 3M** was developed to improve flight crew proficiency in handling issues that can lead to loss of airplane State awareness (ASA).
- 3.46 Based on the foregoing, the meeting reviewed and endorsed the RASG-MID Safety Advisories and agreed to the following Decisions:

DECISION 5/9: AIRPLANE STATE AWARENESS (ASA)-LOW AIRSPEED ALERTING

That, the RASG-MID Safety Advisory related to Airplane State Awareness (ASA)-Low Airspeed Alerting at **Appendix 3K** is endorsed and be published by the ICAO MID Office.

DECISION 5/10: STANDARD OPERATING PROCEDURES EFFECTIVENESS AND ADHERENCE

That, the RASG-MID Safety Advisory related to Standard Operating Procedures effectiveness and adherence at **Appendix 3L** is endorsed and be published by the ICAO MID Office.

DECISION 5/11: AIRPLANE STATES AWARENESS (ASA) -TRAINING

FLIGHT CREW TRAINING (APPROACH TO STALL &

UPSET RECOVERY) VERIFICATION AND

VALIDATION

That, the RASG-MID Safety Advisory related to the Airplane States Awareness (ASA) -Training –Flight Crew Training (Approach to Stall & Upset recovery) Verification and Validation at **Appendix 3M** is endorsed and be published by the ICAO MID Office.

3.47 The meeting noted that IATA with the support of Boeing and Airbus organized the Loss of Control Inflight Workshop, which was hosted by Emirates Airlines in Dubai, UAE, on 3 March 2016. The Workshop aimed at raising safety awareness for accidents and incidents related to LOC-I and provided airlines with tools to enhance safety and develop prevention measures to address LOC-I.

Implementation of the RASG-MID Safety Advisories (RSAs)

3.48 The meeting recognized the need to monitor the implementation of the RASG-MID Safety Advisories in the MID Region. Accordingly, the meeting tasked the different RASG-MID subsidiary bodies to follow up with States and stakeholders the implementation of the issued RSAs.

Emerging Risks Area

- 3.49 The subject was addressed in in WP/9 presented by the RAST Rapporteur. With respect to CFIT, it was highlighted that based on the fourth Edition of the MID-ASR, it is considered as an Emerging Risk. The meeting reviewed the progress achieved with regard to the implementation of the DIP (RAST-MID/CFIT/1) "The implementation of BPN Approach procedures to all runways not currently served by precision approach procedures", as at **Appendix 3N**.
- 3.50 With respect to Near MID Air Collision (NMAC), it was noted that it will be addressed under the AIA WG in order to conduct some analysis and provide feedback on the contributing factors to be considered for the development of mitigation measures.
- 3.51 The meeting noted that other Emerging Risks such as Laser Attacks, Wildlife and Foreign Object Debris (FOD) are addressed under the RGS WG.

Outcome of the Safety Support Team (MID-SST)

3.52 The subject was addressed in WP/12 presented by the MID-SST Rapporteur. The meeting noted that the Terms of Reference (TORs) of the Team was revised to reflect the new way of doing business, with a focus on targeted assistance, sharing of expertise, experience, and best practices in order to agree on recommended actions and provide assistance related to the implementation of the SEIs. Accordingly, the meeting agreed to the following Decision:

DECISION 5/12: SST Revised Terms of Reference (TORs)

That, the Terms of Reference of the SST be revised as at **Appendix 30**.

- 3.53 With respect to the first SEI "improve status of implementation of SSP in MID Region", the meeting noted that the following DIPs have been completed:
 - 1- (MID-SST/01) related to the establishment of an RSOO to support the SSP implementation in the Region;
 - 2- (MID-SST/02) related to SMS guidance material; and
 - 3- (MID-SST/03) related to SSP/SMS Workshop.
- 3.54 The meeting noted that in order to monitor the progress of the SSP implementation and keep ICAO informed on the process, States should continuously update the Gap Analysis on iSTARS. It was highlighted that the Gap Analysis could be shared by selecting this option on iSTARS. Accordingly, the meeting urged States to update the Gap Analysis on iSTARS on a regular basis and encouraged them to use the option which allows the sharing of their Gap Analysis.
- 3.55 Since SMS implementation is one of the aerodrome certification challenges and that the subject would be addressed under the framework of the MID-SST in coordination with the RGS WG, it was noted that Saudi Arabia is coordinating with Egypt and will provide feedback on the action plan related to enhancement of SMS implementation at MID International Aerodromes.
- 3.56 With regards to the second SEI "Strengthening of States' Safety Oversight Capabilities", it was agreed that States should share their information including current status, main obstacles, needs and work programme to complete PQs and CAPs, technical assistance received, comments on the CMA-OLF, and any other information to be presented by the National Continuous Monitoring Coordinators (NCMCs). In this regard, the meeting noted that the MID-SST/3 meeting will be held in Abu Dhabi, UAE, 10-13 October 2016 and will include in its agenda a 1-day NCMCs meeting. Accordingly, the meeting urged States to support the MID-SST/3 meeting and ensure active participation of the NCMCs.
- 3.57 It was underlined that the progress of updating the Corrective Action Plans (CAPs) to address identified findings from the USOAP-CMA is low. Accordingly the meeting urged States to take necessary measures to update their CAPs including the progress of implementation.
- 3.58 With respect to the third SEI "Regional Cooperation for the Provision of Accident & Incident investigation", it was agreed that the Strategy for the establishment of Regional Accident and Incident Investigation Organization(s) (RAIOs), needs to be revised in order to reach a mature level of regional cooperation before considering any feasibility study on the establishment of RAIO(s).
- The meeting noted that the RSC/4 reviewed a revised version of the Strategy prepared by UAE in coordination with Bahrain, Saudi Arabia and Sudan and agreed, through Draft Conclusion 4/9, to invite States to review the revised Strategy and provide feedback/comments to the ICAO MID Regional Office by 15 March 2016. As a follow-up action, the ICAO MID Regional Office issued State Letter Ref: ME 4/1 16/026 dated 26 January 2016. Few comments have been received. The revised version of the Strategy is at **Appendix 3P**. Considering that the Strategy was initially developed during the joint ACAC/ICAO Seminar held in Rabat in 2012, and in order to further fine tune it, taking into account States' needs and plans, the meeting agreed that an ACAC/ICAO joint Workshop be organized in 2017 to address issues related to Accident and Incident Investigation, with a special focus on Regional Cooperation. One of the main deliverables of this Workshop should be the

revised Strategy for the establishment of a Middle East RAIO. Accordingly, the meeting agreed to the following Conclusion:

CONCLUSION 5/13: ACAC/ICAO AIG WORKSHOP

That,

- a) a joint ACAC/ICAO AIG Workshop be organized in 2017;
- b) the Strategy for the establishment of a Middle East RAIO be finalized by the Workshop, for final endorsement by RASG-MID and the ACAC Executive Council; and
- c) States are encouraged to attend and support the Workshop.
- 3.60 In connection with the above, the meeting noted with appreciation the offer from Saudi Arabia to champion a DIP on the subject and to host the ACAC/ICAO AIG Workshop in Saudi Arabia in 2017.
- 3.61 The meeting was apprised of other activities related to the MID-SST work programme, such as the Safety Management Workshop (Kuwait, 25 -27 May 2015), Human factors in Accident Investigation training in Abu Dhabi (1-2 November 2015) and MENASASI Seminars.

Findings of a Safety Culture Survey

- 3.62 The subject was addressed in WP/19 and PPT/4 presented by AACO and ACI. The meeting thanked AACO and ACI for their initiative to conduct a survey on safety culture for the APAC and MID States.
- 3.63 The meeting noted the results of the survey and agreed to wait for the outcome of the Safety Management International Collaboration Group (SM ICG), which is working on a Safety Culture Checklist, in order to take appropriate decisions.

Outcome of the Interregional English Language Proficiency Workshop

- 3.64 The subject was addressed in WP/15 presented by the Secretariat. The meeting was apprised of the outcome of the Interregional English Language Proficiency Workshop, which was jointly organized by the ICAO APAC, EUR/NAT and MID Regional Offices and gratefully hosted by Kuwait (9-11 November 2015).
- 3.65 The main outcomes of the Workshop are as follow:
 - Licenses should be endorsed based on ICAO recognized tests.
 - Need to enhance States' safety oversight capabilities related to LPRs implementation, including through ICAO Home of English Language Proficiency Programme (iHELPP) and training of concerned regulators' staff.
 - Regulators should maintain regular contact with the Test Service Providers.
 - ICAO to consider inclusion of ELP related procedures in the PANS Training document (Doc 9868), as appropriate.
 - ICAO to consider developing additional ELP (testing) related Protocol Questions

(PQs) within the USOPA CMA framework.

- Based on identified requirements (safety case), ICAO to consider the development of provisions related to ELP for other aviation safety related disciplines (e.g. AIM, MET, firefighting, flight attendants, ground staff).
- Cooperation and sharing of information, sharing of resources at regional/sub-regional level to be encouraged.
- ICAO ELP training material (i.e. sound samples) to be used and further developed, including the development of a Computer Based Training (CBT).
- 3.66 The meeting supported the outcome of the Workshop and agreed that the MID-SST take them into consideration in its future work programme to recommend necessary follow-up actions.

Establishment of MENA-RSOO

- 3.67 The subject was addressed in WP/14 presented by the Secretariat. The meeting recalled that Nine (9) States (Bahrain, Egypt, Jordan, Kuwait, Morocco, Oman, Qatar, Saudi Arabia and Sudan) signed the Letter of Intent and committed to the process of establishing the MENA RSOO during the DGCA-MID/3 meeting (Doha, 27-29 April 2015) and that the signed Letter of Intent was handed to the Director General of ACAC for presentation to the ACAC Executive Council (Rabat, Morocco, 5-7 May 2015) and necessary follow-up action with concerned States and ICAO.
- 3.68 It was highlighted that, in accordance with the Future Activities and Work Plan proposed by the Study (concluded in April 2015), the MENA RSOO Steering Committee, which should be composed of the Directors General of the States that signed the Letter of Intent, should have been established and held its first meeting in June 2015. In this regard, the meeting noted that ACAC called for a meeting, which was initially intended to be the First meeting of the MENA RSOO Steering Committee (Rabat, 16-17 March 2016). However, due to the low level of attendance and the absence of the DGs or delegated officials, the meeting was considered as preparatory meeting for the Steering Committee. The meeting was attended by Morocco, Saudi Arabia, ACAC and ICAO.
- 3.69 The meeting was informed that the ACAC Executive Council met in Jeddah, Saudi Arabia, 16-17 May 2017 and that Saudi Arabia, re-confirmed its commitment to support the establishment of the MENA RSOO, and offered to cover the cost of the detailed Study related to the establishment of the MENA RSOO, which includes the development of the legal, organizational and financial frameworks and associated documents, such as the business and financial plans.
- 3.70 Based on the foregoing, the meeting reiterated that MENA RSOO should be aligned with the RASG-MID priorities and objectives. Therefore, ACAC should effectively and continuously coordinate the implementation of the project with the ICAO MID Office and the RASG-MID.

MID Region Safety Targets and Revised MID Region Safety Strategy

3.71 The subject was addressed in WP/13 presented by the Secretariat. The meeting reviewed the current status of the different Safety Indicators included in the MID Region Safety Strategy as at **Appendix 3Q**.

- 3.72 With respect to the reactive part of the Strategy, it was noted that although the MID Region average accidents rates are slightly above the global rates, the regional average rates for the period (2010-2014) show a good improvement compared to (2009-2013).
- 3.73 The meeting recognized that the review of the safety recommendations related to past investigation activities could be very beneficial to learn from past experiences, and agreed that the MID-SST coordinate with the stakeholders the development of a RASG-MID Safety Advisory, which consolidates a set of safety recommendations addressing the Focus Areas and Emerging Risks in the MID Region.
- 3.74 The meeting noted that the priorities identified by the RASG-MID and included in the MID Region Safety Strategy helped all stakeholders to work towards the achievement of the agreed safety targets and that, as a whole, good progress has been registered, especially in the RGS area. However, there is still room for improvement, but this necessitates to address the following main challenges:
 - a) the escalated political/security situation in some of the MID States, which affected the achievement of the regional safety targets;
 - b) insufficient technical and/or financial resources at State level to implement the Global Aviation Safety Plan (GASP) objectives, the SEIs and contribute to the achievement of the agreed safety targets and support the RASG-MID Work Programme;
 - c) difficulty to find voluntary Champions/Coordinators (from States or the Industry) to progress the work related to the identified SEIs and DIPs;
 - d) some States do not have sufficient number of qualified and experienced technical staff, including inspectorate staff, to fulfil safety oversight responsibilities;
 - e) lack of adequate training provided to technical and inspectorate staff;
 - f) slow progress in the implementation of the work programme of the MID Safety Support Team (USOAP-CMA, SSP/SMS, AIG, etc.); and
 - g) low level of reporting of safety data (incidents and hazards).
- 3.75 Based on the above, the meeting agreed that the implementation of the MID Region NCLB Strategy/Plan could provide means to overcome the regional challenges by collaboration of all stakeholders to provide targeted assistance to those States in need, as prioritized by the RASG-MID, which will foster the achievement of the safety targets included in the Doha Declaration and MID Region Safety Strategy.
- 3.76 In connection with the above, the meeting endorsed the revised version of MID Region Safety Strategy, as proposed by the RSC, which includes the following changes:
 - inclusion of two new Safety Indicators: "Average Fleet Age" and "Percentage of fleet above 20 years of age", based on the outcome of the HLSC 2015 related to core Safety Performance Indicators (SPIs);
 - inclusion of new Safety Indicator related to ECCAIRS: "Percentage of MID States that use ECCAIRS for the reporting of accidents and serious incidents";
 - deletion of the wording "acceptable means of compliance" from the Safety Target

related to the use of the IATA Operational Safety Audit (IOSA); and

- deletion of the indicator related to IATA Safety Audit for Ground Operations (ISAGO) due to the difficulties related to the measurement/monitoring and unavailability of required information including the total number of Ground Services Providers.
- 3.77 Accordingly, the meeting agreed to following Conclusion:

DECISION 5/14: REVISED MID REGION SAFETY STRATEGY

That, the revised version of the MID Region Safety Strategy (Revision 4, May 2016) at **Appendix 3R** is endorsed.

3.78 With respect to the newly added Safety Indicators: Average Fleet Age, Percentage of fleet above 20 years of age and Percentage of MID States that use ECCAIRS for the reporting of accidents and serious incidents, concern was raised regarding the use of the term "Safety Indicator" especially for the Average Fleet Age and Percentage of fleet above 20 years of age. In this respect, reference was made to the definition in Annex 19-Safety Management and Doc 9859-Safety Management Manual. The meeting recalled, that in accordance with the outcome of the HLSC 2015, States are required to monitor their fleet age; and there is no requirement to define a regional target for these indicators. The meeting agreed that the subject should be further addressed by the RSC.

MID Region NCLB Strategy/Plan

- 3.79 The subject was addressed in WP/18 presented by the Secretariat. It was highlighted that the NCLB campaign highlights ICAO's efforts to assist States in implementing ICAO Standards and Recommended Practices (SARPs). The main objective of the NCLB initiative is to better identify and coordinate assistance to States in need so that they may foster sustainable local and regional prosperity and fully benefit from improved global connectivity.
- 3.80 The meeting agreed with the RSC/4 that focus should be on the States with the greatest needs (Low EI, SSC, etc.) and that the RASG-MID should be involved in the prioritization of required assistance. In this respect, it was highlighted that prioritization should be based on the USOAP-CMA data, the safety and air navigation performance indicators included in the MID Region Safety and Air Navigation Strategies, considering also the volume of traffic and other pertinent data.
- 3.81 The meeting recognized that the Doha Declaration and the MID Region Safety Strategy, address regional policy targets, with regional performance targets, but do not specify what needs to be achieved by each State (accountability for accomplishment), in order to contribute to the accomplishment of the regional targets.
- The meeting noted that the MID NCLB Strategy/Plan will bring a new vision and scope of the regional activities to improve effective implementation status of Member States, and to set measureable and accountable deliverables and specific expected outcomes. The MID NCLB Strategy/Plan aims at a new leadership approach to transform the way business is done through agreement with concerned States on specific and measureable outcomes, and clear definition of accountability for the achievement of the set goals. It necessitates a proactive approach and outreach by the ICAO Regional Director and his team, to foster political will and senior level commitment, transforming the status quo of business as usual that does not impact the resolution of many long standing deficiencies, and applying hand holding concepts where needed, identifying Champion States or stakeholder to provide required assistance. Therefore, a plan of action is to be developed for each State; and the progress achieved will be monitored on continuous basis, with progress reports delivered to the State's senior management (DG or Minister) as well as to the DGCA-MID, RASG-

MID and MIDANPIRG.

3.83 Based on the above, the meeting supported the development of the MID NCLB Strategy/Plan for endorsement by the DGCA-MID/4 meeting.

RASG-MD Engagement Strategy- Implementation Status

- 3.84 The subject was addressed in WP/16 presented by the Secretariat. The meeting reviewed the RASG-MID Engagement Strategy and discussed its implementation status and effectiveness. It was reiterated that the success of RASG-MID is dependent on the commitment, participation and contribution of its members and partners from States, industry and Regional and Sub-regional Organizations through financial and in-kind support.
- 3.85 The meeting commended the achievements of the RASG-MID since its establishment; nevertheless it was recognized that the level of attendance/support to the RASG-MID and its subsidiary bodies was still not up to expectation.
- 3.86 The meeting recalled that the main objectives of the Engagement Strategy are:
 - Regional, National, and local knowledge and awareness;
 - buy-in;
 - commitment;
 - effective contribution to the work under RASG-MID;
 - active participation to meetings, events, and forums; and
 - harmonization of efforts.
- 3.87 The role of the different RASG-MID stakeholders was underlined. In particular, it was highlighted that participation in Safety Teams should be by specialists in the subjects under consideration. Such specialists should have relevant experience in the field concerned. Accordingly, all stakeholders should support the work of the Safety Teams by providing experts able to contribute to the work (voluntary basis), including the review of the RASG-MID deliverables.
- 3.88 In accordance with the Engagement Strategy, the meeting agreed to the following assessment using a ranking from 1 (poor) to 5 (very good):

Engagement Criteria	Assessment	Remarks
Level of participation in RASG-MID activities	3	
Effective implementation of safety action plans and mitigation measures	3	
Achievement of safety targets within set timelines	3	
Streamlining of efforts and avoidance of duplication of efforts	2	
Level of communication with stakeholders as per set plans	4	
Feedback Questionnaire (customers satisfaction surveys) from RASG-MID stakeholders and partners	N/A	First survey to be conducted end of 2016

3.89 Based on the above, the meeting urged all stakeholders to secure necessary resources to support the RASG-MID activities in an efficient manner.

RASG-MID Work Programme for 2016

- 3.90 The subject was addressed in WP/17 presented by the Secretariat. The meeting reviewed the Schedule of 2016 safety events and noted that almost all the events included therein are ICAO events. The meeting noted with concern, that many events held in the MID Region are not coordinated with the RASG-MID, which may cause an overlap of events and duplication of efforts.
- 3.91 The meeting reiterated that one of the main objectives of the RASG-MID is to ensure effective coordination and cooperation between all stakeholders, in particular for the organisation of safety events. Accordingly, the meeting urged all stakeholders to ensure that their activities are properly coordinated with the RASG-MID and included in the Work Programme through the ICAO MID Regional Office.

CAPSCA

- 3.92 The subject was addressed in WP/20 presented by the Secretariat. The meeting recalled that the Aerodrome Emergency Plan (AEP) should include public health emergencies and that ICAO initiative which addresses public health is the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA), which provides technical assistance programmes, Airport Assistance Visits, and training to support States, ANSPs, airport and aircraft operators' implementation of the public health related SARPs.
- 3.93 The meeting recalled that the Third meeting of the Directors General of Civil Aviation Middle East Region (DGCA-MID/3, Doha, Qatar, 27-29 April 2015) noted the progress made by CAPSCA programme and urged MID States that have not yet done so, to (1) join the CAPSCA-MID Project, (2) request Assistance Visits and support and (3) provide voluntary contributions to the CAPSCA-MID project. The meeting noted that around 120 States joined CAPSCA out of them 11 States are from the MID Region.
- The meeting was apprised of the outcomes of the Fifth CAPSCA Regional meeting (CAPSCA-MID/5) and Training Workshop which were conducted in Cairo, Egypt from 29 February to 3 March 2016. The CAPSCA-MID/5 work programme, presentations and report are available on the ICAO MID website http://www.icao.int/MID/Pages/capsca-mid.aspx.
- 3.95 The meeting recognized the importance of CAPSCA programme to address public health issues and urged States that have not yet done so, to join the CAPSCA-MID project. In addition, the meeting encouraged States to host and support future CAPSCA-MID meetings.

REPORT ON AGENDA ITEM 4: RASG-MID WORKING ARRANGEMENTS

RASG-MID Working Arrangements

4.1 The subject was addressed in WP/21 presented by the Secretariat.

RASG-MID Procedural Handbook-Third Edition

4.2 The meeting reviewed and endorsed the RASG-MID Procedural Handbook-Third Edition at **Appendix 4A**, which reflects the outcome of the RASG-MID/4 meeting; and agreed to the following Decision:

DECISION 5/15: ENDORSEMENT OF RASG-MID PROCEDURAL HANDBOOK-THIRD EDITION

That, the RASG-MID Procedural Handbook-Third Edition at Appendix 4A is endorsed.

Election of a Second Vice Chairperson for the RASG-MID

4.3 The meeting recalled that Mr. Achim Baumann, Regional Director, Safety and Flight Operations, IATA-MENA left IATA. The meeting thanked Mr. Baumann for his contributions to the RASG-MID. Mr. Jehad Faqir, Head of Safety & Flight Operations, IATA- MENA was unanimously elected as the new Second Vice-Chairperson of the RASG-MID.

RASG-MID and RSC Working Arrangements

- 4.4 In order to improve the efficiency of the RASG-MID and give enough authority to the RASG-MID Steering Committee (RSC) to advance the work, the meeting agreed that:
 - the RSC could approve on behalf of the RASG-MID, as deemed necessary:
 - 1) the MID Annual Safety Reports; and
 - 2) RASG-MID Safety Advisories.
 - the RASG-MID should meet every **15 to 18 months** to allow sufficient time for technical work to be completed by the subsidiary bodies; and the RSC could approve, on behalf of RASG-MID, those Draft Conclusions/Decisions emanating from the subsidiary bodies, which necessitate urgent follow-up action(s).
- 4.5 Based on the above, the meeting agreed that the RSC Terms of Reference (TORs) should be updated to reflect the above; and agreed to the following Decision:

DECISION 5/16: RSC TERMS OF REFERENCE (TORS)

That.

- a) the RSC is delegated the authority to approve on behalf of the RASG-MID:
 - 1) the MID Annual Safety Reports;

- 2) the RASG-MID Safety Advisories; and
- 3) those Draft Conclusions/Decisions emanating from the subsidiary bodies, which necessitate urgent follow-up action(s).
- b) the RSC TORs should be updated to reflect the above.

RASGs Terms of Reference (TORs)

4.6 The meeting recognized the need to update the RASGs TORs to keep pace with latest developments, including the recommendation of the HLSC-2015 and ICAO NCLB Initiative, and agreed accordingly to the following Conclusion:

CONCLUSION 5/17: REVISION OF THE RASGS TERMS OF REFERENCE

That, ICAO consider the revision of the RASGs Terms of Reference (TORs) taking into consideration the latest developments including the outcomes of the HLSC 2015 and ICAO NCLB Initiative.

REPORT ON AGENDA ITEM 5: UPDATE FROM AND COORDINATION WITH MIDANPIRG

- 5.1 The subject was addressed in WP/22 presented by the Secretariat. The meeting was apprised of the latest air navigation activities related to safety.
- 5.2 The meeting recalled that the First MIDANPIRG/RASG-MID Coordination (MRC/1) meeting (Bahrain, 10 June 2015), endorsed the Table for the subjects of common interest to MIDANPIRG and RASG-MID with the associated leading Group as at **Appendix 5A**.

Call Sign Confusion (CSC)

- 5.3 The meeting recalled that the ICAO MID Regional Office issued the RASG-MID Safety Advisory- RSA-04 through State Letter Ref.: ME 4-15/152 dated 26 May 2015, to provide a set of guidelines and similarity rules for use by airline operators and air traffic controllers. Accordingly, the meeting encouraged States and aircraft operators to implement the RSA-04.
- 5.4 The meeting was apprised of the MIDANPIRG/15 meeting outcome related to call sign similarity and confusion. The meeting supported the following MIDANPIRG/15 Conclusion and urged States to take necessary measures to implement its provisions:

CONCLUSION 15/2: CALL SIGN SIMILARITY PROVISIONS AND GUIDELINES

That, States be urged to:

- a) take necessary measures to ensure that their Aircraft Operators (AOs) implement a mechanism to de-conflict call similarity between the same AO flights and thereafter between their local AOs and other Middle East AOs flights;
- b) report call sign similarity/confusion cases using the template at Appendix 4.1C; and
- c) develop a simplified mechanism to trigger the reporting of call sign similarity/confusion by ATCOs.
- The meeting was updated on the initiative related to CSC implemented under the framework of the MID Region ATM Enhancement Programme (MAEP), by the MAEP Interim Project Management Office (MAEP IPMO) with Etihad Airways as the Champion, supported by IATA and the ICAO MID Regional Office. The meeting reviewed the progress report on the CSC initiative as presented to the Second Meeting of the MAEP Steering Committee (MAEP SC/2). Accordingly, the meeting encouraged States to cooperate with the CSC Initiative Team, for successful future testing.

Performance Based Navigation (PBN)

The meeting was apprised of the latest developments related to PBN. The meeting noted that MIDANPIRG/15 endorsed the MID Region PBN Implementation Plan (MID Doc 007), which offers appropriate guidance for air navigation service providers, airspace operators and users, regulators, and international organizations on the evolution of navigation capabilities as one of the key systems supporting air traffic management, and which describes the RNAV and RNP navigation applications that should be implemented in the short, medium and long term at the regional level. The Plan as revised by MSG/5 meeting is available on the ICAO MID Regional Office Website: https://portal.icao.int/RO_MID/Pages/MIDDocs.aspx.

- 5.7 The meeting recognized that the main identified challenge impeding the advancement of PBN implementation in addition to the low number of qualified PBN Experts (PANS-OPS, Airspace planner, OPS Approval and Instructors) is the lack of necessary regulations enabling service providers to implement and the air operators to use PBN procedures. Accordingly, the meeting encouraged States to take necessary measures to develop/update their civil aviation regulations to cover the PBN requirements.
- 5.8 The meeting noted that the establishment of the MID Flight Procedure Programme (MID FPP) under the framework of MID Region ATM Enhancement Programme (MAEP) is ongoing, based on the experience gained from the AFI and Asia/Pacific FPPs. The MID FPP main objective in Phase 1 is the building of the MID States' capabilities related to PBN, which eventually will foster the PBN Implementation.
- 5.9 The meeting recalled that the MSG/5 meeting reviewed the outcome of the PBN SG/2 meeting (Sharm El Sheikh, Egypt, 22-25 February 2016). The meeting was informed of the Amendment 6 to the Procedures for Air Navigation Services Aircraft Operations (PANS-OPS, DOC 8168) and the new ICAO Circular 336 on the transition from RNAV to RNP approach chart identification.
- 5.10 The MSG/5 meeting was apprised of the latest developments related to the Visual Guided Approaches (VGAs). The meeting noted that VGAs are established at specific aerodromes to enhance safety, improve efficiency and for environmental/noise considerations. In this respect, the meeting encouraged States to work closely with the air operators to make available the required regulations/provisions and certification process, and to implement VGAs where needed/applicable.

Civil/Military Coordination

5.11 The meeting recalled that the MIDANPIRG/15 meeting established the MID Civil/Military Support Team, with a view to expedite the implementation of the FUA Concept in the MID Region. Accordingly, the meeting encouraged States to request the ICAO MID Regional Office to coordinate the conduct of a Support Team visit, which includes in its work programme a Civil/Military Cooperation Workshop.

Conflict Zones

- 5.12 The meeting noted that some airspace users continue to circumnavigate Baghdad, Damascus and Tripoli FIRs due to the conflict zones. With regard to Sana'a FIR, some air operators resumed operations through Sana'a FIR using the ATS routes over the high seas.
- 5.13 The meeting commended the work of the Contingency Coordination Teams (CCTs), established in accordance with the MID Region ATM Contingency Plan, which succeeded in the provision of a forum for sharing information, identifying the challenges and implementation of contingency measures/routes ensuring the safety of air traffic during contingency situations.
- 5.14 The meeting noted that the majority of the information posted on the ICAO Conflict Zone Information Repository (CZIR) is related to the MID Region. In this respect, States were encouraged to provide updated information related to conflict zones, in accordance with the interim procedure to disseminate information on risks to civil aviation arising from conflict zones attached to State Letter Ref.: SMM 1/4-15/16 dated 20 March 2015.

Search and Rescue (SAR)

- 5.15 The meeting noted that the Council at its 206th Session approved the recommendation of the ANC on the amendment to Annex 6 Part 1 in relation to Normal Tracking with applicability of 2018; and the Air Navigation Commission (ANC) at its 200th Session gave final review to amendments to Annex 6 Part 1 in relation to Flight Data Recovery and Distress Tracking with applicability in 2021.
- 5.16 The meeting noted that in accordance with the USOAP-CMA results, SAR Effective Implementation at global level is **61.9%** and at the MID regional level is **65.18%**. The main findings are related to lack of:
 - English Language Proficiency for RCC radio operators;
 - Appropriate training programmes/plans of SAR experts;
 - lack of signature of SAR agreements;
 - lack of plans of operations for the conduct of SAR operations and SAR exercises;
 - lack of provision of required SAR services; and
 - non-compliance with the carriage of Emergency Locator Transmitter (ELT) requirements.
- 5.17 It was highlighted that the MSG/5 meeting established a MID SAR Action Group composed of SAR Experts from volunteer States (Bahrain, Egypt, Iran, Saudi Arabia and UAE) and ICAO to develop the MID SAR Plan and an Action Plan for the conduct of regional/sub-regional SAR training exercises.
- 5.18 The meeting encouraged States to attend the Inter-regional AFI/APAC/MID SAR Workshop that will be held in Seychelles from 19 to 22 July 2016.

Remotely Piloted Aircraft System (RPAS)

- 5.19 The subject was addressed in WP/23 and PPT/3 presented by the Secretariat. The meeting was apprised of the latest developments related to RPAS. The meeting noted that the ANC during its 196th Session in May 2014 established the RPAS Panel to replace the Unmanned Aircraft Systems Study Group (UASSG).
- 5.20 The main objective of the RPAS Panel is to develop SARPs, procedures and guidance to facilitate safe, secure an efficient integration of Remotely Piloted Aircraft (RPA) into non-segregated airspace and aerodromes, maintaining the existing level of safety for manned aviation, with priority to Instrument Flight Rules (IFR) operations in controlled airspace. The meeting noted that the personnel licensing provisions related to RPAS will be adopted in 2018.
- 5.21 The meeting encouraged States to use the guidance material related to RPAS provided in the ICAO Doc 10019 and the information available on the RPAS webpage: https://www4.icao.int/rpas
- 5.22 The meeting encouraged States to consider the developments related to RPAS, and take necessary measures for the amendment of the relevant civil aviation regulations and procedures in a timely manner, in order to ensure safe integration of the RPA into the non-segregated airspace.

5.23 The meeting agreed that the RASG-MID should address the RPAS safety-related issues. The meeting agreed to the following Conclusion:

CONCLUSION 5/18: REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS)
OCCURRENCES

That, States be urged to report any safety occurrence related to RPA operations to the ICAO MID Regional Office on regular basis, for review and analysis by the Accident and Incident Analysis Working Group (AIA WG).

Reduced Vertical Separation Minima (RVSM)

- 5.24 The subject was addressed in WP/24 presented by the Middle East Regional Monitoring Agency (MIDRMA). The meeting was apprised of the MIDRMA activities.
- 5.25 The meeting noted that the MIDANPIRG/15 meeting reviewed and endorsed the MID RVSM Safety Monitoring Report (SMR) 2014, which presents evidence that, according to the data and methods used, the key safety objectives as set out by MIDANPIRG, continue to be met.
- The meeting was apprised of the MIDRMA activities related to the Minimum Monitoring Requirements (MMR). The meeting noted with appreciation that the MIDRMA developed an Auto Online MMR Tool to enable the Civil Aviation Authorities in the MID Region to check their MMR for each air operator under their responsibility and identify the aircraft that are non-compliant with the Annex 6 requirements for height-keeping performance. Accordingly, the meeting urged States to use the Auto Online Minimum Monitoring Requirements (MMR) Tool, available on the MIDRMA website.
- 5.27 The meeting emphasized that, in an RVSM airspace, the operation of an aircraft which does not comply with stringent altimetry system performance requirements, constitutes a significant risk to mid-air collision. The same risk exists for an approved aircraft which is configured differently to the configuration for which the approval was granted.
- 5.28 The meeting noted that recently, the Airworthiness Authorities in UAE and Qatar managed to certify all their C17s aircraft and Oman certified some other types which are used by their military, while the Airworthiness Authority in Kuwait is still reviewing the certification process of their C17s aircraft. It was highlighted that the MIDRMA is continuously monitoring the activities of the non-approved military cargo aircraft operating in the Middle East airspace and expects an increase in the number of violations to the RVSM airspace. Accordingly, the meeting encouraged States to implement a process for the RVSM approval of their military aircraft, if not yet done so.
- 5.29 The meeting reviewed and updated the MIDRMA Airworthiness/Flight Operations focal points as at **Appendix 5B**.

A-SMGCS and A-CDM

The subject was addressed in WP/11 presented by the Secretariat. The meeting noted that Advanced Surface Movement Guidance and Control Systems (A-SMGCS) and Airport Collaborative Decision Making (A-CDM) are part of the identified air navigation priorities in the MID Region. The meeting was apprised of the advantages related to the implementation of A-SMGCS and A-CDM, which aims to improve aerodrome safety and capacity.

REPORT ON AGENDA ITEM 6: FUTURE WORK PROGRAMME

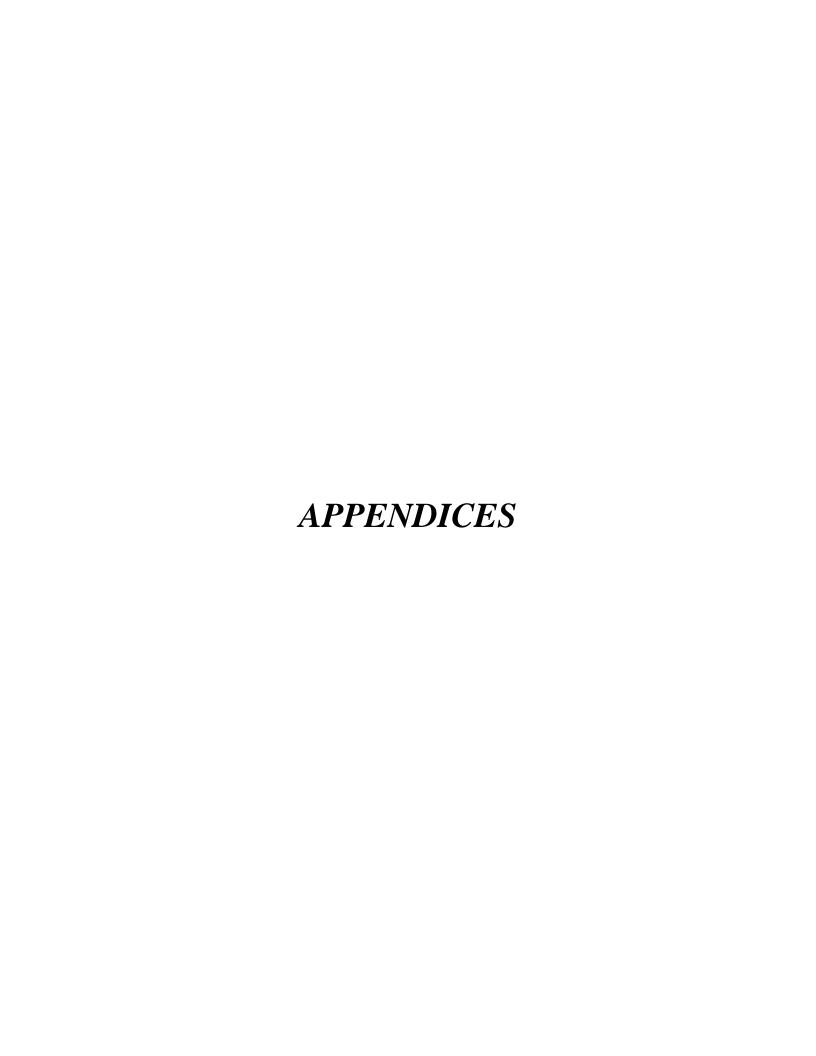
- 6.1 The subject was addressed in WP/25 presented by the Secretariat. The meeting noted that the RSC/5 meeting will be hosted by IATA-MENA in Amman, Jordan, 28-30 November 2016.
- 6.2 The meeting noted with appreciation the offer from Bahrain to host the RASG-MID/6 meeting during the second half of 2017, pending final confirmation. Tentatively the date will be 19-21 September 2017. The exact date will be coordinated between the ICAO MID Regional Office and the RASG-MID Chairman.
- 6.3 The meeting noted with appreciation also that the Fourth MID Region Safety Summit will be hosted by Saudi Arabia in Riyadh in the first half of 2018.

REPORT ON AGENDA ITEM 7: ANY OTHER BUSINESS

Areas of Interest to the United States at the 39th ICAO Assembly

- 7.1 The subject was addressed in WP/26 presented by the United States. The meeting was provided with an overview of United States' areas of interest for the 39th ICAO Assembly highlighting aviation challenges for the next Triennium. The United States' proposals for the 39th Assembly concerns mainly the following subjects:
 - Encourage a Performance-Based Approach.
 - Ensure Global Viability of New Standards and Recommended Practices.
 - Manage Integration of New Technologies and Entrants.
 - Improve Airport Planning and Runway Safety.
 - Environment (Global Market Based Measures (GMBM)).
 - Promote Safe and Secure Operations (Cyber security, GASeP).
- 7.2 The meeting encouraged States to review the United States' papers to be presented to the 39th ICAO Assembly and support the proposed initiatives, as appropriate.

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APPENDIX 3A

FOLLOW-UP ACTION PLAN ON RASG-MID/4 CONCLUSIONS AND DECISIONS

CONCLUSIONS AND DECISIONS	STATUS	REMARKS
CONC. 4/1: THIRD MID REGION ANNUAL SAFETY REPORT That, the Third MID Region Annual Safety Report is endorsed.	Completed	Endorsed by the RASG-MID/4 meeting.
Conc. 4/2: Mandatory and Voluntary Reporting Systems That, States, be invited to take necessary measures to: a) enhance their mandatory reporting system; and b) establish, if not already done, an effective voluntary confidential and non-punitive reporting system, to enhance the collection of data on hazards and associated safety risks that may not be captured by the mandatory reporting system.	Ongoing	The subject is addressed by MID Safety Team (MID-SST). It was further discussed and recommended as a Conclusion of the MID Safety Management Workshop (Kuwait, 25-27 May 2015).
DEC. 4/3: STUDY ON THE ESTABLISHMENT OF A MID REGION SAFETY DATABASE That, the MID-SST conduct a study on the need and feasibility of establishing a MID Region Safety Database.	Overcome by events	In accordance with the outcome of the Safety Management Workshop (Kuwait, 25-27 May 2015), the SST/2 meeting (Cairo, Egypt, 27 – 29 October 2015) and the RSC/4 meeting (Cairo, Egypt, 15 – 17 December 2015) agreed that the establishment of a Regional/Sub-regional safety database should be considered by the MENA RSOO, when established.
CONC. 4/4: FLIGHT DATA EXCHANGE (FDX) RASG-MID SAFETY ADVISORY That, the Draft RASG-MID Safety Advisory at Appendix 3A be further reviewed and finalized by ICAO in coordination with IATA and all concerned stakeholders in order to be posted on the ICAO MID website.	Completed	RASG-MID Safety Advisory-06 (RSA-06) has been posted on the ICAO MID website.

CONCLUSIONS AND DECISIONS	STATUS	REMARKS
DEC. 4/5: ACCIDENT AND INCIDENT ANALYSIS WORKING GROUP (AIA WG) That, the Accidents and Incidents Analysis Working Group (AIA WG) be established with Terms of Reference (TOR) as at Appendix 3B.	Completed	AIA WG has been established and had its First meeting, AIA WG/1 (Cairo, Egypt, 29 – 31 March 2016).
Conc. 4/6: Additional RGS SEIs That, additional RGS SEIs be developed as follows: a) RGS/4 on Aerodrome Safeguarding with Egypt as Champion supported by Sudan; b) RGS/5 on Wildlife Control with Sudan as Champion supported by Egypt and UAE; and c) RGS/6 on Laser-attacks with Egypt as Champion supported by UAE.	Actioned	The Conclusion is being addressed and implemented by the RGS WG.
Conc. 4/7: REDUCTION OF UN-STABILIZED APPROACH RISK That, States that have not yet done so, be urged to minimize the risk of unstabilized approach through (but not limited to): a) training of operators (pilots, air traffic controllers/air navigation service providers, and aerodrome operators); b) development of relevant Guidance materials; c) encouraging the reporting of un-stabilized approaches, assessment and mitigation of the associated risk and conduct of necessary safety oversight, as part of SMS implementation; and d) review of Standards Operation Procedures.	Completed	SL Ref.: AN 5/24 - 15/219 dated 30 July 2015.

CONCLUSIONS AND DECISIONS	STATUS	REMARKS			
CONC. 4/8: DEVELOPMENT OF ADDITIONAL RUNWAY SAFETY PROVISIONS That, ICAO consider the development of additional Runway Safety provisions.	Completed	The ANC agreed that the development of additional runway safety provisions will be included in the Work Programme and that a requirement to establish runway safety teams to be applicable in the next edition of the PANS Aerodrome.			
CONC 4/9: RUNWAY SAFETY TEAM (RST) AND RUNWAY SAFETY GO-TEAM That, MID States, that have not yet done so, be encouraged to: a) foster the implementation of Runway Safety Teams (RST) at their international aerodromes and associated safety management systems, making use of the Runway Safety Implementation Kit (I-Kit) which includes the RST Handbook and Runway Safety Go-Team methodology; b) consider supporting the regional Runway Safety Go-Team activities; and c) encourage their aerodrome operators to request Runway Safety Go-Team visits,	Completed	SL Ref.: AN 5/24 - 15/220 dated 30 July 2015.			
as required. CON. 4/10 GUIDANCE MATERIAL RELATED TO CALL SIGN SIMILARITY That, the RASG-MID Safety Advisory at Appendix 3J providing guidance related to call sign similarity, including the call sign similarity rules is endorsed.	Completed	RASG-MID Safety Advisory-04 (RSA-04) has been issued and posted on the ICAO MID website.			
CONC. 4/11: MID REGION SAFETY STRATEGY That, a) the MID Region Safety Strategy at Appendix 3Q is endorsed; and b) States be urged to provide necessary information/feedback to the ICAO MID Regional Office related to all Safety Indicators included in the MID Region Safety Strategy.	Completed	The MID Region Safety Strategy was endorsed by the RASG-MID/4 meeting.			

CONCLUSIONS AND DECISIONS	STATUS REMARKS
CONC. 4/12: TRACKING SSP IMPLEMENTATION VIA THE GAP ANALYSIS T iSTARS That, States, that have not yet done so, be urged to complete their SSP Gap Ana on iSTARS and request assistance from ICAO, as deemed necessary, to complete their task before 1 June 2015.	11 States completed the SSP Gap Analysis on iSTARS.
CONC. 4/13: RASG-MID ENGAGEMENT STRATEGY That, the RASG-MID Engagement Strategy at Appendix 3T is endorsed.	Completed The RASG-MID Engagement Strategy has been endorsed the RASG-MID/4 meeting.
CONC. 4/14: IATA-IOSA PROGRAMME That, States be encouraged to accept the IATA-IOSA Programme as an accept means of compliance that would complement their safety oversight activities.	Ongoing Replaced and superseded by Conclusion 5/2.
DEC. 4/15: RASG-MID CHAIRMANSHIP That, Mr. Ismaeil Mohammed Al Blooshi, Mr. Abdullah O. Rajab Al Ojail Mr. Achim Baumann, continue to serve as the RASG-MID Chairperson, First Chairperson and Second Vice-Chairperson, respectively, for three addit meetings.	Vice-

APPENDIX 3B

iSTARS ADREP Occurrence Data Form

Section	Name	Data type	Source
Filing Information	Reporting State/Organization	Value list	ISO 3166-1 list of country codes
33.71	Occurrence Date	Date	<u>ISO 8601</u>
When	Occurrence Time (UTC)	tate/Organization Value list ISO 3166-1 list of country code Iso 8601 Time (UTC) Time Value list Value list Value list IsO 3166-1 list of country code occurrence Text Value list Value list IsO 3166-1 list of country code occurrence Text Value list Value list Cocurrence Class Taxonomy Value list Value list Value list Damage Aircraft Taxonomy Value list Injury Level Taxonomy Number Text Stration Text Value List Try Value list IsO 3166-1 list of country code Occurrence Class Taxonomy Value list Injury Level Taxonomy Number Text Stry Value List Try Value list Operation Text Operator me/Code Value list Value list Operation Type Taxonomy MG1: 0-2250 kg MG2: 2251 - 5700 kg MG3: 3701 - 272000 kg MG3: 5701 - 272000 kg MG5: >272000 kg UNK: Unkown Value list Value list Value list Value list Value list Flight Phase Taxonomy use Value list	<u>ISO 8601</u>
	State of occurrence	Value list	ISO 3166-1 list of country codes
	Location of occurrence	Text	
Where	FIR	Value list	FIR Codes
	Latitude (ddmmss)	Latitude	
	Longitude (dddmmss)	Longitude	
Classification	Occurrence class	Value list	Occurrence Class Taxonomy
Classification	Occurrence category	Value list	Occurrence Category Taxonomy
	Damage aircraft	Value list	Damage Aircraft Taxonomy
Severity	Injury level	Value list	Injury Level Taxonomy
	Fatalities	Number	
Narrative	Narrative	Text	
	Aircraft registration	Text	
Aircraft Identification	Aircraft Category	Value List	
Aircraft identification	Manufacturer/model	Text	
	State of registry	Value list	ISO 3166-1 list of country codes
Operator	State of the Operator Operator Name/Code	Text	
Operation Type	Operation type	Value list	Operation Type Taxonomy
Mass Group	Mass group	Value list	MG2: 2251 - 5700 kg MG3: ₅₇₀₁ - 27000 kg MG4: 27001 - 272000 kg MG5: >272000 kg
XX	Last departure point	Value list	4L Airport Codes
History of Flight: Itinerary	Planned destination	Value list	4L Airport Codes
	Flight phase	Value list	Flight Phase Taxonomy
Analysis	Main root cause	Value list	
Allarysis	Contributing factors	Value list	Hazard Taxonomy

APPENDIX 3C

DIP Tracking for MID-RAST/RGS/2

Development guidance material and training programmes to support the creation of action plans by local aerodrome Runway Safety Teams (RST)

RGS/2 DIP Deliverable	Target Date	Status	Comments		
✓ Develop and issue Stop Bar guidance documentation for consideration of LRSTs	End April 2014	Completed	RASG-MID Safety Advisory (RSA-01) circulated to States on 2 November 2014 (Ref: ME 4-14/253)		
 ✓ Organise a Workshop for Regional RST Go-Teams 	End June 2014	Completed	3 June 2014 – see RASG-MID/4 WP/7 - Outcome of MID-RRSS/2 for details		
✓ Develop and issue regulatory framework supporting establishment of LRSTs	End September 2014	Completed	RASG-MID Safety Advisory (RSA-02) circulated to States on 20 January 2015 (Ref: ME 4-15/014)		
✓ Develop and issue a model checklist for LRSTs	End December 2014	Completed	RASG-MID Safety Advisory (RSA-03) circulated to States on 16 March 2015 (Ref: ME 4-15/078)		

APPENDIX 3D

DIP Tracking for MID-RAST/RGS/3

Development guidance material and training programmes to support Aerodrome Infrastructure and Maintenance Management

RGS/3 DIP Deliverable	Target Date	Status	Comments
✓ Conduct a MID-Regional Runway Safety Seminar	End June 2014	Completed	4 June 2014 – see RASG-MID/4 WP/7 - Outcome of MID-RRSS/2 for details
 ✓ Organise a Regional Aerodrome Certification Workshop 	End June 2014	Completed	4 June 2014 - see RASG-MID/4 WP/7 - Outcome of MID-RRSS/2 and RASG-MID/4 WP/8 - Runway Safety Related Issues
✓ Develop a MID-Region Aerodrome Certification toolkit for States.	End March 2015	Completed	RASG-MID Safety Advisory (RSA-05) circulated to States on 10 September 2015 (Ref: ME 4-15/261)
✓ Develop and issue guidance material on periodic surveillance audits of Aerodrome Infrastructure and Maintenance	End March 2016	Completed	Draft RASG-MID Safety Advisory (RSA-xx) provided to ICAO MID on 5 April 2016 and circulated for review by MID-States.
Develop and issue guidance material on proactive oversight of Aerodrome Infrastructure Development	End November 2016	In Progress	

RASG-MID SAFETY ADVISORY – 10



(RSA-10)

June 2016

MID-Region

Periodic Surveillance Audits of Aerodrome Infrastructure & Maintenance

Date of Issue:	June 2016
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Owner:	RASG-MID

These guidelines are developed by the Runway and Ground Safety Working Group (RGS WG), as part of MID-RAST/RGS/3 DIP deliverables, based on the work of the UAE General Civil Aviation Authority in collaboration with the ICAO MID Regional Office within the framework of RASG-MID the Regional Aviation Safety Group - Middle East (RASG-MID).

Disclaimer

This document is intended to provide guidance for civil aviation regulators, aerodrome operators and other stakeholders involved in aerodromes infrastructure and maintenance.

The document has been compiled by members of the aviation industry to enhance aviation safety. It is not intended to supersede or replace existing materials produced by the State or in ICAO SARPs. The distribution or publication of this document does not prejudice the State's ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.

Regional Safety Advisory

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INTRODUCTION

BACKGROUND

This advisory publication was developed further to the expertise and experience of the General Civil Aviation Authority of the United Arab Emirates based on its regulation, guidance materials and processes in support of the runway and ground safety enhancement initiatives undertaken by the ICAO Regional Aviation Safety Group – Middle East (RASG-MID) and the associated Runway & Ground Safety Working Group (RSG WG).

This publication provides guidance material for periodic surveillance audits of Aerodrome Infrastructure and Maintenance. A cycle of periodic surveillance audits is inexorably linked to effective certification of aerodromes. This publication provides an oversight framework suitable for ongoing safety assessment of Certified Aerodromes and is provided further to the information contained in RASG-MID Safety Advisory – 05 (RSA-05) - Aerodromes Certification Toolkit.

The Detailed Implementation Plan for the Safety Enhancement Initiative delivered by this publication is as follows:

Develop and issue guidance material on periodic surveillance audits of Aerodrome Infrastructure and Maintenance

Without an effective safety oversight regime, States' efforts to assess and improve runway safety may be thwarted or addressed in an inconsistent manner.

Whilst this Safety Advisory provides a readily adoptable framework for periodic surveillance audits, it is essential for all States to ensure adequate legal, regulatory and organisational structures and commit the necessary resources to fulfil their safety oversight obligations. These actions are essential to support the oversight of aerodrome operators in accordance with relevant ICAO provisions.

PURPOSE

The purpose of this Safety Advisory is to provide model elements for periodic surveillance audits of Aerodrome Infrastructure and Maintenance to support MID States in developing and benchmarking regulation and processes to support the effective safety oversight at certificated aerodromes. The guidance consists of the following elements:

Model **Regulation** as it pertains to the portions of the Certification which support a regime periodic surveillance audits including initial certification of Infrastructure as well as enforcement actions in the event of safety critical non-conformance.

(Chapter 3)

Model **Oversight Process** to be considered as part of the State's aerodrome certification and safety oversight processes. This is to be considered in conjunction with ICAO Doc 9734, Safety Oversight Manual. (*Chapter 4*)

Model **Forms & Templates** which may be used in support of Periodic Surveillance Audit of Aerodrome Infrastructure and Maintenance. These materials are for the use of States and aerodrome operators as appropriate.

(Appendices)

These guidelines are based on the work carried out by the General Civil Aviation Authority of the United Arab Emirates as an integral part of their commitment to enhance runway safety through the creation of materials to support aerodrome oversight.

In doing so, there is one single concern: safety.

This Safety Advisory serves to further empower States in their efforts to support periodic surveillance audits of Aerodrome Infrastructure and Maintenance through provision of model regulation and processes.

USING THIS SAFETY ADVISORY

The Table of Contents provides an overview of the materials which may be used by States as part of their safety oversight of Certified Aerodromes through periodic surveillance audits of Aerodrome Infrastructure and Maintenance.

Each chapter of this Safety Advisory includes proposed application of the model elements for the consideration, adaptation and adoption of States. The Safety Advisory does not have to be read in order from beginning to end; particular paragraphs may be consulted as required.

The reader will choose the depth at which the Safety Advisory will be used at any given time. Reading may range from using the Table of Contents or elements of the model materials as a benchmark for gap analysis – to adopting and/or adapting the content of the model elements.

This advisory is in support of State's safety oversight system with specific reference to Critical Element 7 - Surveillance Obligations and should be read in within the context of ICAO Doc 9734, Safety Oversight Manual, Part A, The Establishment and Management of a State's Safety Oversight System. It is also recommended that ICAO Doc 9137, Airport Services Manual, Part 9, Airport Maintenance Practices be read as background prior to conducting audit on maintenance activities. This material is published for the consideration of States based on the regulation and processes established and implemented by the General Civil Aviation Authority of the United Arab Emirates.

CHAPTER 1 REGULATION IN SUPPORT OF PERIODIC SURVEILLANCE AUDITS OF

AERODROME INFRASTRUCTURE & MAINTENANCE

1.1 Application

Each State must publish applicable national civil aviation regulation in support of Periodic Surveillance Audits to include Aerodrome Infrastructure & Maintenance. Below are sample clauses and definitions in support of this requirement which need to be assessed by each State. Some material is repeat of information included in RASG-MID Safety Advisory – 05 (RSA-05) - Aerodromes Certification Toolkit however **emphasis** have been added to those elements which are essential in providing the foundation for audits of Aerodrome Infrastructure and Maintenance.

1.2 Model Regulation: Definition

- 1.2.1 **Aerodrome Certificate Verification Audit.** An inspection of the aerodrome facilities, equipment and services and audit of the safety manuals and Compliance Statements for certification conducted prior to the issue of an Aerodrome

 Certificate.
- 1.2.2 **Periodic Surveillance Audit.** An audit conducted at least annually at the discretion of the Authority confirming on-going compliance with the National Regulations.

1.3 Model Regulation: Applicability of Regulation

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit.

1.4 Model Regulation: Operator Obligations in relation to Aerodrome Infrastructure and Maintenance

1.4.1 Grant of an Aerodrome Certificate

- a) ...the aerodrome's facilities, services and equipment are in accordance with the national civil aviation regulations and other relevant ICAO Standards and Recommended Practices;
- b) The Aerodrome Manual prepared for the applicant's aerodrome contains all pertinent information on the aerodrome site, facilities, services, equipment, operating procedures, organisation and management;
- c) The aerodrome operator's Safety Management System and supporting operating procedures make satisfactory provision for the safety of aircraft;
- d) The applicant will be able to operate and maintain the aerodrome properly...

For more criteria related to Grant of an Aerodrome Certificate consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit.

1.4.2 Validity of an Aerodrome Certificate

- 1.4.2.1 The Aerodrome Certificate shall remain valid
 - a) ...subject to Periodic Surveillance Audits;
 - b) subject to Aerodrome Certification Verification Audits...

For more criteria related to Validity of an Aerodrome Certificate consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit.

1.4.3 Restriction, Suspension or Revocation of an Aerodrome Certificate

- 1.4.3.1 The National Authority may restrict, suspend or revoke an Aerodrome Certificate with reference to the national laws.
- 1.4.3.2 The National Authority may restrict, suspend or revoke an Aerodrome Certificate in the event of non-compliance with the certification requirements or unresolved safety deficiency/concern. In such cases the National Authority shall notify the aerodrome operator in writing of its reasons.

For more information related to Restriction, Suspension or Revocation of an Aerodrome Certificate Consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit.

CHAPTER 4 MODEL PROCESS FOR AERODROME PERIODIC SURVEILLANCE AUDIT

4.1 Application

The model procedures below provides a framework for States to certify aerodromes and conduct the necessary safety oversight audits in support of the Aerodrome Certification process in Chapter 3. The model process for the Audit Programme should be read in conjunction with ICAO Doc 9734, Safety Oversight Manual.

The model is based on the premise that each aerodrome will have allocated inspectors from various disciplines responsible for the initial and on-going oversight. Management decisions regarding the audits will be undertaken by the appropriate levels of the management holding the appropriate authority further to the State's delegation of powers and authorities regarding technical matters.

4.2 Model Process: Introduction

ICAO Doc 9734, Safety Oversight Manual and the ICAO annexes establish the standards in support of the eight critical elements essential to the state safety oversight system. Audits are part of surveillance activity associated with these critical elements proactively ensure that aerodrome certificate holders continue to meet the established requirements and function at the level of competency and safety required by the National Authority to the activities for which they are certified.

4.2.1 Purpose

National civil aviation regulation provides for the grant of aerodrome certificates subject to the State being satisfied that the aerodrome operators meets the requirements of the regulation. Once issued, the aerodrome certificate shall be valid subject to the conditions of the certificate and continued compliance with these national civil aviation regulation.

The procedures and guidelines outlined in this document provide for the initial verification and on-going surveillance audits of certified aerodromes.

This processes to be includes a framework for recording and reporting compliance in relation to appropriate laws, national civil aviation regulations and safety requirements as well as resolution of safety issues further to audit findings.

This procedure defines the responsibilities, goals and methods for audit of certified aerodromes by the National Authority. This approach aims to create a professional, harmonious relationship between the National Authority and the aerodrome operator by outlining procedures to conducted efficient and effective audits by collecting information in the least disruptive manner and fostering a culture of partnership, no blame, transparency and self-disclosure.

4.2.2 Responsibility

It is the responsibility of States to monitor the performance of its inspectors and auditors against this procedure to include timely closure of audit reports.

4.3 Model Process: References

4.3.1 References

[National Authority to insert references to relevant ICAO, national civil aviation regulation, guidance materials, etc.]

4.4 Model Process: Audit Programme

4.4.1 Audit Programme

States shall develop and approve an annual Audit Programme. Effective audit programmes should be carefully planned and executed and can be based on a risk-based approach. Auditors are responsible for implementing the approved annual Audit Programme. Designated lead auditors are responsible briefing management on the findings and difficulties in follow-up and closure.

The following are the objectives of the Audit Programme:

- a) Ascertain whether the aerodrome operator is or will continue to conduct operations in accordance with the national law, national civil aviation regulations, National Authority Publications and ensure that organisation's manuals and procedures are appropriately documented and followed;
- b) Ensure the aerodrome manual includes required content and the aerodrome operator demonstrates effective implementation of its obligations;
- c) Provide assurance that the aerodrome operator's competency, operating practices and records of compliance meet requirements;
- d) Provide the opportunity to identify gaps in aerodrome operator's implementation of national civil aviation regulation, guidance material or best practices if such actions are required or would result in improvements in operating safety environment;
- e) Detect and track the resolution of safety concerns residing in the aviation system; and
- f) Establish whether the aerodrome operator may operate or continue to operate under an aerodrome certificate or if the aerodrome shall be restricted, suspended or revoked.

Note: This would include the ability to analyse safety deficiencies, forward recommendations, support the resolution of identified deficiencies, as well as take enforcement action when appropriate.

Surveillance activities are conducted at different intervals depending on the type of the audit to be conducted. The scope, depth and complexity of the audit along with size and type of operation shall require individual auditor planning.

Type of Aerodrome Audit	Frequency
Aerodrome Certificate Verification Audit	Conducted prior to the issue of an Aerodrome Certificate.
Periodic Surveillance Audit	The frequency is based on the complexity of operations and proficiency operations. The maximum period between two audits is based on the aerodrome operator's risk profile and shall not exceed 18 months.
Mid-Audit Review	May be conducted between periodic audits when deemed necessary by auditors to review any outstanding findings or accepted action plans.

Audits include following general characteristics:

- a) A specific work activity title;
- b) A definite beginning and a definite end;
- c) Defined procedures;
- d) Specific objectives; and
- e) Reporting of findings.

4.5 Model Process: Checklists

Checklists are powerful audit tools and if used correctly they shall enable auditors to focus on the task in hand. Checklists also act as a guide, an aid memoire, provider of continuity and a record of audit coverage. Checklists which support safety Periodic Surveillance Audit of Aerodrome Infrastructure including the following:

Reference	Name	Purpose
Appendix A	Aerodrome Self- Assessment Checklist	Used as part of the initial Aerodrome Certification Verification Audit as well as during Periodic Surveillance Audits to provide the aerodrome operator meets to demonstrate compliance through a self-assessment.
Appendix B	Aerodrome Core Item Checklist	Used as part of the initial Aerodrome Certification Verification Audit as well as during Periodic Surveillance Audits to ensure the aerodrome operator meets areas of necessary compliance. All items of the checklist must be annotated during an Aerodrome Certification Verification Audit however the Allocated Inspector may complete only parts of this checklist further to the agreed scope of a Periodic Surveillance Audit.

4.6 Model Process: Procedure

4.6.1 Audit Phases

Audits, including Aerodrome Certification Verification Audit are divided into eleven phases:

- Phase 1 Audit Planning and Preparation
- Phase 2 Audit Notification
- Phase 3 Opening Meeting
- Phase 4 Audit Conduct
- Phase 5 Evaluation of Results
- Phase 6 Closing Meeting
- Phase 7 Notification of Audit Findings
- Phase 8 Corrective Actions
- Phase 9 Follow-up Actions
- Phase 10 Records
- Phase 11 Audit Closure

4.6.2 Phase 1 - Audit Planning and Preparation

Planning is vital to ensure that a surveillance programme is effective and efficient. The auditor shall have a complete and clear understanding of the aerodrome operator and its procedures.

The auditor are encouraged to gather as much as information prior to the audit and must verify the aerodrome operator's level of compliance with the latest published national civil aviation regulations.

All audits must be planned in order to ensure that National Authority resources are correctly utilised and aerodrome operators are not unduly inconvenienced. The planning phase shall take into consideration:

- a) Access to the aerodrome;
- b) Presence of key personnel; and
- c) Knowledge of the audit process.

Management should appoint a lead auditor for an audit with two or more auditors. The lead auditor shall determine the scope of the audit in consultation with the rest of the team and if necessary conduct a briefing to establish the following:

- a) Information on the aerodrome and aerodrome operator;
- b) The audit scope, elements, targets, timings, etc;
- c) Roles and responsibilities of each auditor;
- d) Locations to be visited,
- e) Team travel arrangements;
- f) Opening and Closing Meeting arrangements; and
- g) Distribution of the relevant documentation.

4.6.3 Phase 2 - Audit Notification

For scheduled audits sufficient notice time, no less than two weeks, shall be given to the aerodrome operator.

4.6.4 Phase 3 - The Opening Meeting

The purpose of this phase is to:

- a) Explain the purpose of the audit including the objective and scope of the audit;
- b) Introducing different representatives;
- c) Provide short summary of the audit programme;
- d) Confirming the arrangements for the Closing Meeting;
- e) Plan and agree on alternative arrangements, where necessary;
- f) Confirm housekeeping arrangements (office to work from, escorts, etc.); and
- g) Confirm which auditees shall provide corrective actions to any findings.

4.6.5 Phase 4 - Audit Conduct

The task of the auditor when conducting the audit is to verify compliance with the national law, national civil aviation regulations, National Authority Publications and ensure that organisation's manual and procedures are appropriately documented and followed. In this regard, the auditor shall carefully review the regulation to identify the applicable requirements.

Note: The auditor always needs "Objective Evidence" taking into consideration that an audit is a fact finding mission, not a fault finding mission.

Each element of the audit shall be conducted with the following guidelines in mind:

- a) Identify the current practices;
- b) Establish that the practices are appropriate;
- c) Establish that the documentation matches the practices;
- d) Review the system for regulatory compliance;
- e) Identify any immediate safety-significant problems;
- f) Aerodrome operator's compliance to latest published regulations; and
- g) Other things to consider, such as:
 - i. Are the people appropriately trained/qualified?
 - ii. Are there sufficient controls in the system (quality assurance processes)?
 - iii. Shall the process continue if key personnel are not available (do they have a contingency)?
 - iv. When issues are uncovered ask "why" to get to the root cause of the problem and report on that root cause
 - v. Are the procedures in accordance with the national civil aviation regulations and other National Authority requirements?
 - vi. Are the documents reviewed and approved adequately by authorised personnel prior to issue?

- vii. Are invalid or obsolete documents promptly removed from all points of use?
- viii. Are there any activities for which no document procedures exist?

Each auditor shall record the findings and notes of the audit on the audit checklist. This shall include sufficient detail to identify what was observed during the audit including details of records sampled, names of staff interviewed and deficiencies found.

4.6.5.1 Phase 5 - Evaluation of Results

The auditor shall evaluate the audit results to establish which findings are reportable. A finding is valid if it can be cross-referenced to the national law, national civil aviation regulation, guidance materials or any documents approved or accepted by the National Authority such as the Aerodrome Manual.

A finding is categorised as Level 1, Level 2 or Level 3.

4.6.5.2 Level 1 Finding:

- a) Level 1 findings are those which pose a hazard to aircraft operational safety or which contravenes a legal requirement or which lowers safety standards. This non-compliance might be with the:
 - applicable provisions of the State's law;
 - national civil aviation regulations;
 - the aerodrome operator's certification requirements;
 - conditions of an existing aerodrome certificate; or
 - the aerodrome operator's procedures or systems.

In determining whether a Level 1 shall be assigned to a particular finding, the auditor shall exercise sound judgement and seek management concurrence, prior to formally reporting the finding

Consequence

- b) Aerodrome Certification Verification Audit for aerodromes not yet in operation: This category of finding, if not rectified by the aerodrome operator will result in restrictive conditions on the proposed aerodrome certificate or result in the refusal of the National Authority to grant an aerodrome certificate.
- c) Aerodrome Certification Verification Audit for operating aerodromes or Periodic Surveillance Audit: This category requires immediate corrective or containment action by the aerodrome operator, failure of which shall result in limitation or suspension of operations as well as limitation, suspension revocation of any existing aerodrome certificate.

Timeframe for Corrective Actions

- d) Depending on the seriousness of the finding, its impact on the safety and if necessary a risk assessment by the audit, the auditor may give the aerodrome operator, up to seven days to provide the appropriate corrective action plan.
- e) Where a particular Level 1 finding requires an action on the spot, such as grounding an aircraft, the Auditor shall notify verbally, followed by email to the organisation pending formal notification from the National Authority.

f) However, some corrective actions may require a longer time than the time set by the auditor. It is up to the auditor to extend the timeline based on the corrective action plan provided by the aerodrome operator further to management approval.

Other Condisiderations

g) If the Level 1 is confirmed, the auditor shall decide if the situation require enforcement action in the case of violation against national laws, demonstration of gross negligence, incompetence, or evidence of wilful act, sabotage, failure to give the National Authority access to the aerodrome operator's facilities or record, falsification of documentary evidence, malpractice or fraudulent use of the aerodrome certificate or absence of an accountable manager.

4.6.5.3 Level 2 Finding:

a) A Level 2 finding non-compliance with national civil aviation regulation or a finding against the aerodrome operator's procedures, which could possibly hazard the aircraft operational safety or which could lower safety standards.

Consequence

b) *Certification Verification Audit for aerodromes not yet in operation:* This category of finding, if not rectified by the aerodrome operator, must be supported by a corrective action plan which remediates the deficiency and is acceptable to the National Authority.

Time Frame for Corrective Action

c) For Level 2 finding, the Auditor, based on his/her judgment, may grant 30 days for the corrective actions to be implemented. However, it is up to the Auditor to extend the timeline based on the corrective action plan provided by the organisation.

Other Considerations

d) Repeated or multiple Level 2 findings in a particular area could be an indication of deterioration of the aerodrome operator's standards and controls. In this case the auditor may decide to raise it to Level 1 and potentially place a restriction on operations.

4.6.5.4 Level 3 Finding:

- a) A level 3 finding is an observations or recommendation to improve safety standards and/or achieve a better practice by addressing:
 - opportunities for improvements or
 - deficiencies that may lead to potential findings.

Timeframe for Corrective Actions

- b) For Level 3, the auditor may grant up to three months for the corrective actions to be implemented however, not all Level 3 finding will necessarily warrant corrective actions and therefore may be closed based on the aerodrome operator's acknowledgement.
- c) It is important when reviewing non-compliances to ensure that the statements made are factual, supported by objective evidence and are clear, concise and understandable. If there is any doubt as to the ability to support the conclusion made, then the finding shall be discarded.

- d) In addition to the above, the auditor shall always analyse the audit report and establish the following before presenting the final report:
 - Is the deficiency an isolated error or a system breakdown?
 - Is the aerodrome operator already aware of the problem?
 - Has the deficiency been reported during previous audits?
 - Can the corrective action rectify the problem before the report is prepared? If this is the case, it shall still be raised as a finding.

4.6.6 Phase 6 - The Closing Meeting

The purpose of the Closing Meeting is to ensure the following is established:

- a) To continue the communication process with the aerodrome operator's management and to feedback the results of the audit, together with any conclusions reached.
- b) To ensure that the aerodrome operator's management is aware of and fully understand the findings and associated implications, and what they need to do next.
- c) To mark the end of phases 4 and 5.

The auditor shall use the cove the following items during the Closing Meeting:

- a) Explain the purpose of the meeting including the objective and scope of the audit, for the benefit of any participants who may not have been at the opening meeting.
- b) Thank the aerodrome operator for its cooperation, hospitality, provision of facilities and professional manner in which it participated in the audit process (as appropriate).
- c) The findings shall then be presented and accepted/rejected by the aerodrome operator if they are justified and documented.
- d) The auditor shall allow for some discussion on corrective actions of findings in order these are clear.
- e) If the findings are of significant nature, the auditor shall not leave the aerodrome operator's offices without a firm commitment from the aerodrome operator's management as to when the corrective actions shall be addressed to National Authority.
- f) The auditors shall try not to become involved in a debate on findings, but shall advise the organisation that these conclusions shall be followed by a notification of audit findings.

4.6.7 Phase 7 - Notification of Audit Findings

The National Authority shall provide the organisation with a formal report no later than 10 working days from the last day of the audit unless there is a Level 1 finding, in which case the report shall be raised as soon as possible but in no more than 3 working days from the date of detection.

The lead auditor shall complete the audit report. The following conditions shall be observed:

a) All audit reports shall include a completed Aerodrome Core Item Checklist (Reference: Appendix E)

- b) Where an audit involves assessments over multiple disciplines, a single, consolidated report should be raised.
- c) Audit reports shall include an audit summary briefly explain the scope of the audit, its purpose, the location, the number of findings, the general impression, positive points etc.
- d) The date of a finding in the report shall reflect the actual date when the finding was discovered.
- e) Findings shall be recorded in order of severity.
- f) Each finding shall have a response based on the level of the finding and/or auditor's recommendation.
- g) The audit report shall be endorsed and dated by the auditor.
- h) The report is confidential and then it shall not be distributed to a third party without permission from management.

4.6.8 Phase 8 - Corrective Actions

Depending upon the nature and level of the findings, it is very important for the aerodrome operator to submit an action plan for corrective actions along with the root cause. A plan for corrective actions is a set of actions taken to immediately rectify the finding including preventive actions to ensure no new occurrence.

Once the proposed plan is received, the auditor may either accept or request further corrective actions even if a presentation of evidences from the operator is required. If additional information is required by from the aerodrome operator the auditor may extend the deadline of the action.

4.6.9 Phase 9 – Follow-up Actions

Follow-up is required prior to the closure of the audit to verify that all proposed corrective actions are implemented. The auditor may plan a follow-up audit to verify that the corrective actions are satisfactory completed. The results of the follow-up audit shall be recorded.

The auditor may hold face-to-face review meetings with the aerodrome operator to ensure timely follow-up on the corrective actions. The auditor will keep records of these meetings.

Whenever an audit finding has not been actioned within the time limit specified, the auditor shall attempt to determine the reason. If there is no acceptable reason for the delay, the auditor shall refer the matter to management for action. If there is no response further to management intervention then the matter may be considered in the context of enforcement action.

4.6.10 Phase 10 – Records

The auditor is responsible for ensuring that records for the audit are appropriately recorded.

4.6.11 Phase 11 - Closure of the Audit

When the corrective actions are found acceptable this should be documented and the audit is considered closed. The auditor shall notify the aerodrome operator when the audit is closed.

4.7 Model Process: Regulatory Surveillance and Enforcement

Auditors must be aware of the relationship between audit and enforcement action. During the course of an audit when an auditor discovers a finding which may result in enforcement action, the enforcement procedures should be consulted.

4.8 Model Process: Report of Finding following a Regulatory Amendment

When new or amended national civil aviation regulations are introduced, there may be instances whereby aerodrome operators cannot immediately comply with the new requirements. If a finding is raised against a new requirement, the audit shall take this into consideration in agreeing to a timeline for corrective actions. Alternatively, the aerodrome operator may be asked to conduct an aeronautical study and apply for a deviation. The Auditor shall follow-up to close the finding.

Appendix A Model Aerodrome Pre-Audit Assessment Form

D.1 Aerodrome Pre-Audit Assessment

The National Authority may require all aerodromes to complete a pre-audit assessment prior to the National Authority undertaking certification validation or periodic surveillance audits. This form is in support of process for aerodrome certification, transfer of an aerodrome certificate and on-going safety oversight activities.

D.2 Aerodrome Pre-Audit Assessment - Introduction

The Aerodrome Pre Audit Assessment form is considered to be "Restricted – Management (when completed)"

PURPOSE

The purpose of the Aerodrome Pre-Audit Assessment is allow the Aerodrome Operator to self-assess aerodrome safety elements prior to an audit and to demonstrate effective or planned implementation of its safety management system to the National Authority.

CONTENT

Part 1 -Confirmation of Aerodrome Details and Key Personnel - including Aerodrome Post Holders:

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit

Part 2 -Overview of the System for Organising and Managing Aerodrome Airside Safety:

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit

Part 3 - Statement of the Physical Characteristics of the Aerodrome and the Level of Service Provided

GUIDANCE NOTES FOR COMPLETION

- 1. When completing the Assessment it is not necessary to duplicate large areas of other manuals; but provide full reference so answers can be easily found.
- 2. If the Aerodrome Operator considers any particular questions do not apply to their aerodrome, they should state this in the space provided for the answer and the National Authority auditor will discuss the matter at the next audit.
- 3. Queries relating to the completion of this should be directed to the assigned aerodrome auditor or principle inspector.
- 4. When the document is completed, it should be returned via e-mail to the National Authority with a copy to the assigned aerodrome auditor no less than two weeks before the scheduled audit.

D.3 Part 1 - Aerodrome Pre-Audit Assessment Confirmation of Aerodrome Details and Key Personnel – including Aerodrome Post Holders

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit

D.4 Part 2 - Aerodrome Pre-Audit Assessment Overview of the Systems for Organising and Managing Aerodrome Airside Safety

The following questions are intended to assist aerodrome management and National Authority in assessing the Safety Management System in operation at the aerodrome. The answers should encompass all organisations that work or have an influence on airfield activities.

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit

D.5 Part 3 - Aerodrome Pre-Audit Assessment Statement of the Physical Characteristics of the Aerodrome and the Level of Service Provided

3.1 RUNWAYS & TAXIWAYS 3.1.1 RUNWAYS

- Please complete/amend the table below (dimensions in metres).
 Highlight where national civil aviation regulation minima are not met.
- *3) Indicate areas where special procedures are required.*

Runway	Reference Code (Number and Letter)	Runway Width	Bearing Strength (PCN)	Runway Strip Width	Comments

3.1.2 Criteria regulating the use of a pavement by an aircraft with an ACN higher than the PCN reported for that pavement.

3.2 CALCULATION OF DECLARED DISTANCES

3.2.1	.2.1 Please fill in all the details for each runway										
Runway	Di	imensions		-	Instrument	t/Visual		Runway	y Magneti	c Bearing	
TODA	1	Start	ts				<u>'</u>				
TORA		Ends	s								
ASDA		Ends	3								
TODA		Ends	5								
LDA			Starts			Displaced Threshold:					
(based off	approach slope	Ends	Ends								
Undersho	ot	Fron	n			RESA	A				
(total)		То				AVA	ILABLI	Ξ:			
Over-run		Fron	n			RESA					
(total)		То	Го		_	AVAILABLE:					
Approach Surface		Surface Slop	pe If different from national civil aviation regulations requirement give reason:					gulations			
Runway	Di	imensions		Instrumen		nt/Visual Ru		Runway	y Magneti	c Bearing	
TORA		Star	ts				Runway Magnetic Bearing				1
		Ends	3								
ASDA		Ends	5								
TODA		Ends	5								
LDA	approach slope		Starts			Displaced Threshold:					
(based on	арргоасн ѕюре	Ends	3								
Undersho	ot	Fron	n			RESA					
(total)		То				AVAILABLE:					
Over-run		Fron	n			RESA					
(total)		То				AVA	ILABLE	E:			
Approach Surface Slope			oe		If different from national civil aviation regulations requirement give reason:						

3.3 TAXIWAYS

3.3.1	b) His	ghlight wi licate are	ase complete / amend the table below (dimensions in metres). hlight where national civil aviation regulation minima are not met. cate areas where special procedures are required. (If already completed, please only y changes).							
Taxiway Designator	•	Code		W	idth	S	trip W	idth	В	earing Strength (PCN)
3.4 RUNWA	Y END SA	FETY A	REAS:	(RES	As)	•			1	
	 RESA a) Please complete / amend the table below (dimensions in metres). b) Highlight where national civil aviation regulation minima are not met. c) Indicate areas where special procedures are required. (If already completed, please only highlight any changes) 									
Runway		Unders	hoot R	ESA (r	netres)		Over	run RE	SA (me	tres)
RWY										
RWY										
RWY										
RWY										
3.4.2	Where a RE	SA Aero	nautic	al Stud	ly is rec	quired;	state th	e date	that thi	s was last reviewed.
3.5 AEROD	ROME GR	OUND L	IGHT]	ING (A	(GL)					
3.5.1	Please highl	ight and	descril	be any	change	s				
		INDIC	ATE T	YPE ()F LIG	HTS (e	.g. HI	OR LI)		REMARKS
RUNWAY (designator)	ı									
Approach										
Supplement	ary									
PAPI										

APAPI										
LITAS										
Rwy Centr	reline									
Rwy Edge										
Threshold										
End										
TDZ										
Stopway										
Taxiway E	ldge									
Taxiway C	Centreline									
Illuminate	d Signs									
Illuminate	d Windsleeve	'S								
Docking G	uidance									
Floodlighti	ing									
Obstacle										
Beacon										
Other (Hel	licopter?)									
3.5.2	3.5.2 a) Does your lighting comply with national civil aviation regulation in all YES / No. please identify and justify the non-compliance. b) Describe any mitigating procedures you have put in place to ameliorate						YES / NO			
	the reduced	standar	rd of sa	fety.						
		•							 	
3.5.3	3.5.3 What is the aerodrome policy on aerodrome lighting inspections and where is it documented?						documented?			
3.5.4	.5.4 a) Are the apron and aircraft stands illuminated in accordance with YES / NO national civil aviation regulation?						YES / NO			
	b) When was the last apron/aircraft stand luminance check carried out?									
	3.5.5 a) When did the last runway lighting inspection take place?									
3.5.5		b) Who conducted the last check?								
3.5.5	b) Who	condu	cted the	e last cl	neck?	g mspec		F		
3.5.5	b) Who		cted the	e last cl	neck?	5 mspec		r		

3.5.6	a) When did the last aerodrome AGL Flight Check take place?b) Who conducted the last check?c) What was recorded and where?
3.5.7	Describe the fault reporting and follow-up system that ensures faults are rectified?
3.5.8	 a) What is the policy for checking the alternate input power supply to the AGL system? b) Who conducted the last check? c) What was recorded and where?
3.5.9	Are there any developments or changes to the AGL system planned?
3.5.10	How is the photometric performance of the AGL checked?

3.6 APRONS, STANDS AND HARDSTANDINGS

3.6.1	Confirm that all aprons, stands and hardstandings meet the requirements of national civil aviation regulation in terms of:						
	a) Slopes						
	b)	Markings					
	c)	Aircraft stand spacing					
	d)	Aircraft clearance from obstructions, etc					
3.6.2	Ident	tify any aprons, stands or hardstandings in use that do not comply with CAR Part IX,					
3.6.2		tify any aprons, stands or hardstandings in use that do not comply with CAR Part IX, lescribe any mitigating feature or procedures in place.					
	and d						
3.6.2	and d	lescribe any mitigating feature or procedures in place.					

3.9 AERODROME MARKINGS & SIGNALS

3.9.1	What is the aerodrome policy and process on aerodrome inspections for markings, signals and signage?						
3.9.2	 a) What is the date of the last inspection specifically for markings and signals? b) Was it conducted by Aerodrome Operations? YES / NO If No, please indicate who conducted the inspection. 						
3.9.3	3.9.3 Do all signs, markings & signals comply with national civil aviation regulation? YES / NO If NO, please give details, and show a plan with dates to achieve compliance.						
3.9.4	Indicate markings diagram may be for	~ -	vided, or provi	de a coloured	diagram, or a	advise where such a	
Runway D	Designator	RWY	RWY	RWY	RWY	REMARKS	
Runway T	Threshold						
Aiming Po	oint						
Touchdow	vn Zone						
Runway C	Centreline						
Runway E	Edge Markings						
Runway E	Edge (Grass)						
Taxiway (Centreline		·	·	·		
Taxiway e	edge						
Taxiway I	ntermediate Hold						
Runway T Positions	Taxi-Holding						
Signs	Mandatory						
Signs	Information						
Boundary	Markers						
Landing T	T/ Signals Area						
Windsleev	ve (Illuminated)						
Other Sign	nals/Markings						

3.16 RUNWAY SURFACE FRICTION ASSESSMENT

3.16.1	Do you have policies & procedures for the following areas of periodic friction assessment?							
	a) Training in use of equipment?	YES						
	/ NO							
	b) Record keeping?	YES						
	/NO							
	c) Maintenance of equipment?	YES / NO						
	d) Where are the above policies and procedures documented?	YES						
	/ NO							
3.16.2	Please state: -							
	a) Type of Continuous Friction Measuring Equipment (CFME) used for run	way surface						
	friction assessments							
	b) Latest assessment friction readings for inner and both outer portions							
	c) Date of most recent runway surface friction assessment							
3.16.3	a) Following the most recent runway surface friction assessment, are you							
	aware of any portion of the runway having a friction level lower than	YES / NO						
	Maintenance Planning Level?							
	If YES what maintenance has been planned to improve friction values?							
	b) Following the most recent runway surface friction assessment, are you	YES / NO						
	aware of any portion of the runway having a friction level lower than Minimum							
	Friction Level?							
	If YES, what maintenance has been planned to improve friction values?	YES / NO						
	c) If the answer to b) above is YES, has the runway concerned been notified							
	by NOTAM as "may be slippery when wet"?							

Note: Please ensure that a complete copy of the most recent runway surface friction assessment is available during the audit.

3.18 AERODROME INFORMATION (AIP Entry)

AIP amendments other than those for permanent changes to declared distances or permanent changes to the RFF category are the responsibility of the aerodrome management, who may arrange permitted amendments directly with Aeronautical Information Service (AIS).

For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit

On behalf of the Aerodrome Operator, I confirm that the details for this Part 3 - Aerodrome Pre-Audit Assessment - Overview of the Systems for Organising and Managing Aerodrome Airside Safety are correct to the best of my knowledge.

Singed:	Name:
Organisation:	Date:

Appendix B Model Aerodrome Certification Core Item Checklist

E.1 Application

The oversight of the initial Aerodrome Certification process as well as the on-going safety oversight of certificated aerodrome is support by the National Authority processes and associated forms. The Aerodrome Certification Core Item Checklist is used during the certification of aerodromes as well as during on-going safety oversight activities such as the Periodic Surveillance Audit.

The Core Item Checklist as published in the RASG-MID Safety Advisory-05 (RSA-05) — Aerodromes Certification Toolkit has been cut down to focus on the items most essential to Aerodrome Infrastructure and Maintenance. The other excluded portions of the checklist are also considered essential to safe aerodrome operations and should be undertaken separately or in parallel to any audit focusing on Aerodrome Infrastructure and Maintenance.

E.2 Model: Aerodrome Certification Core Item Checklist

Aerodrome Name: Auditor Name: Audit Dates:

Reference:

No	CORE ITEM Regulatory Reference	AUDIT ITEM	Findings / Observations					
1	CERTIFICATION DOCUMENTATION							
	For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit							
2	SMS							
	For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit							
3	PHYSICAL CHARACTERISTICS							
3.1		Runway						
3.2		Runway Clear & Graded Area						
3.3		Runway Strip						
3.4		Delethalisation						
3.5		Aiming Point / TDZ						
3.6	Provision of RESA							
3.7		Provision of runway turn pads						
3.8		Taxiways						
3.9		Taxiway Strip						

No	CORE ITEM Regulatory Reference	AUDIT ITEM	Findings / Observations			
3.10		Apron				
3.11		Markings				
3.12		Signage				
3.13		Location and conspicuity of wind sleeve				
3.14		Vehicle access roads				
4	APRON MANAGEM	ENT				
	For more information of Toolkit	consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodrom	es Certification			
5	AERONAUTICAL GI	ROUND LIGHTING (AGL)				
5.1		Runway				
5.2		Taxiways				
5.3		Apron Lux Levels				
5.4		Obstacle Lighting				
5.5		Inspection & Maintenance Procedures				
5.6		Assessment of Photometric Testing				
5.7		Alternate Power Switch-Over Times				
5.8		Flight Checks				
5.9	PAPI Checks (location & survey)					
ACT	IONS:					
6	RUNWAY/TAXIWAY	Y INCURSION PREVENTION				
6.1	For more information of Toolkit	consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodrom	es Certification			
7	RUNWAY SURFACE	FRICTION				
7.1		Review of Runway Surface Friction Assessments				
7.2		Procedures / Documentation				
7.3		Training				
ACT	IONS:	I	<u>I</u>			
8	FUEL MANAGEMEN	NT				
	For more information of Toolkit	consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodrom	es Certification			

No	CORE ITEM Regulatory Reference	AUDIT ITEM Findings Observation						
9	WILDLIFE HAZARD CONTROL & HABITAT MANAGEMENT							
	For more information Toolkit	consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodrom	es Certification					
10	SURVEYS							
	For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit							
11	AERODROME SAFE	GUARDING						
	For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit							
12	ON-AERODROME PROJECTS							
	For more information consult RASG-MID Safety Advisory-05 (RSA-05) – Aerodromes Certification Toolkit							
13	RUNWAY & MOVEN	MENT AREA INSPECTIONS						
13.1		Periodicity of inspections						
13.2		Personnel undertaking inspections						
13.3		Physical extent of inspections undertaken						
13.4		Defect-reporting system and loop closure (follow-up)						
13.5		Recording of inspections undertaken						
13.6		Sand Management						
ACT	IONS:		1					

APPENDIX 3F

DIP Tracking for MID-RAST/RGS/4

Aerodrome Safeguarding

RGS/4 DIP Deliverable	Target Date	Status	Comments
✓ Safeguarding Guidance Toolkit	April 2016	Completed	Draft RASG-MID Safety Advisory (RSA-xx) is being prepared and will be ready by July 2016
Regional Workshop	June 2017	Not started	

APPENDIX 3G

DIP Tracking for MID-RAST/RGS/5

Wildlife Management Control

RGS/5 DIP Deliverable	Target Date	Status	Comments
RSA for Regulatory Framework & Guidance Materials	August 2016	In Progress	Draft materials is under preparation and is expected to be provided to ICAO MID by August 2016
Templates on WHMP	September 2016	In Progress	
Wildlife Management Control Workshop	September 2018	Not started	

APPENDIX 3H

DIP Tracking for MID-RAST/RGS/6

Laser Attacks

RGS/6 DIP Deliverable	Target Date	Status	Comments
RSA for Guidance Material	September 2016	In Progress	
✓ ICAO to issue State Letter to promulgate regulations on Laser Attacks	June 2015	Completed	Letter issued by ICAO MID on 3 September 2015
RSA with Case Studies	June 2016	In Progress	Draft is being prepared to be delivered for circulation by June 2016

APPENDIX 3I

Status of Implementation of Aerodrome Certification in the MID Region

	State	Number of Int'l Aerodromes	Number of Certified Int'l Aerodromes	Percentage Certified
1	Bahrain	1	1	100%
2	Egypt	7	4	57%
3	Iran	9	4	44%
4	Iraq	6	2	33%
5	Jordan	3	1	33%
6	Kuwait	1	1	100%
7	Lebanon	1	0	0%
8	Libya	3	0	0%
9	Oman	2	2	100%
10	Qatar	2	2	100%
11	Saudi Arabia	4	4	100%
12	Sudan	4	2	50%
13	Syria	3	0	0%
14	UAE	8	8	100%
15	Yemen	5	0	0%
	Total	59	31	53%

APPENDIX 3J

LOC-I DIPs Status

DIP	Description	Output	Deadline	Status	Comments
LOC-I/1	Airplane State Awareness (ASA)- Low Airspeed Alerting	 Consulted with airframe manufacturers on status of mod on aircraft. Track implementation. 	29 Sept.2016	1 & 2 Completed On going	Draft Safety Advisory issued
LOC-I/2	Standard Operating Procedures effectiveness and adherence	 Ensure Air Carriers SOPs updated. Assessments by air carriers to determine level of adherence current SOP. 	31 Jan. 2016 31 March 2017	Completed On going	Draft Safety Advisory issued
LOC-I/3	ASA-Training-Flight Crew Training Verification and Validation	IATA to organize a Seminar to promote and roll-out LOC-I programme. Air Carrier Standard Operating Procedures (SOP) reviewed, and updated as needed.	30 June 2016 31 July 2018	Seminar postponed On going	 Seminar organized on 3 March 2016 in Dubai. Draft Safety Advisory issued. Provided advanced maneuvers manual to MENA air operators.

APPENDIX 3K

RASG-MID SAFETY ADVISORY – 09



(RSA-09)

May 2016

MID-Region

Airplane States Awareness (ASA) – Low Speed Alerting

Date of Issue:	May 2016
Revision No:	First Edition
Document Ref. No.:	RASG-MID/MIDRAST/LOC-I/1

Owner:	RASG-MID
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Disclaimer

This document has been compiled by members of the aviation industry to provide guidance for air operators and other stakeholders to have low airspeed systems that alerts flight crews when airplane reaches its minimum maneuvering speed in order to reduce the risk of Loss of Control In-flight (LOC-I) accidents. It is not intended to supersede or replace existing materials produced by the National Regulator or in ICAO SARPs. The distribution or publication of this document does not prejudice the National Regulator's ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.



RASG-MID Safety Advisory

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Airplane States Awareness (ASA) – Low Speed Alerting

1. Introduction

- 1.1 A CAST study of 18 loss-of-control accidents and incidents showed that, in many situations, the flight crew failed to properly respond to and recover with how they had been trained from an unexpected upset, approach to stall, or stall situation resulting from flight crew loss of Airplane State Awareness (ASA).
- 1.2 The purpose of flight crew alerts on airplanes is to attract the attention of the Flight crew and to inform them of specific abnormal airplane system conditions or certain abnormal operational events that require their awareness, and, in modern alerting systems, to advise them of possible actions to address these conditions.
- 1.3 The purpose of this Safety Advisory is to reduce the risk of loss-of-control accidents by having low airspeed systems that alerts flight crews when airplane reaches its minimum maneuvering speed.

2. DESCRIPTION

- 2.1 Loss of Control In-flight (LOC-I) refers to accidents in which the flight crew was unable to maintain control of the aircraft in flight, resulting in an unrecoverable deviation from the intended flight path. LOC-I can result from engine failures, icing, stalls or other circumstances that interfere with the ability of the flight crew to control the motion of the aircraft. It is one of the most complex accident categories, involving numerous contributing factors that act individually or, more often, in combination.
- 2.2 Loss of Control In-flight was identified as a high risk category for MID Region to be addressed within the framework of RASG-MID due to its high non-survivability. One of the precursors for Loss of Control In-flight was identified as low airspeed alert.
- 2.3 To improve flight crew awareness of low airspeed, manufacturers should develop and regulators should ensure implementation of systems that alerts flight crews when airplane reaches its minimum maneuvering speed.
- 2.4 On airplanes with no flight envelope protection, in order to improve early flight crew awareness of decreasing energy State, manufacturers should develop and implement multisensory low speed alert at the caution level in existing airplanes, as practical and feasible.
- 2.5 IATA consulted with manufacturers of Boeing, Airbus, Embraer and Bombardier aircraft to determine the status of their fleet with regards to low airspeed alert.

Boeing Fleet

- 2.6 Low airspeed alerting is basic on the 787, 777, 747-8, 767-400 {with the Large Format Display Systems (LFDS)} and 747-400.
- 2.7 It is an option on the 737-600/700/800/900 and there is a service bulletin available (SB 737-34A2292). The SB adds an aural Caution ("AIRSPEED LOW") from EGPWS to the amber visual indications (box around airspeed flashes amber) on the Primary Flight Display (PFD).
- 2.8 It is not basic, not an option, and no service bulletin is available for the 757, 727, MD-90, MD-80, 737-100/200/300/400/500 or the 767 airplanes (with the exceptions noted above).

Airbus Fleet

- 2.9 Low airspeed alerting is basic on the Fly by Wire aircraft (A320 family, A330, A340, A350 and A380). The Flight Envelop Protections implemented in these aircraft have been judged as compliant with the new requirements. Furthermore, these aircraft are already fitted with a "Speed, Speed, Speed" aural alert based on the energy of the aircraft.
- 2.10 It is not basic on Non Fly by Wire aircraft (A300 & A310). The discussions with the FAA are ongoing to determine if the current design of these aircraft (in particular the aircraft with alphafloor function capability) is compliant with the new requirements.

Embraer Fleet

2.11 EMBRAER 170/175/190/195:

No Low Speed Alert available, either factory-original or via SB. Stall protection is provided first by a stick shaker, and then by alpha protection (through fly-by-wire system), both based on angle-of-attack and not purely airspeed. These features are factory-original and equip all aircraft delivered.

2.12 ERJ 135/140/145:

No Low Speed Alert available, either factory-original or via SB. Stall protection is provided first by a stick shaker, and then by a stick pusher, both based on angle-of-attack and not purely airspeed. These features are factory-original and equip all aircraft delivered.

Bombardier Fleet, ATR Fleet, Eastern Built Aircraft

- 2.13 No data available.
- 2.14 IATA compiled preliminary statistical data from different sources to identify the number of operators and their fleet in MID Region. The attached table "MID States Airlines & Fleet tracking sheet" outlines the breakdown of the airlines and the number of aircraft in Middle East based carriers including the non-IATA members. The table shows that there are 1481 aircraft registered in the MID Region of which:

- 949 New Generation aircraft with glass cockpit having the provision of low speed alert .This figure represents **64% compliance** rate.
- 217 Classic western built aircraft representing 15 % of the total fleet in Mid Region.
- 123 Regional Jets representing 8%.
- 124 Eastern built aircraft representing 8%,
- 68 Turbo Prop aircraft representing 5 %.

3. RECOMMENDED ACTION

- 3.1 Operators to incorporate existing service bulletins from manufacturers that provides low speed alert functionality.
- 3.2 States' to review and verify the registered operators and their fleet provided in the table "MID States Airlines & Fleet Tracking Sheet" and provide IATA with feedback to continue with the DIP milestones.
- 3.3 IATA will track implementation of its member airlines and report progress to MID-RAST.

References:

RAST-MID/LOC-1/1 FAA AC 25.1322-1; Flight crew alerting

APPENDIX 3L

RASG-MID SAFETY ADVISORY – 07



(RSA-07)

May 2016

MID-Region

Standard Operating Procedures Effectiveness and Adherence

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Disclaimer

This document has been compiled by members of the aviation industry to provide guidance for air operators and other stakeholders on Standard Operating Procedures (SOPs) in order to reduce the risk of Loss of Control In-flight (LOC-I) accidents. It is not intended to supersede or replace existing materials produced by the National Regulator or in ICAO SARPs. The distribution or publication of this document does not prejudice the National Regulator's ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.



Regional Safety Advisory

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STANDARD OPERATING PROCEDURES EFFECTIVENESS AND ADHERENCE

1. Introduction

- 1.1 The purpose of this RASG-MID Safety Advisory (SA) is to ensure that all airline operators publish and enforce clear, concise and accurate flight crew Standard Operating Procedures (SOPs) to reduce the risk of LOC-I accidents.
- 1.2 In a Commercial Aviation Safety Team (CAST) study of 18 LOC-I accidents and incidents, insufficient adherence to SOPs was a factor in 15 events.
- 1.3 The Commercial Aviation Safety Team (CAST) was founded in 1998 with a goal to reduce the commercial aviation fatality rate in the United States by 80 percent by 2007. To achieve this goal, the CAST developed and started implementing a comprehensive Safety Enhancement Plan. By 2007, CAST was able to report that, by implementing the most promising safety enhancements, the fatality rate of commercial air travel in the United States was reduced by 83 percent. CAST continues to develop, evaluate and add Safety Enhancements to the CAST Plan for continuing accident rate reduction.

2. DESCRIPTION

- 2.1 Many aviation safety organizations including the FAA have recently reaffirmed the importance of SOPs. For many years the National Transportation Safety Board (NTSB) has identified deficiencies in standard operating procedures as contributing causal factors in aviation accidents. Among the most commonly cited deficiencies involving flight crews has been **their non-compliance** with established procedures; another has been the **non-existence of established procedures** in some manuals used by flight crews.
- 2.2 In general, effective SOPs are the product of healthy collaboration among managers and flight operations people, including flight crews. A safety culture promoting continuous feedback from flight crews and others, and continuous revision by the collaborators distinguishes effective SOPs at airlines.
- 2.3 To improve flight crew adherence to SOPs and reduce the risk of lost awareness of airplane state, airline operators should:
 - 1. Review, and update as needed, current SOPs for consistency with the manufacturers recommendations, focusing on completeness for all phases of flights and improved awareness and response during operations that are more prone to issues that result in high fatality risk (e.g. rushed and/or un-stabilized approaches, go-arounds, transfer of control, automation interaction, pilot flying/pilot monitoring duties).

- 2. Consult with manufacturers to check that SOPs are consistent with current manufacturer recommendations with regards to LOC-I
- 3. Review SOPs for compatibility with the most current ATC procedures, paying attention to airports where data show higher rates of un-stabilized approach or excessive bank angles.
- 4. Develop training programs to provide pilots with rationale for SOPs, focusing on those with lower adherence rates.
- 5. Airlines/operators and regulators should ensure that their training/standardization and monitoring programs emphasize the importance of adherence to SOPs and identify the rationale behind those procedures.
- 6. Airlines/operators should implement Flight Operational Quality Assurance (FOQA) programs to identify systemic procedural deviations and unsafe trend.
- 7. Airlines/operators incorporate processes to periodically review and update SOPs, other policies, and training based on results of monitoring programs for SOP adherence.
- 2.4 This Safety Advisory identifies the above broad topics that should be addressed in Standard Operating Procedures effectiveness and adherence. Only a specific air operator and the respective airplane manufacturer know what is best for particular circumstances.

References:

FAA Advisory Circular (AC) 120–71A, Standard Operating Procedures for Flight Deck Crewmembers CAST Plan (located on Skybrary: http://www.skybrary.aero/index.php/Portal:CAST_SE_Plan) CAST Safety Enhancement (SE) 2 — Standard Operating Procedures CAST SE 11 – Crew Resource Management Training CAST SE 26 – Policies and Procedures - Standard Operating Procedures (SOPs) CAST SE 60 – Pilot Training – One Project: SOPs, CRM FAA Order 7110.65, Air Traffic Control

APPENDIX 3M

RASG-MID SAFETY ADVISORY – 08



(RSA-08)

May 2016

MID-Region

Airplane States Awareness (ASA) – Training –Flight Crew training (Approach to Stall & Up Set Recovery) Verification and Validation

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Disclaimer

This document has been compiled by members of the aviation industry to provide guidance for air operators and other stakeholders to conduct effective upset prevention and recovery training, including approach-to-stall, in realistic scenarios, using qualified flight simulator training devices in order to reduce the risk of Loss of Control In-flight (LOC-I) accidents. It is not intended to supersede or replace existing materials produced by the National Regulator or in ICAO SARPs. The distribution or publication of this document does not prejudice the National Regulator's ability to enforce existing National regulations. To the extent of any inconsistency between this document and the National/International regulations, standards, recommendations or advisory publications, the content of the National/International regulations, standards, recommendations and advisory publications shall prevail.



RASG-MID Safety Advisory

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AIRPLANE STATES AWARENESS (ASA) – TRAINING –FLIGHT CREW TRAINING (APPROACH TO STALL & UP SET RECOVERY) VERIFICATION AND VALIDATION

1. Introduction

- 1.1 A CAST study of 18 LOC-I accidents and incidents showed that, in many situations, the flight crew failed to properly respond to and recover with how they had been trained from an unexpected upset, approach to stall, or stall situation resulting from flight crew loss of Airplane State Awareness (ASA). In some of these events, a review of the accident report indicated proficiency issues with the pilot even after checking and qualification, particularly when training had been provided by an external training organization.
- 1.2 The purpose of this Safety Advisory is to reduce the risk of LOC-I accidents by having Air Carriers conduct effective upset prevention and recovery training, including approach-to-stall, in realistic scenarios, using qualified flight simulator training devices.

2. DESCRIPTION

- 2.1 To improve flight crew proficiency in handling issues that can lead to loss of Airplane State Awareness (ASA). Air carriers should review, incorporate, and adopt the best practices recognized by the aeronautical community with regards to upset prevention and recovery training, including the following:
 - a) Qualification of flight simulation training devices to satisfactorily represent aircraft characteristics for proposed scenarios. Air carriers should coordinate with airplane and simulator manufacturers to ensure that training devices satisfactorily represent aircraft characteristics for proposed scenarios.
 - b) Approach-to-stall training in realistic scenarios. (i.e., up to the stall warning activation):
 - i. approach-to-stall with the autopilot engaged (including auto-throttles disengaged, inoperative or not installed), with emphasis on the effect of autopilot trim/auto-trim and combinations of auto-flight modes that can lead to low energy state (e.g., use of vertical speed modes in climb near the airplane's performance ceiling);
 - ii. a demonstration of recognition and recovery from initial improper response to approach-to-stall;
 - iii. high-altitude approach-to-stall (service ceiling for the weight) to include recognition of low and high speed buffet, performance capabilities of the engines and flight control sensitivity;

- iv. low-altitude approach-to-stall (terrain critical) and recovery with ground proximity warning system (GWPS) alerts; and
- v. air data system failures that can present as, or lead to, stall.
- c) Upset prevention and recovery training (UPRT) realistic scenarios including but not limited to:
 - i. Upsets encountered with and without auto-flight engaged;
 - ii. Upsets occurring in instrument meteorological conditions (IMC); and in VMC with no external reference (e.g. taking-off at night over the sea/unlighted terrain)
 - iii. Sub-threshold roll (imperceptible roll rate) in IMC;
 - iv. Pilot-induced upsets; and
 - v. Air data system failures (e.g., unreliable airspeed), with emphasis on subtle or intermittent types of failures that can be particularly difficult to recognize or diagnose.
- 2.2 Air carriers should verify and validate the quality and consistency of training, with emphasis on externally provided training. This should include examining both the content and conduct of training. Training verification and validation should include improving surveillance of and communication with third-party training providers. To accomplish this, air carriers should:
 - a) implement a process to ensure their aircrew training program, including any externally provided training, is consistent with current airline and manufacturer policy and procedures.
 - b) implement a process to validate the qualification and currency of trainers, including third-party training providers.
 - c) validate contractor training by periodically observing training and/or checking events and auditing records to ensure consistency of aircrew training and pilot proficiency.

References:

CAST SEI 95 FAA Order 8900.1 FAA Information for Operators InFO 13003

APPENDIX 3N

CFIT DIP Status

Status	Comments
1.Completed 2.on going 3. on going	Runway priorities 1. OMRK. Completed. Published with effective AIRAC 05/2016 28 April 2016. 2. OIMM 13 3. OISS 11/29 4. HEBA 14 5. ORMM 14/32 (in progress) 6. ORNI 10 (in progress)
	1.Completed 2.on going

APPENDIX 30

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 and monitoring the implementation of Safety Enhancement Initiatives (SEIs) related to identified safety issues not directly linked to the agreed Focus Areas (FAs).

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

- 1) develop SEIs 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).
- identify associated difficulties and deficiencies related to implementation of each SEI and propose mitigation measures;
- 3) share expertise and experience and provide recommended actions for each SEI, in a prioritized manner based on best practices;
- 4) monitor the status of achieving related safety objectives and targets included in the MID Region Safety Strategy;
- 5) monitor the implementation of the Global Aviation Safety Plan (GASP) at the regional level and provide feedback to the RSC; and
- 6) propose input to the RSC for the development of the RASG-MID Annual Work Programme.

B) COMPOSITION

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

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.

APPENDIX 3P

STRATEGY FOR THE ENHACEMENT OF REGIONAL COOPERATION ON AIR ACCIDENT INVESTIGATION FOR THE ACAC AND ICAO MID MEMBER STATES

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

Whereas Assembly Resolution A36-10, inter-alia:

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

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

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

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

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

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

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

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

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

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

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

The later surveys and meetings indicated that going for establishing a full RAIO in the near future is a difficult objective to be achieved due to the diversity in the capabilities of the various States, but this shall not ever prevent the States to establish a kind of bilateral and multilateral cooperation that aims to enhance the capabilities of an individual State;

The Strategy for regional cooperation for the purpose of enhancing States' capabilities for accident and incidents investigation is detailed below:

- 1) States are urged to develop and further strengthen regional/sub-regional cooperation for accidents and incidents investigation;
- 2) States are encouraged to establish or strengthen dialogue with established regional investigation-related bodies/mechanisms;
- 3) The implementation of regional/sub-regional cooperation for AIG activities, is in accordance with the following:

Phase A: Data collection

- <u>Step 1</u>: Each State should determine its investigation-related competencies and share this information with other involved States, including:
 - o Premises offices, work-spaces, wreckage storage and examination areas;
 - o Investigators qualifications, experience, specialized skills;

Examples of the specialized skills are:

- Metallurgy;
- Flight recorders;
- Fluid analysis
- Aviation pathology
- Human factors
- Fire and explosions
- Underwater recovery

- o Equipment flight recorder readout and analysis facilities; field investigation equipment; engineering and scientific capabilities, wreckage and systems examination and analysis (e.g. metallurgy, electronics, composites);
- Other organizations and facilities that have competencies to assist the State in its investigations, such as, research institutions, commercial companies and subjectmatter experts.

Phase B: Following actions

- <u>Step 2</u>: Establish a list of investigators, equipment and other local and outside organizations that States might utilize in investigations;
- <u>Step 3:</u> Organize and host meetings, seminars/workshops to address issues associated with AIG activities aiming, among others, to improve regional coordination. An update on the cooperation progress shall be presented during each of these activities;
- <u>Step 4:</u> Consider establishing a common training programme for the member States' investigators, taking into consideration the ICAO Circ 298, Training Guidelines for Aircraft Accident Investigators.

The common training will cover the following levels of training:

- Induction;
- Basic:
- Advanced:
- Specialized; and
- Recurrent
- The On-the-Job (OJT)
- <u>Step 5:</u> Consider entering into bilateral and multilateral cooperation agreements among States regarding support in investigations. The most practicable mechanism of these agreements is signing memoranda of understanding.

The suggested cooperation areas are as follows:

- Sharing information;
- Sharing training;
- Sharing equipment;
- Sharing new investigation technologies;
- Sharing expertise;
- Participation with observer status in each other's investigations;
- Exchange investigation procedures; and
- Sharing knowledge.
- 4) A questionnaire will be prepared and circulated to the MID States for exploring the capabilities each individual State;

- 5) The progress of the implementation of the phased approach should be reported to the appropriate RASG; and
- 6) States should agree on the implementation of the programme, including the decision related to the possible establishment of RAIO(s).



APPENDIX 3Q

STATUS OF THE MID REGION SAFETY INDICATORS vs. THE SAFETY TARGETS

			MID Region			Global		
	Safety Indicator	Safety Target	Average Rate (2009-2013)	Average Rate (2010-2014)	Rate 2014	Average Rate (2009-2013)	Average Rate (2010-2014)	Rate 2014
	Number of accidents per million departures	Reduce/Maintain the regional average rate of accidents to be in line with the global average rate by 2016. 7.		5.2	4.4	3.72	3.5	3.1
	Number of fatal accidents per million departures Reduce/Maintain the regional average rate of fatal accidents to be in line with the global average rate by 2016.		1.69	1.2	0.88	0.53	0.46	0.29
Part	Number of Runway Safety related accidents per million departures	Reduce/Maintain the regional average rate of Runway Safety related accidents to be below the global average rate by 2016.	3.98	2.68	2.6	1.98	2.05	2.45
Reactive Part		Reduce/Maintain the Runway Safety related accidents to be less than 1 accident per million departures by 2016.	N/A	N/A	2.6	N/A	N/A	N/A
	Number of LOC-I related accidents per million departures	Reduce/Maintain the regional average rate of LOC-I related accidents to be below the global rate by 2016.	0.61	0.39	0	0.08	0.07	0.06
	Number of CFIT related accidents per million departures	Reduce/Maintain the regional average rate of LOC-I related accidents to be below the global rate by 2016.	0.42	0.2	0	0.12	0.11	0.06

	Safety Indicator	Safety Target	MID
	USOAP-CMA Effective Implementation (EI) results:	Progressively increase the USOAP-CMA EI scores/results:	
	 a. Regional average EI. b. Number of MIDStates with an overall EI over 60%. c. Number of MID States with an EI score less than 60% for more than 2 areas (LEG, ORG, PEL, OPS, AIR, AIG, ANS and AGA). Number of Significant Safety Concerns. 	 a. Increase the regional average EI to be above 70% by 2020. b. 11 MID States to have at least 60% EI by 2020. c. Max 3 MID States with an EI score less than 60% for more than 2 areas by 2017. a. MID States resolve identified Significant Safety Concerns as a 	a. 68.23% b. 8 States c. 6 States
		matter of urgency and in any case within 12 months from their identification. b. No significant Safety Concern by end of 2016.	None
Proactive Part	Use of the IATA Operational Safety Audit (IOSA), to complement safety oversight activities.	 a. Maintain at least 60% of eligible MID airlines to be certified IATA-IOSA by the end of 2015 at all times. b. All MID States with an EI of at least 60% accept the IATA Operational Safety Audit (IOSA) as an acceptable Means of Compliance (AMC) by 2015 to complement their safety oversight activities. 	a. 68% b. 4 States
	Number of Ground Handling service providers in the MID Region having the IATA Safety Audit for Ground Operations (ISAGO) Certification, as a percentage of all Ground Handling service providers.	 a. 75% of the Ground Handling service providers to be certified IATA-ISAGO by the end of 2017. b. The IATA Ground Handling Manual (IGOM) endorsed as a reference for ground handling safety standards by all MID States with an EI above 60% by end of 2017. 	TBD
	Number of certified international aerodrome as a percentage of all International Aerodromes in the MID Region.	a. 50% of the International Aerodromes certified by 2015.b. 75% of the International Aerodromes certified by 2017.	(53%) 31 out of 59
	Number of established Runway Safety Team (RST) at MID International Aerodromes.	50% of the International Aerodromes by 2020.	32%

	Safety Indicator	Safety Target	MID
	Number of MID States, having completed the SSP Gap Analysis on iSTARS.	10 MID States by 2015	11 States (Bahrain, Egypt, Iran, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Syrian Arab Republic and UAE).
	Number of MID States, that have developed an SSP implementation plan.	10 MID States by 2015	9 States (Bahrain, Egypt, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan and UAE).
	Number of MID States with EI>60%, having completed implementation of SSP Phase 1.	All MID States with EI>60% to complete phase 1 by 2016.	3 States (Bahrain, Saudi Arabia and UAE) completed implementation of SSP Phase 1.
art			4 States (Egypt, Iran, Kuwait and Qatar) partially completed implementation of SSP Phase 1.
Predictive Part	Number of MID States with EI>60%, having completed implementation of SSP Phase 2.	All MID States with EI>60% to complete phase 2 by 2017.	1 State (UAE) completed implementation of SSP Phase 2.
Pred			6 States (Bahrain, Egypt, Iran, Kuwait, Qatar and Saudi Arabia) partially completed implementation of SSP Phase 2.
	Number of MID States with EI>60%, having completed implementation of SSP Phase 3.	All MID States with EI>60% to complete phase 3 by 2018.	7 States (Bahrain, Egypt, Iran, Kuwait, Qatar, Saudi Arabia and UAE) partially completed implementation of SSP Phase 3.
	Number of MID States with EI>60%, having completed implementation of SSP	All MID States with EI>60% to complete SSP implementation by 2020	None
	Number of MID States with EI>60% that have established a process for acceptance of individual service providers' SMS.	a. 30% of MID Stateswith EI>60% by 2015.b. 70% of MID Stateswith EI>60% by 2016.c. 100% of MID Stateswith EI>60% by 2017.	75% 6 States (Bahrain, Egypt, Iran, Kuwait, Saudi Arabia and UAE) established a process for acceptance of individual service providers' SMS.





MID Region Safety Strategy

Revision 4, May 2016

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MID Region Safety Strategy

1. Strategic Safety Objective

1.1 Continuous improvement of aviation safety through a progressive reduction of the number of accidents and related fatalities in the MID Region to be in line with the global average, based on reactive, proactive and predictive safety management practices.

2. Safety Objectives

- 2.1 States and Regions must focus on their safety priorities as they continue to foster expansion of their air transport sectors.
- 2.2 The ICAO Global Aviation Safety Plan (GASP) establishes targeted safety objectives and initiatives while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.
- 2.3 The GASP includes a framework comprised of measurable objectives, supported by Safety Performance Areas and associated safety initiatives.
- One of the strengths of the GASP is that while setting global objectives and priorities, it allows States and Regions to plan and establish their own specific approaches towards meeting these objectives and priorities according to each Member State's safety oversight capabilities, SSPs and safety processes necessary to support the air navigation systems of the future.
- 2.5 The MID Region safety objectives are in line with the GASP objectives and address specific safety risks identified within the framework of the Regional Aviation Safety Group-Middle East (RASG-MID), based on the analysis of available safety data.

Mid-term Near-term Long-term 2022 2017 All States establish effective All Member States fully Member States implement safety oversight systems implement the ICAO SSP safety capabilities as necessary Framework to support future Air Navigation Systems States with effective safety • RASGs incorporate regional oversight (over 60% EI) fully implement SSP monitoring and safety management programmes States / Stakeholders support RASGs with the sharing of safety information

GASP Objectives

2.6 The enhancement of communication and information exchange between aviation Stakeholders and their active collaboration under the framework of RASG-MID would help achieving the MID Region safety objectives in an expeditious manner.

3. Measuring and monitoring Safety Performance:

- 3.1 The first version of the MID Region Safety Strategy was developed by the First MID Region Safety Summit (Bahrain, 28-29 April 2013) and endorsed by the DGCA-MID/2 meeting (Jeddah, Saudi Arabia, 20 -22 May 2013).
- 3.2 The monitoring of safety performance and its enhancement is achieved through identification of relevant Safety Themes and Indicators as well as the adoption and attainment of Safety Targets.
- 3.3 The MID Region Safety Indicators and Targets are detailed in the Table below:

	Safety Indicator	Safety Target
	Number of accidents per million departures.	Reduce/Maintain the regional average rate of accidents to be in line with the global average rate by 2016.
	Number of fatal accidents per million departures.	Reduce/Maintain the regional average rate of fatal accidents to be in line with the global average rate by 2016.
ve Part	Number of Runway Safety related accidents per million departures.	Reduce/Maintain the regional average rate of Runway Safety related accidents to be below the global average rate by 2016.
Reactive		Reduce/Maintain the Runway Safety related accidents to be less than 1 accident per million departures by 2016.
	Number of LOC-I related accidents per million departures.	Reduce/Maintain the regional average rate of LOC-I related accidents to be below the global rate by 2016.
	Number of CFIT related accidents per million departures.	Reduce/Maintain the regional average rate of CFIT related accidents to be below the global rate by 2016.

	Safety Indicator	Safety Target
	USOAP-CMA Effective Implementation (EI) results:	Progressively increase the USOAP-CMA EI scores/results:
	a. Regional average EI.	a. Increase the regional average EI to be above 70% by 2020.
	b. Number of MIDStates with an overall EI over 60%.	b. 11 MID States to have at least 60% EI by 2020.
	c. Number of MIDStates with an EI score less than 60% for more than 2 areas (LEG, ORG, PEL, OPS, AIR, AIG, ANS and AGA).	c. Max 3 MIDStates with an EI score less than 60% for more than 2 areas by 2017.
	Number of Significant Safety Concerns	a. MID States resolve identified Significant Safety Concerns as a matter of urgency and in any case within 12 months from their identification.
Part		b. No significant Safety Concern by 2016.
Proactive Part	Use of the IATA Operational Safety Audit (IOSA), to complement safety oversight activities.	a. Maintain at least 60% of eligible MID airlines to be certified IATA-IOSA at all times.
Pro		b. All MID States with an EI of at least 60% use the IATA Operational Safety Audit (IOSA) to complement their safety oversight activities, by 2018.
	Number of certified International Aerodrome as a percentage of all International Aerodromes in	a. 50% of the International Aerodromes certified by 2015.
	the MID Region.	b. 75% of the International Aerodromes certified by 2017.
	Number of established Runway Safety Team (RST) at MID International Aerodromes.	50% of the International Aerodromes by 2020.
	Percentage of MID States that use ECCAIRS for the reporting of accidents and serious incidents.	TBD.

	Safety Indicator	Safety Target
	Number of MID States, having completed the SSP gap analysis on iSTARS.	10 MID States by 2015.
	Number of MID States, that have developed an SSP implementation plan.	10 MID States by 2015.
	Number of MID States with EI>60%, having completed implementation of SSP Phase 1.	All MID States with EI>60% to complete phase 1 by 2016.
	Number of MID States with EI>60%, having completed implementation of SSP Phase 2.	All MID States with EI>60% to complete phase 2 by 2017.
Predictive Part	Number of MID States with EI>60%, having completed implementation of SSP Phase 3.	All MID States with EI>60% to complete phase 3 by 2018.
Predict	Number of MID States with EI>60%, having completed implementation of SSP.	All MID States with EI>60% to complete SSP implementation by 2020.
	Number of MID States with EI>60% that have established a process for acceptance of individual service providers' SMS.	a. 30% of MID Stateswith EI>60% by 2015. b. 70% of MID Stateswith EI>60% by 2016. c. 100% of MID Stateswith EI>60% by 2017.
	*Average Fleet Age.	States are required to monitor their fleet age. No regional Safety Targets are defined.
	*Percentage of fleet above 20 years of age.	The regional surety Tangets are defined.

4. Governance

- 4.1 The MID Region Safety Strategy will guide the work of RASG-MID and all its member States and partners.
- 4.2 The RASG-MID will be the governing body responsible for the review and update of the Strategy, as deemed necessary.
- 4.3 Progress on the implementation of the MID Region Safety Strategy and the achievement of the agreed Safety Targets will be reported to the ICAO Air Navigation Commission (ANC), through the review of the RASG-MID reports; and to the stakeholders in the Region during the MID Region Safety Summits.

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APPENDIX 4A

INTERNATIONAL CIVIL AVIATION ORGANIZATION



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

PROCEDURAL HANDBOOK

THIRD EDITION – MAY 2016

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-PA 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;
 - 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 line with the ICAO Global Aviation Safety Plan (GASP) and the regional objectives and priorities outlined in the MID Region Safety Strategy.

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 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) the MID Region by ensuring effective coordination and cooperation between all stakeholders and monitoring progress in the implementation of the GASP and the regional objectives and priorities outlined in the MID Region Safety Strategy;
- b) to support the establishment and operation of a performance-based safety system for the Region, using the GASP, and building on the work already done by States and regional organizations; and
- c) to ensure achievement of the RASG-MID's objectives by implementing the RASG-MID Engagement Strategy, which outlines a strategy and plan for engagement and communication with safety stakeholders and partners in the MID Region to enhance the level of participation in and support to RASG-MID and its subsidiary bodies

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 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 <u>Member States</u> 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 safety related initiatives and activities in the MID Region within the RASG-MID Work Programme to ensure implementation of the GASP andnd the regional objectives and priorities outlined in the MID Region Safety Strategy;
- 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) ensure active and effective participation in accordance with RASG-MID Engagement Strategy; 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:
 - 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 MID States:
 - e) RASG-MID Representatives/Alternates from the following Partners:

AACO Arab Air Carrier Organization; Arab Civil Aviation Commission; **ACAC** ACI Airports Council International;

Boeing Commercial Airplane Company; **BOEING**

COSCAP-GS Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States;

FSF Flight Safety Foundation;

IATA International Air Transport Association;

International Federation of Airline Pilots Association; **IFALPA MEASR-TLST** Middle East Aviation Safety Roadmap - Top Level

Safety Team; and

World Food Programme (United Nations). WFP (UN)

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).

<u>Note</u>: An Alternate should be elected from the member States and another Alternate from the Partners, in order to replace the Co-Chaiperson(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) and the MID Region Safety Strategy.
- 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.
- 3.6.6 All Teams should ensure active and effective participation in accordance with RASG-MID Engagement Strategy.

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.

<u>Note</u>: 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, 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 decided.
- 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 and the regional objectives and priorities outlined in the MID Region Safety Strategy;
 - 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.
- <u>Note</u>: 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) <u>Discussion Papers</u>: 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) <u>Information Papers</u>: 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) <u>PowerPoint Presentations</u>: 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 <u>Conclusions</u> 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. COORDINATION BETWEEN RASG-MID AND MIDANPIRG

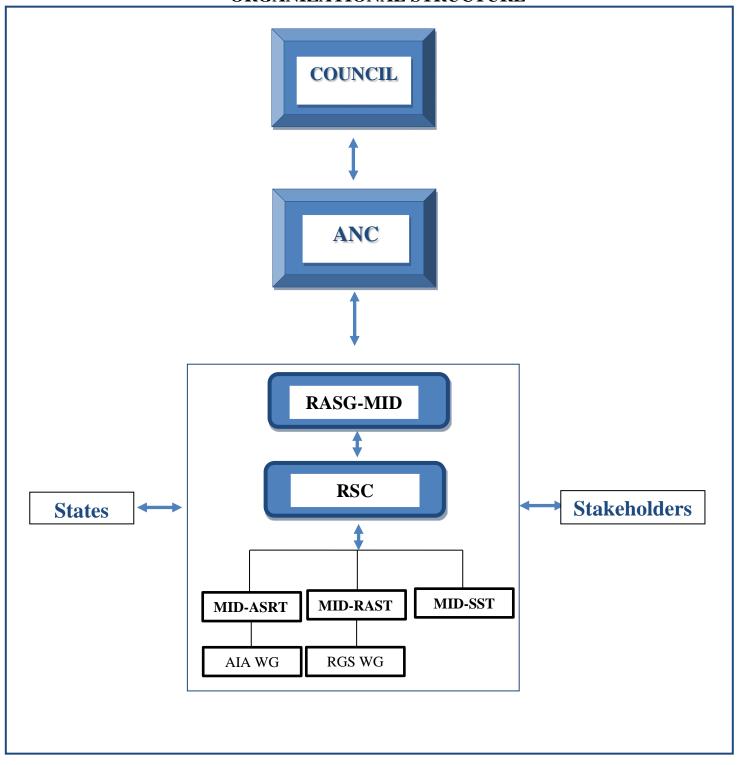
- 5.1 The Secretariat will ensure that the safety issues raised by the PIRGs and RASGs are fully coordinated. In addition, the following RASG-MID/MIDANPIRG coordination mechanism should be implemented:
 - the Chairperson(s) of RASG-MID should attend the MIDANPIRG meetings;
 - the Chairperson(s) of MIDANPIRG should attend the RASG-MID meetings;
 - the ICAO MID Regional Office to organize on a yearly basis a MIDANPIRG/RASG-MID Coordination meeting to be attended by the Chairpersons of both Groups and their subsidiary bodies, in order to follow-up on the activities being coordinated between the two Groups, agree on the level of involvement of the relevant subsidiary bodies, address any roadblocks and identify additional subjects, which need to be addressed by/coordinated between both Groups; and
 - the coordination between MIDANPIRG and RASG-MID be based on the following Table listing the subjects in which both MIDANPIRG and RASG-MID have interest with an assignment of the leading Group:

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

Subjects of interest for MIDANPIRG and RASG-MID	Responsible/Leading Group	
Subjects of interest for WIDAN ING and KASG-WID	RASG-MID	MIDANPIRG
Training for ANS personnel		X
Training other civil aviation personnel	X	
Laser attack	X	
Fatigue Risk Management	X	
RPAS		X

6. RASG-MID ORGANIZATIONAL STRUCTURE

RASG-MID ORGANIZATIONAL STRUCTURE



APPENDIX 5A

Coordination between MIDANPIRG and RASG-MID

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

APPENDIX 5B

LIST OF MIDRMA BOARD MEMBERS/ALTERNATES AND FOCAL PONTS

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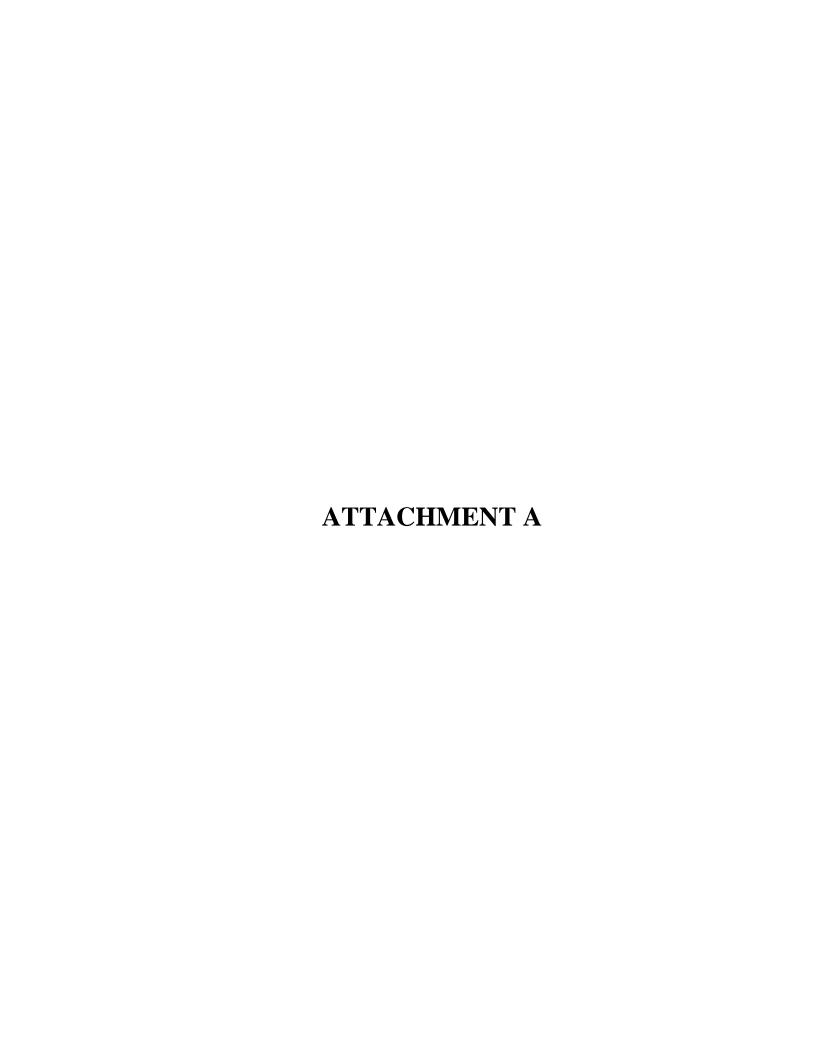
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LIBYA				

STATE	MIDRMA BOARD MEMBER	ALTERNATE	ATC FOCAL POINT	AIRWORTHINESS/FLIGHT OPERATIONS FOCAL POINT
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