REPORT OF THE SEVENTH MEETING OF THE RASG-MID STEERING COMMITTEE

(RSC/7)

(Cairo, Egypt, 3 – 5 March 2020)

The views expressed in this Report should be taken as those of the RASG Steering Committee and not of the Organization. This Report will, however, be submitted to the RASG-MID 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 Seventh meeting of the RASG-MID Steering Committee (RSC/7) was held at the ICAO Middle East Regional Office in Cairo, Egypt, 3-5 March 2020.

2. OPENING

2.1 The meeting was opened by Mr. Mohamed Smaoui, Deputy Regional Director, ICAO Middle East Office. Mr. Smaoui welcomed all the participants to Cairo and thanked them for their participation.

2.2 Mr. Smaoui highlighted that in line with the directives from the ICAO Council regarding PIRGs and RASGs arrangements, the Seventeenth meeting of the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG/17) and the Seventh meeting of the Regional Aviation Safety Group-Middle East (RASG-MI/7) were organized concurrently for the first time in Cairo, Egypt, from 15 to 18 April 2019. The RASG-MID/7 meeting among others, endorsed the 6th Edition of MID Region Safety Strategy in line with the GASP 2020-2022 and regional developments, 7th MID-ASR and agreed to a revised RASG-MID Organizational Structure with the establishment of four (4) Groups.

2.3 In line with the outcome of the RASG-MID/7 meeting, Mr. Smaoui underlined that the RSC needs to review and update the RASG-MID Terms of Reference, taking into consideration the new generic Terms of Reference of the RASGs endorsed by the ICAO Council. He highlighted also the need to update the ToRs of the RSC and newly established Groups, accordingly. In this regard, Mr. Smaoui informed the meeting that the new arrangements and ToRs should be included in the Fourth Edition of the RASG-MID Procedural Handbook for final endorsement by the RASG-MID/8 meeting.

2.4 Mr. Ismaeil Mohammed Al Blooshi, Chairman of RASG-MID thanked all delegates for their attendance. He highlighted the need for effective participation of all stakeholders within the framework of RASG-MID, in order to achieve the desired objectives and goals.

3. ATTENDANCE

3.1 The meeting was attended by a total of twenty six (26) participants from seven (7) States (Egypt, Iraq, Oman, Qatar, Saudi Arabia, UAE and United States) and five (5) Organizations/Industries (ACAO, Boeing, CANSO, IATA and IFATCA). The list of participants is at **Attachment A**.

4. OFFICERS AND SECRETARIAT

4.1 The meeting was chaired by Mr. Mohammad Faisal Al Dossari, Assistant Director General-Air Accident Investigation, General Civil Aviation Authority (GCAA), United Arab Emirates.

4.2 Mr. Mashhor Alblowi, RO/FLS was the Secretary of the meeting assisted by Mr. Mohamed Chakib, RO/SAF-IMP and Mr. Mohamed Iheb Hamdi, RO/AGA. The meeting was attended also by Mr. Martin Maurino, Technical Officer, Global Aviation Safety, Air Navigation Bureau, ICAO HQ.

4.3 Mr. Mohamed Smaoui, Deputy Regional Director (DRD) supported the meeting.

5. LANGUAGE

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

6. AGENDA

6.1 The following Agenda was adopted:

Agenda Item 1: Adoption of the Provisional Agenda and Election of RSC Co-Chairs

Agenda Item 2: Global Developments related to Aviation Safety

Agenda Item 3: Regional Performance Framework for Safety

Agenda Item 4: Coordination between RASG-MID and MIDANPIRG

Agenda Item 5: Working Arrangements and Future Work Programme

Agenda Item 6: Any other Business

7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 The RSC/7 records its actions in the form of Conclusions and Decisions with the following significance:

a) **Conclusions** deal with matters that, according to the Group's terms of reference, merit directly the attention of States and its stakeholders/partners, or on which further action will be initiated by the Secretary in accordance with established procedures; and

b) **Decisions** relate solely to matters dealing with the internal working arrangements of the Group and its subsidiary bodies.

8. LIST OF CONCLUSIONS AND DECISIONS

RSC CONCLUSION 7/1: *DEVELOPMENT AND IMPLEMENTATION OF NATIONAL AVIATION SAFETY PLANS (NASP)*

RSC CONCLUSION 7/2: *DEVELOPMENT OF THE MID REGIONAL AVIATION SAFETY PLAN (RASP)*

RSC/7 CONCLUSION 7/3:	*8TH ASR*
RSC/7 CONCLUSION 7/4:	*SHARING OF SAFETY DATA ANALYSIS*
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RSC DECISION 7/15:	*TERMS OF REFERENCE (TOR) OF THE ASRG*
RSC DECISION 7/16:	*TERMS OF REFERENCE (TOR) OF THE ASPIG*
RSC DECISION 717:	*FOURTH EDITION OF RASG-MID PROCEDURAL HANDBOOK*
RSC CONCLUSION 7/18:	*FIFTH MID REGION SAFETY SUMMIT*

PART II: REPORT ON AGENDA ITEMS

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

1.1 The subject was addressed in WP/1 presented by the Secretariat. The meeting noted that Mrs. Suha Daher, Commissioner, Civil Aviation Regulatory Commission (CARC), Jordan, has left CARC and will not be able to resume the position of the RSC Co-Chair. In addition, Mr. Ken Sewell, Ex-Regional Director, Safety and Flight Operations, Middle East & North Africa, IATA, is not able to resume the other position of the RSC Co-Chairs. With respect to the Alt Co-Chair, Mrs. Angie A. Abdalla Mostafa, has been assigned as the Representative of Egypt to the ICAO Council. Furthermore, Capt. Souhaiel Dallel from IFALPA has not been actively participating in the RSC activities.

1.2 Taking into consideration the generic Terms of Reference of the RASGs approved by the ICAO Council, the meeting agreed to elect as a first step, a Chairperson for the RSC, pending the final decision of the RASG-MID with regard to the chairmanship of both the RASG-MID and RSC.

1.3 Saudi Arabia, Egypt and UAE nominated Mr. Mohammad Faisal Al Dossari, Assistant Director General-Air Accident Investigation, General Civil Aviation Authority (GCAA), United Arab of Emirates to be the Chairperson of the RSC. Accordingly, Mr. Al Dossari, was elected as the Chairperson of the RSC.

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

Global Development related to Aviation Safety

2.1 The subject was addressed in WP/2 presented by the Secretariat providing an update on the Global Aviation Safety Plan (GASP 2020-2022), Roll-out of SSP Implementation Assessments (SSPIAs) under USOAP CMA and Global Aviation Safety Oversight System (GASOS).

2020-2022 E2dition of the GASP

2.2 The meeting recalled that the 2020-2022 edition (third edition) of the GASP, which was endorsed by the 40th Session of the ICAO Assembly outlines key safety enhancement initiatives for the triennium. It includes the following goals:

Goal 1: Achieve a continuous reduction of operational safety risks
Goal 2: Strengthen States' safety oversight capabilities
Goal 3: Implement effective State safety programmes
Goal 4: Increase collaboration at the regional level
Goal 5: Expand the use of industry programmes
Goal 6: Ensure the appropriate infrastructure is available to support safe operations

2.3 The following HRCs, in no particular order, have been identified for the 2020-2022 edition of the GASP: controlled flight into terrain; loss of control in-flight; mid-air collision; runway excursion; and runway incursion.

2.4 The GASP indicates that emerging issues include concepts of operations, technologies, public policies, business models or ideas that might impact safety in the future, for which insufficient data exists to complete typical data-driven analysis. The management of emerging issues, particularly potential safety risks, can provide opportunities to foster innovation. The use of new technologies, procedures and operations should therefore be encouraged.

2.5 The meeting noted that in line with the GASP, each region and State is encouraged to develop a regional aviation safety plan and national aviation safety plan, respectively, in which the strategic direction for the management of aviation safety for a set time period will be presented. Each plan should be developed in line with the GASP goals, targets and HRCs.

2.6 The meeting recalled the Assembly Resolution A40-1 – ICAO global planning for safety and air navigation; Appendix A (bullet 3 and 4):

> *"Urges Member States to implement national aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities*"; and
>
> *"Urges Member States, regional safety oversight organizations (RSOOs), regional aviation safety groups (RASGs) and international organizations concerned to work with all stakeholders to implement regional aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities*"

2.7 Based on the forgoing, the meeting agreed to the following Conclusions:

RSC CONCLUSION 7/1: ***DEVELOPMENT AND IMPLEMENTATION OF NATIONAL AVIATION SAFETY PLANS (NASP)***

That, States:

a- be requested to establish a National Aviation Safety Plan consistent with Global Aviation Safety Plan (GASP), including the global aviation safety roadmap, and the MID Region Safety Strategy; and based on their operational safety needs;

b- present a progress report on the development and implementation of their NASP to the SEIG/1 and RASG-MID/8 meetings.

RSC CONCLUSION 7/2: ***DEVELOPMENT OF THE MID REGIONAL AVIATION SAFETY PLAN (RASP)***

That,

a- the Secretariat, in coordination with the RASG-MID members/focal points, review and amend the MID Region Safety Strategy to upgrade it to a Regional Aviation Safety Plan (RASP) consistent with the GASP 2020-2022; and

b- present a Draft Version of the MID Regional Aviation Safety Plan (RASP) to the SEIG/1 meeting in September 2020 for review and further inputs, before presentation to the RASG-MID/8 meeting for endorsement.

2.8 The meeting noted with appreciation that the ICAO/ACAO Global Aviation Safety Plan (GASP 2020-2022) and National Aviation Safety Plan (NASP) Workshop was held at the ICAO MID Office, Cairo, Egypt, 1-2 March 2020, with the objective to develop competencies in the planning and implementation of national aviation safety plan, in alignment with the ICAO Global Aviation Safety Plan (GASP) and the regional aviation safety plan. The Workshop materials are available at: https://www.icao.int/MID/Pages/2020/GASP%20and%20NASP%20%282%29.aspx.

Roll-out of SSP Implementation Assessments (SSPIAs) under USOAP CMA

2.9 The meeting was apprised of the Plans for Phase II of SSPIAs, as follows:

- In 2020, ICAO will start developing guidance to support the determination of maturity levels (0: not present and not planned, 1: not present but being worked on, 2: present, 3: present and effective, 4: present and effective for years and in continuous improvement) for each PQ.

- The target is to start using in 2021 the SSP-related PQs including guidance to support the determination of maturity levels. This will enable a quantitative measurement of the level of progress achieved by the State in SSP implementation.

- The first SSPIA to be conducted under Phase 2 will start no earlier than 6 months after the publication of the assessment tool (i.e. SSP-related PQs + guidance to support the determination of maturity levels) on the OLF.

2.10 The meeting noted the criteria to prioritize the scheduling of SSPIAs, as follows:

- level of implementation of SSP Foundation PQs and evidence of:

  a) a robust and sustainable safety oversight system and aircraft accident/serious incident investigation system; and

  b) an effective mandatory safety reporting system, State aircraft accident and incident database and safety analyses; and

- effective completion and updates of PQ self-assessment by the State (for all PQs, including SSP-related PQs).

Global Aviation Safety Oversight System (GASOS)

2.11 The meeting recalled the main objectives of GASOS and underlined that under GASOS, States maintain responsibility for safety oversight, accident investigation and safety management under the Chicago Convention and its Annexes.

2.12 The meeting recalled that the Assembly Resolution A40-6 supported the implementation and further development of GASOS in order to develop the necessary measures to strengthen, assess, and support RSOOs and RAIOs.

REPORT ON AGENDA ITEM 3: REGIONAL PERFORMANCE FRAMEWORK FOR SAFETY

Follow-up on the RASG-MID/7 Conclusions and Decisions

3.1 The subject was addressed in WP/3 presented by the Secretariat. The meeting reviewed the progress made for the implementation of the RASG-MID/7 Conclusions and Decisions as at **Appendix 3A**.

3.2 With respect to the RASG-MID/7 Conclusion 7/11, the meeting noted that Qatar did not propose any Draft for the SEI on Team Resource Management (TRM) and requested Qatar to present a Draft SEI to the SEIG/1 meeting for further review and consideration.

Status of Safety Indicators and Targets

3.3 The subject was addressed in PPT/1 presented by the Secretariat. The meeting noted MID Region Safety Strategy (6th Edition), which was endorsed by RASG-MID/7 meeting, includes selected goals and safety indicators from the new GASP 2020-2022 Edition, taking into consideration the regional specific objectives and priorities with specific timeframes in order to achieve the established safety targets. The MID Region Safety Strategy includes the following goals:

- Aspirational Goal: Zero fatality by 2030
- Goal 1: Achieve a continuous reduction of operational safety risks
- Goal 2: Strengthen States' safety oversight capabilities/Progressively increase the USOAP-CMA EI scores/results
- Goal 3: Improve aerodrome safety
- Goal 4: Expand the use of Industry Programmes
- Goal 5: Implementation of effective SSPs and SMSs
- Goal 6: Increase Collaboration at the Regional Level to enhance safety
- Goal 7: Ensure the appropriate infrastructure is available to support safe operations
- Goal 8: Monitor the fleet age

3.4 The meeting noted the current status of the different Safety Indicators and Targets included in the MID Region Safety Strategy.

Outcomes of the Annual Safety Report Group (ASRG/1)

3.5 The subject was addressed in WP/4 presented by the Secretariat. The meeting noted that the First meeting of the ASRG/1 was held at the ICAO Middle East Regional Office in Cairo, Egypt, 25-27 November 2019.

3.6 The meeting noted that the majority of ASRG members did not attend the meeting, which raised concerns about the commitment and effectiveness of the Group.

Eighth MID Annual Safety Report

3.7 The meeting was apprised of the new risk assessment methodology to proactively identify the focus areas and emerging risks. Based on the analysis of the reactive and proactive safety information for the period 2014-2018, and in accordance with the agreed new methodology for the risk assessment, the meeting agreed that the main focus areas in the MID Region are:

1) Runway Safety (RS)- (mainly RE and ARC during landing);
2) Loss of Control Inflight - (LOC-I);

3) Controlled Flight Into Terrain- (CFIT); and
4) MID Air Collision- (MAC)

3.8 The meeting consolidated the list of Emerging Risks using the ADREP Taxonomy, based on the previous and the newly identified emerging risks. Accordingly, the meeting agreed to the following list of emerging risks

1. Fire/Smoke (non-impact) – (F-NI);
2. Wake turbulence;
3. Runway Incursion-(RI);
4. Bird Strike- (BIRD);
5. Security- (SEC);
6. System Component Failure- Power Plant - (SCF-PP)
7. System Component Failure- Non-Power Plant (SCF-NP); and
8. Windshear

3.9 Based on the forgoing, the meeting reviewed and endorsed the 8th Edition of the MID-ASR and urged States and Stakeholders to provide necessary support to the MID-ASRG. The meeting confirmed that in accordance with the ASRG Terms of Reference the confidentiality/de-identification of data is ensured. It was also highlighted that a Disclaimer on the subject is included in the ASRs. Accordingly, the meeting agreed to the following RSC Conclusion:

RSC/7 CONCLUSION 7/3: 8TH ASR

*That, the Eighth MID Annual Safety Report at **Appendix 3B** is endorsed.*

Ninth MID Annual Safety Report

3.10 The meeting reiterated the importance of sharing the number of occurrences and their safety data analyses by the States in order to produce improved Annual Safety Reports in the future; and urged States to provide the ICAO MID Office by end of **May 2020** with the number of accidents, serious incidents and incidents, safety data analysis, and their associated safety recommendations related to each occurrence category in **Appendix 3C** for the past 5 years (2015 – 2019), using the Template in **Appendix 3D.** Accordingly, the meeting agreed to the following RSC Conclusion:

RSC/7 CONCLUSION 7/4: SHARING OF SAFETY DATA ANALYSIS

*That, States be urged to provide the ICAO MID Office by **31 May 2020** with the number of accidents, serious incidents and incidents, safety data analysis, and their associated safety recommendations related to each occurrence category in **Appendix 3C** for the past 5 years (2015 – 2019) and using the Template in **Appendix 3D.***

3.11 The meeting highlighted the main challenges facing the ASRG for the development of the ASRs, in particular:

- low level of serious incidents and incidents reporting by the States;
- lack of shared safety data analysis and safety recommendations by the States; and
- low participation in the meeting from the States and the organization.

Outcomes of the Aerodrome Safety Planning and Implementation Group (ASPIG/1)

Aerodrome Certification Implementation

3.12 The subject was addressed in WP/5 presented by the Secretariat. The meeting noted that the First meeting of the Aerodrome Safety, Planning and Implementation Group (ASPIG/1) was held at the ICAO Middle East Regional Office in Cairo, Egypt, from 19 to 21 November 2019.

3.13 The meeting highlighted the importance for States to establish a National Regulatory Framework, which includes the criteria and procedures for the Certification of Aerodromes comprising the implementation of the Aerodrome Safety Management System (SMS).

3.14 The meeting noted that the monitoring of the progress of the Aerodrome Certification relies on up-to-date and relevant information regarding Aerodrome Certification. The meeting agreed that States should not only provide the certification status for their individual International Aerodromes to the ICAO MID Office, but also an Aerodrome Certification Implementation Progress/Plan using the Template at **Appendix 3F**.

3.15 Based on the forgoing, the meeting agreed to the following Conclusions:

RSC CONCLUSION 7/5: SURVEY ON BASIC REGULATORY FRAMEWORK FOR AERODROME CERTIFICATION

*That, by May 2020, a Survey on Basic Regulatory Framework for Aerodrome Certification in the MID Region be carried out using the Template at **Appendix 3E**.*

RSC CONCLUSION 7/6: AERODROME CERTIFICATION IMPLEMENTATION PROGRESS

That, States provide the ICAO MID Office, by May 2020 with:

*a) the status of implementation of the Basic Regulatory Framework for aerodrome certification using the **Table 1 of Appendix 3E**; and*

*b) their progress/plan for Aerodrome Certification Implementation using the Template at **Appendix 3F.***

Global Reporting Format (GRF)

3.16 The meeting noted that the runway excursion is a top safety challenge, which can happen during landing or take off and one main contribution factor involves adverse weather that results in runway surface being contaminated.

3.17 The meeting noted that the harmonized methodology developed by ICAO to help mitigate the risk of excursion by assessing and reporting of runway surface conditions. This methodology, known as Global Reporting Format (GRF), will be globally applicable as of 5 November 2020.

3.18 The meeting highlighted that the GRF methodology will have an impact on the States' Regulations, Aerodrome, ATM and AIS Operating Manuals including the reporting format. It is therefore paramount that States ensure that appropriate training is provided to concerned stakeholders, in order to achieve a harmonized global implementation of GRF. Accordingly, the meeting agreed to the following Conclusions:

RSC CONCLUSION 7/7: ***REGIONAL SEMINAR ON GLOBAL REPORTING FORMAT (GRF)***

That,

a) *a Regional Seminar on Global Reporting Format (GRF) be organized by the ICAO MID Office during the first quarter of 2020; and*

b) *States (CAAs, Airports Operators, ANSPs, Airlines, etc.) and International Organizations are invited to actively participate in this Seminar.;*

RSC CONCLUSION 7/8: ***GLOBAL REPORTING FORMAT (GRF) IMPLEMENTATION AND DEPLOYMENT AT AERODROMES***

That, States:

a) *be requested to report on the implementation of the GRF to the ICAO MID Regional Office by July 2020; and*

b) *be encouraged to organize at National level Seminars, Workshops, trainings, etc. related to GRF; and*

c) *ensure full deployment of GRF at their airports.*

Progress on Runway Safety Team Implementation

3.19 The meeting noted that Runway safety-related accidents continue to represent the most significant source of aviation accidents worldwide and remain aviation's number one safety risk category.

3.20 The meeting was apprised of the Global Runway Safety Action Plan (GRSAP) that provides recommended actions for all runway safety stakeholders, with the aim of reducing the global rate of runway excursions and runway incursions. The meeting noted that the GRSAP guides the integrated activities of States, Airports, Airlines, Air Navigation Service Providers and Manufacturers to implement runway safety improvement and risk reduction measures, with an overall objective of reducing runway safety related fatalities and accidents globally.

3.21 The meeting reiterated the importance of establishing Runway Safety Teams at International Airports to improve safety and urged States to submit their detailed Runway Safety Implementation Progress/Plan as at **Appendix 3G** including the GRF deployment at the Airport level. Accordingly, the meeting urged States, that have not yet done so, to use the guidance included in the GRASP for the establishment of Runway Safety Teams; and agreed to the following Conclusion:

RSC CONCLUSION 7/9: ***RUNWAY SAFETY TEAM IMPLEMENTATION PLAN***

*That, States be urged to provide the ICAO MID Office by **May 2020** with a Runway Safety Team Implementation Progress/Plan, using the Template at **Appendix 3G**.*

Progress of the Safety Enhancement Initiatives (SEIs)

3.22 The subject was addressed in WP/7 and WP/8 presented by the Secretariat. The meeting recalled that the following SEIs were endorsed by the RASG-MID:

1. improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region;

2. strengthening of States' Safety Oversight capabilities;

3. improve Regional cooperation for the provision of Accident & Incident Investigation;

4. improve implementation of ELP requirements in the MID Region;

5. sharing and analysis of safety recommendations related to accidents and serious incidents; and

6. Dangerous Goods (New).

3.23 The meeting noted the progress achieved in the implementation of the different SEIs endorsed by the RASG-MID as at **Appendix 3H.**

3.24 With respect to the SSP/SMS implementation in the MID Region, the meeting reviewed and supported the development of the MID Region Safety Management Implementation Roadmap. Accordingly, the meeting agreed to the following RSC Conclusions:

RSC CONCLUSION 7/10: MID REGION SAFETY MANAGEMENT IMPLEMENTATION ROADMAP

That, the MID Region Safety Management Implementation Roadmap at ***Appendix 3I*** *is endorsed*

RSC CONCLUSION 7/11: SAFETY MANAGEMENT IMPLEMENTATION TEAM

That,

a) the Safety Management Implementation Team (SMIT) is established as the main Regional Framework for the provision of assistance to States through Safety Management Assistance Missions; and

b) the ICAO MID Office develop a SMIT handbook for presentation to and endorsement by the RASG-MID/8 meeting.

3.25 The meeting noted with appreciation that Egypt, Saudi Arabia, Qatar and UAE, as well as IATA and CANSO will support the SMIT. Accordingly, the meeting invited the MID Regional Office to issue a State Letter on the subject to inform States prior to the SEIG/1 meeting.

3.26 With regard to the SEI related to ELP, the meeting noted that the ELP Questionnaire was sent to the MID States through State Letter Ref.: ME 4-19/320 dated 21 October 2019 and Reminder State Letter Ref.: ME 4-19/361 2018 dated 24 Nov 2019 was issued. Five (5) States, namely, Egypt, Iraq, Oman, Qatar, and UAE, replied to the Questionnaire. The meeting reviewed the results of the ELP Questionnaire analysis at **Appendix 3J.**

3.27 Through PPT/2, Egypt shared with the meeting their experience related to training programme to enhance ELP for pilots and ATC to mitigate the risk of accidents occurring due to miscommunication.

3.28 For the SMS implementation by ANSPs (ATM), the meeting noted with concern the slow progress related to the actions to improve the status of implementation of SMS by ANSPs (ATM). The meeting noted with appreciation the offer provided by CANSO to organize SMS workshop for ANSPs in 2021.

3.29 With regard to the status of SMS implementation by air operators, aerodromes, maintenance and training organizations, the meeting noted with concern the slow progress in the implementation of the agreed actions.

3.30 With regard to the new SEI related to Dangerous Goods, the meeting agreed to the following SEI "Enhance State Oversight on Dangerous Goods" with actions including capacity building of States Inspectors and development of guidance materials for the oversight of DG (RASG-MID Safety Advisory, etc.). The meeting noted the FAA's willingness to support the SEI related to Dangerous Goods.

3.31 With respect to Aerodrome Operations, the meeting noted the updated progress related to the SEIs as at **Appendix 3K**, as follows:

1. Development of guidance material and training Programmes to support the creation of action Plans by the Runway Safety Team (RST);

2. Development of guidance material and training Programmes to support Aerodrome Infrastructure and Maintenance Management;

3. Aerodrome Safeguarding;

4. Wildlife Hazard Management and Controls;

5. Laser Attacks;

6. Ground Handing Operations and Safety;

7. ARFF and Emergency Planning;

8. Safety Management; and

9. Runway Excursions

3.32 The meeting underlined the need to review the list of current SEIs endorsed by the RASG-MID to ensure full alignment with the 2020-2022 GASP; and urged States to develop their National SEIs in accordance with the new GASP in order to support the development of Regional SEIs considering the areas of common interest/concern and the High Risk Categories (HRCs) identified in the GASP and the MID ASR. Accordingly, the meeting agreed to the following Conclusion:

RSC CONCLUSION 7/12: SAFETY ENHANCEMENT INITIATIVES (SEIS)

That,

*a) States be urged to develop and share their SEIs and present them to the SEIG/1 meeting in **September 2020**; and*

b) the SEIG/1 meeting review:

i. the list of current RASG-MID SEIs to ensure full alignment with the 2020-2022 GASP; and

ii. States' SEIs to identify the areas of common interests/concerns.

UAE Experience related to SSP

3.33 The subject was addressed in PPT/2 presented by UAE. The meeting was apprised of UAE's experience and practices related to the implementation of SSP.

Accident & Incident Investigation Regional Cooperation Mechanism (ARCM) Implementation Action Plan

3.34 The subject was addressed in WP/9 presented by the Secretariat. The meeting recalled that the Strategy for the enhancement of cooperation among the MENA States in the provision of AIG functions at **Appendix 3L** was endorsed by the DGCA-MID/4 meeting (Muscat, Oman, 17-19 October 2017).

3.35 The meeting recalled also that the RASG-MID/7 meeting, through Conclusion 7/9, endorsed the Roadmap for AIG Regional Cooperation at **Appendix 3M**; and the AIG Regional Cooperation Mechanism (ARCM) at **Appendix 3N** was endorsed by the DCGA-MID/5 meeting, through conclusion 5/4 (Kuwait, 4-6 November 2019).

3.36 The ACAO Representative highlighted that the Strategy for the enhancement of cooperation among the MENA States in the provision of AIG functions and the Roadmap for AIG Regional Cooperation were also endorsed by the ACAO EC. He also informed the meeting that the ARCM Implementation Action Plan endorsed by the meeting will be presented to the ACAO ASC/44, Casablanca, Morocco, 26-27 March 2020 and later to the ACAO EC for endorsement.

3.37 The meeting reviewed and updated the ARCM Implementation Action Plan at **Appendix 3O**, and endorsed the following Draft Conclusion.

RSC CONCLUSION 7/13: AIG REGIONAL COOPERATION MECHANISM ACTION PLAN

That,

*a) the AIG Regional Cooperation Mechanism (ARCM) Action Plan at **Appendix 3O** is endorsed; and*

b) *an ARCM Technical Coordination meeting be organized by the ICAO MID Office in Cairo, 1-4 June 2020.*

REPORT ON AGENDA ITEM 4: COORDINATION BETWEEN RASG-MID AND MIDANPIRG

ANS Safety Issues

4.1 The subject was addressed in WP/10 presented by the Secretariat. The meeting reviewed the Table reflecting the subjects of common interest to MIDANPIRG and RASG-MID at **Appendix 4A**.

Call Sign Similarity and Confusion (CSC)

4.2 The meeting noted with appreciation that an important decrease in the number of incidents related to call sign similarity/conflict was observed in the Emirates FIR (around 40% decrease). Therefore, the implementation of the alphanumeric call signs has resulted in the decrease of the number of incidents. Consequently, the meeting agreed that call sign similarity and confusion should no longer be considered as a high risk in the Region. In addition, the meeting noted that call sign conflicts/similarities would continue to exist and ANSPs should place increased emphasis on the detection/alerting of call sign conflicts before they occur.

4.3 The meeting recalled that the ATM-SG/5 meeting encouraged States/ANSPs to develop unified procedures if/when potential exists and to consider that their future ATM systems should provide a 'built-in' detection and alerting tool to Air Traffic Controllers. The ATM-SG/5 meeting encouraged States and airspace users to:

a) support the MID Region CSC initiatives ensuring effective implementation and cooperation;

b) take note of and support the work of the UAE; and

c) promote the reporting of call sign similarity events to the email addresses: MIDCSC@icao.int and MENACSSU@iata.org

Reduced Vertical Separation Minima (RVSM)

Large Height Deviation (LHD) Reporting

4.4 The meeting noted with concern that without the LHDs reports related to all categories mainly A, B, C, D, E, H, J and K, the MIDRMA will not be able to assess compliance with Safety Objective 2 (Overall risk of collision due all causes).

4.5 The meeting recognized the need to raise the awareness with respect to the importance of the LHD Reports and their impact on the assessment of the safe implementation of RVSM in the MID Region. Accordingly, the meeting urged States to report LHDs and exchange information in a timely manner and provide necessary data to the MIDRMA.

Height-Keeping Monitoring Requirements

4.6 The meeting noted that failure to respond to the required height monitoring requirements may jeopardize safety as well as risk the implementation of RVSM. The meeting noted that the MIDRMA continues to coordinate very closely with other RMAs to exchange all available height monitoring results, particularly with the EUR RMA, which is providing height-monitoring results to the MIDRMA for any MID RVSM approved aircraft flying over their Height Monitoring Units (HMUs).

4.7 The meeting urged States to continuously check and comply with their Monitoring requirements as published on the MIDRMA website https://midrma.com/en/monitoringResults. The meeting noted that the MIDRMA Board/16 also encouraged States to use the Auto Online MMR Tool that was developed to enable the Civil Aviation Authorities to check their MMR for each air operator under their responsibility and identify aircraft that are non-compliant with the ICAO Annex 6 requirements for height-keeping performance.

Development of the MID RVSM Safety Monitoring Report (SMR) 2018 and 2019

4.8 The meeting noted with concern that for the first time the Safety Objective 2 could not be assessed due to the lack of LHDs reports related to LHD Categories A, B, C, D, H, J and K. Accordingly, the MIDRMA was not able to demonstrate that safety within the RVSM Airspace is maintained.

4.9 Based on the above, the meeting urged States to take necessary follow-up actions with their ANSPs to send the required LHD Reports to the MIDRMA in order to finalize the SMR 2018 and SMR 2019 and present them to the upcoming MSG/7 meeting.

Search and Rescue issues

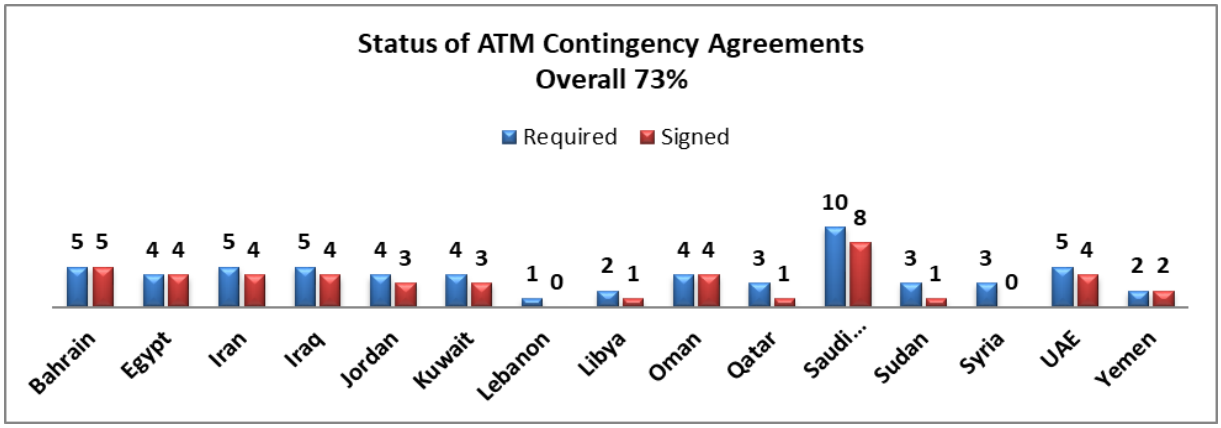
4.10 The meeting noted the main deficiencies and USOAP CMA SAR findings in the MID Region are related to.

- Implementation of the Regional SAR Plan;
- Lack of Comprehensive National SAR Plans;
- Local cooperation among stakeholders involved in SAR;
- SAR is more retro-active rather than pro-active approach;
- 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.

Contingency Planning

4.11 The meeting was apprised of the activities related to contingency planning in the MID Region and the status of the various Contingency Coordination Teams (CCTs).

4.12 The meeting was informed also about the status of signed contingency agreements between adjacent ACCs as reflected in the **Graph 1** below:



Aerodrome Design and Operations

4.13 The subject was addressed in WP/11 presented by the Secretariat. The meeting noted that the 6th Edition of the GANP brought relevant changes to the Airport Operations Performance Improvement Area and requested the ASPIG to monitor the A-CDM and SURF threads in accordance with the new changes and report the level of their implementation to the MIDANPIRG and MSG.

4.14 The meeting recalled that MIDANPIRG/17, through Conclusion 17/1, agreed to organize a joint ACAO/ICAO ASBU Symposium in 2020. Accordingly, the meeting encouraged States (including airport operators) and stakeholders to actively participate in the ACAO/ICAO ASBU Symposium, Cairo, Egypt, 16-19 March 2020.

Operational thread: SURF (Surface Operations)

4.15 The meeting was apprised of the ASBU Operational Thread SURF, which aims to enhance the situational awareness of Air Traffic Controllers and pilots during ground operations by the provision of the aerodrome surface situation on their respective A-SMGCS displays including some initial alerting services for the prevention of runway incursions or electronic maps in the cockpit.

4.16 The meeting noted that there is a need to raise awareness on Surface operation concept through capacity building initiative.

4.17 Based on the above, the meeting noted the following Draft Conclusion, proposed by the ASPIG/1 meeting, to be endorsed by the MSG/7 meeting:

DRAFT CONCLUSION 1/7: A-SMGCS IMPLEMENTATION SEMINAR

That,

a) ICAO organize an A-SMGCS Implementation Seminar in 2020; and
b) States are encouraged to participate actively in this event.

4.18 The meeting was informed that ICAO is coordinating with ACAO to organize an A-SMGCS Seminar in September 2020; and encouraged States (including airport operators) and stakeholders to actively participate in the Seminar.

Airport Planning Challenges (States/Airports)

4.19 The meeting noted that the lack of strategic planning can lead to the development of objectives that fail to consider how airport projects contribute to the longer-term sustainable development strategy. The meeting highlighted that without a coherent strategy, Airports may not address basic functional and safety requirements and intrinsic needs for the future.

4.20 The meeting recognized that effective airport master planning is vital in building the airport capacity in a timely and phased approach, thus avoiding significant delays in the future due to capacity constraints. It was highlighted that Airport capacity may be increased and airport delays may be reduced through more precise and up-to-date airport planning.

4.21 The meeting noted the following Draft Conclusion, proposed by the ASPIG/1 meeting, to be endorsed by the MSG/7 meeting:

DRAFT CONCLUSION 1/8: AIRPORT PLANNING SEMINAR

That, ICAO organize an Airport Planning Seminar in 2021 and States are encouraged to participate actively in this event.

REPORT ON AGENDA ITEM 5: WORKING ARRANGEMENTS AND FUTURE WORK PROGRAMME

Working Arrangements and Future Work Programme

5.1 The subject was addressed in WP/12, WP/13 and WP/14 presented by the Secretariat.

Terms of Reference (ToR) of the RASG-MID and RSC

5.2 The meeting noted that the RASG-MID/7 meeting highlighted the need to review and update the RASG-MID ToR, taking into consideration the new/generic ToR of the RASGs at **Appendix 5A**, endorsed by the President of the Council in July 2019, and tasked the RSC to follow up on the subject including the required update to the ToR of the RASG-MID and the RSC before the formal endorsement by the RASG-MID/8 meeting.

5.3 The meeting reviewed the draft ToR of the RASG-MID and the RSC at **Appendices 5B and 5C**, respectively, and urged States to review them and provide comments/feedback before the formal endorsement by the RASG-MID/8 meeting. Accordingly, the meeting agreed to the following RSC Conclusion:

RSC CONCLUSION 7/14: STATES' REVIEW AND FEEDBACK ON THE TERMS OF REFERENCE (TOR) OF THE RASG-MID AND RSC

*That, States review the Draft Terms of Reference (ToR) of the RASG-MID and RSC at **Appendices 5B and 5C**, respectively, and provide comments/feedback to the ICAO MID Office by **November 2020** for the consolidation of the final version to be presented to the RASG-MID/8 meeting for endorsement.*

New RASG-MID Organizational Structure

5.4 The meeting recalled that based on the feedback and proposals received from the stakeholders and different RASG-MID subsidiary bodies, the RASG-MID/7 meeting endorsed the revised RASG-MID Organizational Structure at **Appendix 5D** with the establishment of the following Groups:

- Annual Safety Report Group (ASRG)
- Aerodromes Safety, Planning and Implementation (ASPIG)
- Safety Enhancement Implementation Group (SEIG)
- Accident and Incident Investigation (AIIG)

ToR of the new Groups

5.5 The meeting recalled that the RASG-MID/7 meeting agreed that the ToR of each Group should be developed at their first meeting, for review and endorsement by the RSC/7 meeting. Accordingly, the meeting reviewed and endorsed the ToR developed for the ASRG and ASPIG at **Appendices 5E** and **5F**, respectively; and agreed to the following t RSC/7 Decisions:

RSC DECISION 7/15: TERMS OF REFERENCE (TOR) OF THE ASRG

That, the Terms of Reference (ToR) of the Annual Safety Report Group (ASRG) are endorsed as at ***Appendix 5E.***

RSC DECISION 7/16: TERMS OF REFERENCE (TOR) OF THE ASPIG

That, the Terms of Reference (ToR) of the Aerodromes Safety Planning and Implementation Group (ASPIG) are endorsed as at ***Appendix 5F*** .

RASG-MID Procedural Handbook

5.6 The meeting recalled that the RASG-MID Procedural Handbook provides 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.

5.7 As a follow up to the RASG-MID Decision 7/10, the Secretariat consolidated the Draft Fourth Edition of the RASG-MID Procedural Handbook for presentation to the RSC/7 meeting before the formal endorsement by the RASG-MID/8 meeting, reflecting:

- the new Organizational Structure of the RASG-MID, which was endorsed by the RASG-MID/7 meeting;
- the new Terms of Reference (ToR) of the RASG-MID complying with the generic ToR of RASGs, which were endorsed by the ICAO Council; and
- the ToR of the ASRG and ASPIG, which was developed by the first meeting of each Group (for review and endorsement).

5.8 The meeting reviewed the Draft Fourth Edition of the RASG-MID Procedural Handbook at **Appendix 5G**, and requested the Secretariat to prepare the final Draft for presentation to the RASG-MID/8 meeting for formal endorsement. Accordingly the meeting agreed to the following Decision:

RSC DECISION 7/17: FOURTH EDITION OF RASG-MID PROCEDYRAL HANDBOOK

That, the ICAO MID Office consolidate the Fourth Edition of the RASG-MID Procedural Handbook for presentation to and endorsement by the RASG-MID/8 meeting.

Future Work Programme

5.9 The meeting noted that the DGCA-MID/5 meeting agreed that the MIDANPIRG and RASG-MID should meet on biennial basis (every two years), concurrently (similar to the MIDANPIRG/17 and RASG-MID/7), to the extent possible, around March-April of the odd years (2021, 2023, 2025, etc.). The MIDANPIRG Steering Group and the RASG-MID Steering Committee should meet also on biennial basis during the even years (2020, 2022, 2024, 2026, etc.). Accordingly, the meeting agreed that the RSC/8 meeting be held during the first quarter of 2022; the venue will be the ICAO MID Office in Cairo, unless a State is willing to host the meeting.

5.10 The meeting explored the possibility to organize the fifth MID Region Safety Summit back-to-back with the MIDANPIRG/18 and RASG-MID/8 meetings. However, the meeting agreed that the Summit should be organized separately to reduce the burden on the host State and the Secretariat.

5.11 In this respect, the meeting was in view of organizing the Summit before the RASG-MID/8 meeting, with the objective to gather all stakeholders to develop a draft MID RASP, taking into consideration the 2020-2022 GASP and MID Region Safety Strategy, in order to be presented to the RASG-MID/8 meeting for review and endorsement. Accordingly, the meeting agreed to the following RSC/7 Conclusion:

RSC CONCLUSION 7/18: FIFTH MID REGION SAFETY SUMMIT

That, the Fifth MID Region Safety Summit be organized beginning of 2021 with the objective to develop a draft MID RASP for presentation to the RASG-MID/8 meeting for review and endorsement.

REPORT ON AGENDA ITEM 6: ANY OTHER BUSINESS

6.1 Nothing has been discussed under this Agenda Item.

APPENDICES

APPENDIX 3A

FOLLOW-UP ACTION PLAN ON RASG-MID/7 CONCLUSIONS & DECISIONS

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 7/ 1	**RASG-MID SAFETY ADVISORY – GNSS VULNERABILITIES** That, the RASG-MID Safety Advisory (RSA-14) on GNSS Vulnerabilities at Appendix 4E is endorsed and be published by the ICAO MID Office EAD.	Safety concerns related to GPS jamming	RSA-14 on GNSS published on the ICAO website	RASG-MID/7	June 2019	**Completed**
C. 7/2	**7TH MID ASR** That, the seventh MID Annual Safety Report is endorsed and be posted by the ICAO MID Office on the website.	Sharing the final 7th MID-ASR for the period 2013-2017 with identified Focus Areas and Emerging Risks	MID-ASR 7th Edition published on the ICAO website	RASG-MID/7	April 2019	**Completed**
C.7/3	**PROVISION OF SAFETY DATA FOR THE DEVELOPMENT OF THE 8TH MID ASR** That, in order to present an improved version of the 8th MID-ASR to the MID-ASRT/4 meeting, States, that have not yet done so, be urged to provide the ICAO MID Office by **1 July 2019** with the number of accidents, serious incidents and incidents, safety data analysis, and their associated safety recommendations related to each occurrence category in **Appendix 5.1C** for the past 4 years (2015 – 2018), using the Template at **Appendix 5.1D.**	Identification of safety risks, trends and sharing of best practices for mitigation measures	Safety Data Analyses	States	July 2019	**Completed** SL ME 4/1.1–18/414 dated 20 December 2018. *(Replies: Egypt, Jordan, Libya, Oman, Syria & Yemen)* Reminder ME 4/1.1-19/071 dated 28 February 2019. *(Replies: Egypt, Iran and UAE)*
C. 7/4	**REVISED MID REGION SAFETY STRATEGY** That, the revised version of the MID Region Safety Strategy at **Appendix 5.1F** is endorsed.	Need to keep pace with developments, including the GASP 2020-2022	MID Region Safety Strategy	RASG-MID/7	April 2019	**Completed**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
D. 7/5	**SSP IMPLEMENTATION AD-HOC ACTION GROUP** That, an SSP Implementation Ad-Hoc Action Group composed of the following experts, is established to develop the Regional Roadmap for SSP implementation in the MID Region: Mr. Khalid Alhumaidan from UAE (Champion) Mr. Mohammad Hushki from Jordan Mr. Mohamed Salah from Egypt Mr. Mohamed Chakib from ICAO Mr. Mashhor Alblowi from ICAO	Development of SSP and monitor the implementation in the MID Region	Development of the Regional Roadmap for SSP implementation	UAE supported by Jordan, Egypt, and ICAO	March 2020	**Completed** The MID Region Safety Management Implementation Roadmap was endorsed by the RSC/7 meeting (RSC Conclusion 7/10)
D. 7/6	**AD-HOC ACTION GROUP FOR SMS IMPLEMENTATION BY ANSPs** That, an Ad-Hoc Action Group for SMS implementation by ANSPs composed of the following experts, is established to support ICAO and CANSO in the development and implementation (as appropriate) of actions/tasks in support of the SEI related to the improvement of the status of implementation of SMS by ANSPs (ATM): Mr. Waleed Al Riyami from UAE (Champion) Mr. Ahmed Said from Egypt Mr. Ahmed Mostafa from Egypt Ms. Leena Ahmed Al-Kooheji from Bahrain Mr. Shayne Campbell form CANSO Mr. Mohamed Chakib from ICAO Mr. Elie El Khoury from ICAO Mr. Mashhor Alblowi from ICAO	Improve the status of implementation of SMS by ANSPs (ATM)	Development and implementation of actions/tasks	UAE supported by Bahrain, Egypt, Saudi Arabia, CANSO, and ICAO	March 2020	**Completed** The MID Region Safety Management Implementation Roadmap was endorsed by the RSC/7 meeting (RSC Conclusion 7/10) The Safety Management Implementation Team (SMIT) was established by the RSC/7 meeting as the main Regional Framework for the provision of assistance to States through Safety Management Assistance Missions (RSC Conclusion 7/11)

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
D. 7/7	**ELP AD-HOC ACTION GROUP** That, an ELP Ad-Hoc Action Group composed of the following experts is established to support the implementation of the SEI related to the improvement of the implementation of ELP requirements in the MID Region: Mr. Ibrahim Addasi from UAE (Champion) Mr. Mutasim Aljawharji from Saudi Arabia Mr. Mohammad Hushki from Jordan Ms. Leena Ahmed Al-Kooheji from Bahrain Mr. Mohamed Chakib from ICAO Mr. Mashhor Alblowi from ICAO Mr. Elie El Khoury from ICAO	Effectiveness of the implemented ELP in the MID Region	To support the implementation of the SEI related to the improvement of the implementation of ELP requirements	UAE supported by Saudi Arabia, Jordan, Bahrain, and ICAO	March 2020	**Actioned** The ELP Questionnaire was sent to the MID States through State Letter Ref.: ME 4-19/320 dated 21 October 2019 and Reminder State Letter Ref.: ME 4-19/361 2018 dated 24 Nov 2019 was issued. Five (5) States, namely, Egypt, Iraq, Oman, Qatar, and UAE, replied to the Questionnaire. The results of the ELP Questionnaire analysis was reviewed by RSC/7 meeting.
D. 7/8	**SEI RELATED TO DANGEROUS GOODS** That, the RSC develop a new SEI related to Dangerous Goods.	DG as source of significant safety issues	Identified as a low level of effective implementation	RSC/7	March 2020	**Ongoing** The RSC/7 meeting agreed to the following SEI "Enhance State Oversight on Dangerous Goods" with actions including capacity building of States Inspectors and development of guidance materials for the oversight of DG (RASG-MID Safety Advisory, etc.).
C. 7/9	**ROADMAP FOR AIG REGIONAL COOPERATION** That, the Roadmap for AIG Regional Cooperation be amended as at **Appendix 5.1J.**	States level 2 of implementation	Roadmap for AIG Regional Cooperation	RASG-MID/7	April 2019	**Completed**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
D.7/10	**REVISED RASG-MID ORGANIZATIONAL STRUCTURE** That, a) the revised RASG-MID Organizational Structure at Appendix 5.2A is endorsed; and b) the Secretariat consolidate a new Edition of the RASG-MID Procedural Handbook reflecting the revised Organizational Structure and Terms of Reference (ToRs) of the different Groups for presentation to the RSC/7 meeting before the formal endorsement by the RASG-MID/8 meeting..	Effectiveness of the RASG-MID working arrangements	New Handbook with the revised Org. Structure	RASG-MID/7 and ICAO	March 2020	**Actioned** The RASG-MID/7 meeting endorsed the revised RASG-MID Organizational Structure The RSC/7 meeting reviewed and endorsed the ToR developed for the ASRG and ASPIG (RSC Decisions 7/15 and 7/16) The RSC/7 meeting reviewed the draft ToR of the RASG-MID and the RSC and urged States to review them and provide comments/ feedback before the formal endorsement by the RASG-MID/8 meeting (RSC Conclusion 7/14) The RSC/7 meeting reviewed the Draft Fourth Edition of the RASG-MID Procedural Handbook and requested the Secretariat to prepare the final Draft for presentation to the RASG-MID/8 meeting for formal endorsement (RSC Conclusion 7/17)

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 7/11	**SEI ON TEAM RESOURCE MANAGEMENT (TRM) FOR ATM** That Qatar present a Draft SEI/DIP on Team Resource Management (TRM) for further review and consideration.	Human performance effectiveness in aviation	SEI on Team Resource Management	Qatar	March 2020	**Ongoing** The RSC/7 meeting requested Qatar to present a Draft SEI to the SEIG/1 meeting for further review and consideration.

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

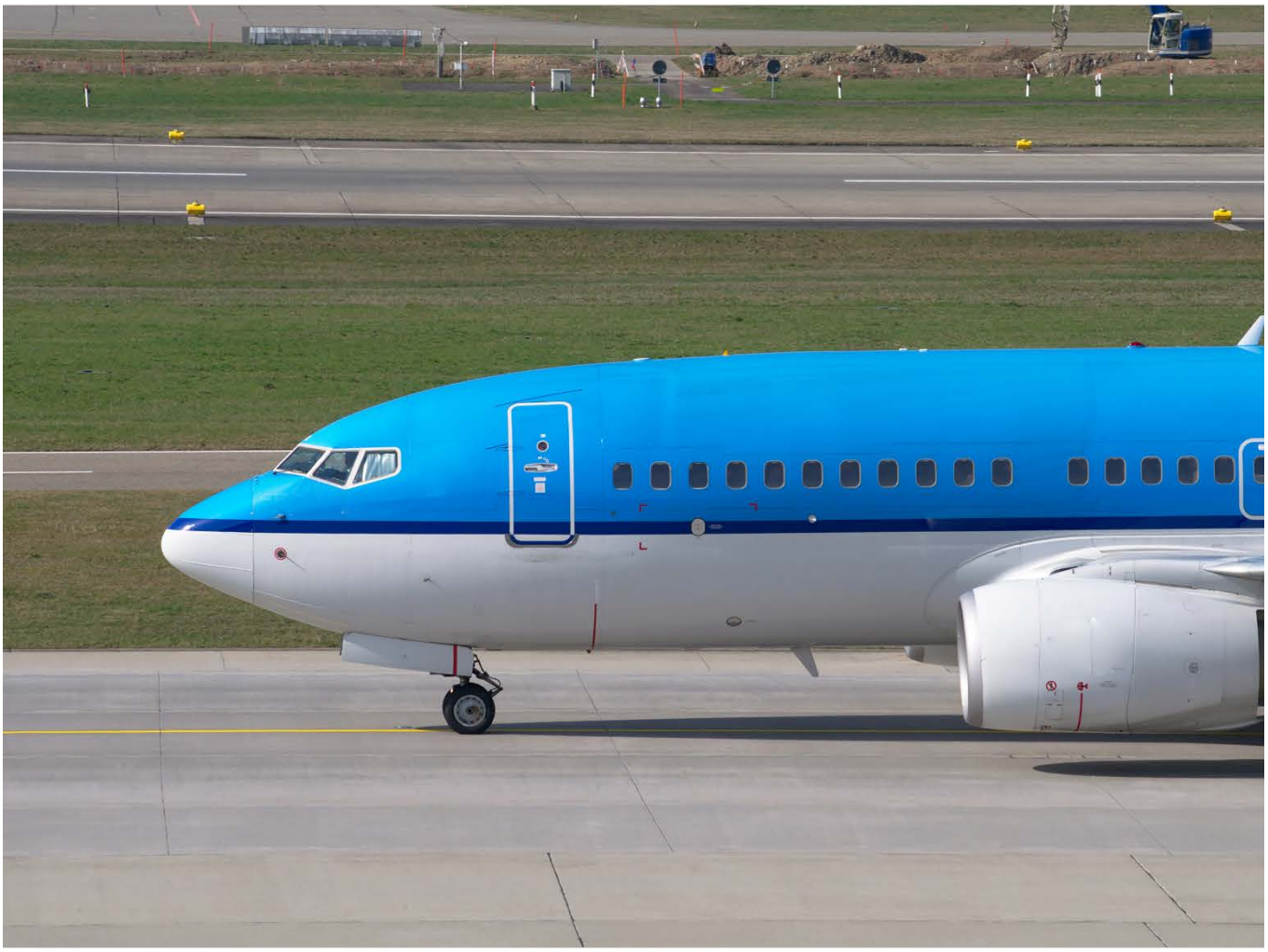
No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 1	**AVIATION DATA & ANALYSES AND AIRPORTS & AIR NAVIGATION CHARGES SEMINARS/ WORKSHOPS**					**Ongoing**
	That, in order to foster dialogue on the development of an economically viable civil aviation system (airlines, airports, air navigation services providers, etc.) and enhance its economic efficiency and transparency: a) ICAO organize jointly with ACAO on regular basis the Aviation Data and Analyses and the Airports and Air Navigation Charges Seminars/Workshops; and b) States are encouraged to participate actively in these events..	Low level of implementation of ICAO Policies regarding Airports and Air Navigation Charges	Airports and Air Navigation Charges Seminars/ Workshops	ICAO & ACAO	TBD	
C. 2	**STATE LETTERS ONLINE MONITORING TOOL (SLOMT)** That, in order to support States in the process of follow-up and effective provision of replies to the ICAO MID Office State Letters: a) ICAO to develop a State Letter Online Monitoring Tool (SLOMT); and b) States to designate Focal Points to support the design, development, testing and implementation of the SLOMT.	Low level of reporting to the Sate Letters	Develop a State Letter Online Monitoring Tool (SLOMT)	ICAO States	TBD Jun. 2019	**Actioned**
D. 3	**NEAR MID AIR COLLISION (NMAC) ACTION GROUP** That, the NMAC Action Group be: a) established to carry out further analyses of the reported MAC incidents and provide feedback to the ATM SG and ASRT; and b) composed of members designated by Bahrain, Iran, Oman, Saudi Arabia, UAE, IATA and ICAO.	To maintain safe separation between aircraft and reduce the number of NMAC incidents	NMAC Action Group	MIDANPIRG/17 & RASG-MID/7	Apr. 2019	**Actioned**

No.	CONCLUSIONS AND DECISIONS	CONCERNS/ CHALLENGES (RATIONALE)	DELIVERABLE/ TO BE INITIATED BY		TARGET DATE	STATUS/REMARKS
C. 4	**WORKSHOP ON TEAM RESOURCE MANAGEMENT (TRM) FOR ATM** That: a) a Team Resource Management (TRM) Workshop for ATM be organized jointly by ACAO and ICAO, with support from Qatar; and b) States be encouraged to participate actively in this Workshop.	Enhance effective Team Resource Management	TRM Workshop	ACAO, ICAO & Qatar	TBD	**Ongoing**

ICAO

SAFETY

MID Region Annual Safety Report



Eighth Edition March 2020

Reference Period (2014 - 2018)

Regional Aviation Safety Group – Middle East (RASG-MID)
Eight Edition, March 2020

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Contents

1. Foreword

The Regional Aviation Safety Group-Middle East (RASG-MID) was established in September 2011 to develop an integrated, data driven strategy and implement a work program that supports a regional performance framework for the management of safety.

RASG-MID supports the implementation of the ICAO Global Aviation Safety Plan (GASP) and the achievement of the Safety Targets in the MID Region Safety Strategy. The RASG-MID membership includes representatives from ICAO, MID States, and international organizations.

RASG-MID consists of four main teams; the Annual Safety Report Group (ASRG), the Aerodrome Safety planning and Implementation Group (ASPIG), the Safety Enhancement Initiative Group (SEIG), the Accident and Incident Investigation Group (AIIG), and the Aerodrome (APIG). The Annual Safety Report Group (ASRG) is in charge of collecting and analysing safety information. The Group is also responsible for the identification of the safety focus areas and the production of the RASG-MID Annual Safety Report (ASR).

The RASG-MID Annual Safety Report is a timely, unbiased and transparent source of safety related information essential for all aviation stakeholders interested in having a tool to enable sound decision-making on safety related matters.

2. Executive Summary

Over the last five years, the global scheduled commercial international operations accounted for approximately 37.7 million departures in 2018, compared to 31.9 million departures in 2014. The MID Region showed a stable growth in traffic volumes. Total scheduled commercial departures in 2018 accounted approximately for 1.4 million departures compared to 1.15 million departures in 2014. In terms of aircraft accident, the MID Region had an accident rate of 2.3 accidents per million departures in 2018, which increased compared to 1.45 in 2017. The MID Region accident rate in 2018 is still below the global accident rate which is 2.6 accidents per million departures.

However, the 5-year average accident rate for 2014-2018 is 2.6, which is almost similar to the global average rate (2.58) for the same period. The MID Region had a fatal accident rate of 0.71 accidents per million departures in 2018, which increased compared to the previous year (2017). However, the 5-year average fatal accident rate for 2014-2018 is 0.78, which is above the global average rate (0.45) for the same period. The MID Region had no fatal accident in 2017. However, four fatal accidents occurred in 2014, 2015, 2016, and 2018. The 2014 accident caused 38 fatalities, 224 fatalities were registered in 2015, 1 fatality in 2016, and the year 2018 caused 66 fatalities.

Based on the analyses of all accidents, serious incidents, and incidents data, it is concluded that the Focus Areas for the MID Region are:

1. Loss of Control Inflight- (LOC-I);
2. Runway Safety (RS)- (mainly RE and ARC during landing);
3. Controlled Flight Into Terrain- (CFIT); and

4. Mid Air Collision- (MAC)

Emerging risks have been identified, as follows:

1. Security risks with impact on safety-SEC;
2. Fire/Smoke-non impact- (F-NI);
3. Runway Incursion- (RI);
4. Birdstrike- (BIRD); and
5. Wake Turbulence (Vortex).

The regional average overall Effective Implementation (EI) in the MID Region (13 out of 15 States have been audited) is 75.23 %, which is above the world average 68.53% (as of 25 Sep 2019). Three (3) States are currently below EI 60%.

The EI by Area (e.g. Operations, Airworthiness) shows that all areas are above 60% EI, which reflect the improvement in the oversight capabilities particularly in the area of ANS and AGA. With respect to the Critical Elements (CEs), CE4 (Qualified technical personnel) improved and is above 60% (61.71%) EI, whereas CE8 (resolution of safety issues) is the only one below EI 60% (59. 47%).

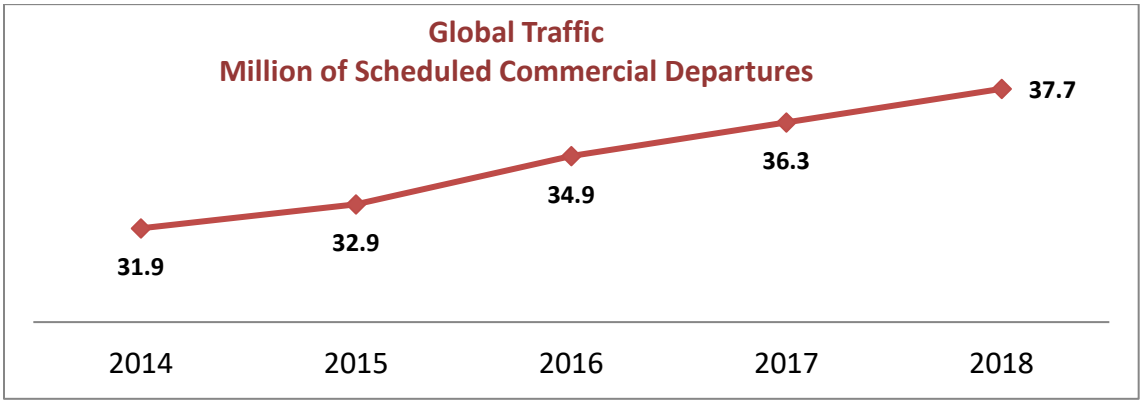
Implementation of SSP is one of the main challenges faced by States in the MID Region. The RASG-MID addresses the improvement of SSP implementation in the MID Region as one of the top Safety Enhancement Initiatives (SEIs). Currently, States in the MID Region could not reach to full implementation of the SSP framework. Common challenges/difficulties have been identified based on the States feedback and recommendations for the way forward were provided in this regard.

Several activities took place to support the implementation of SSP/SMS, including the new ICAO Safety Management Training Programme (SMTP), SSP implementation Workshops, and meetings in order to address the challenges and difficulties, as well as sharing of experiences and best practices.

3. Traffic Volumes

Global Traffic

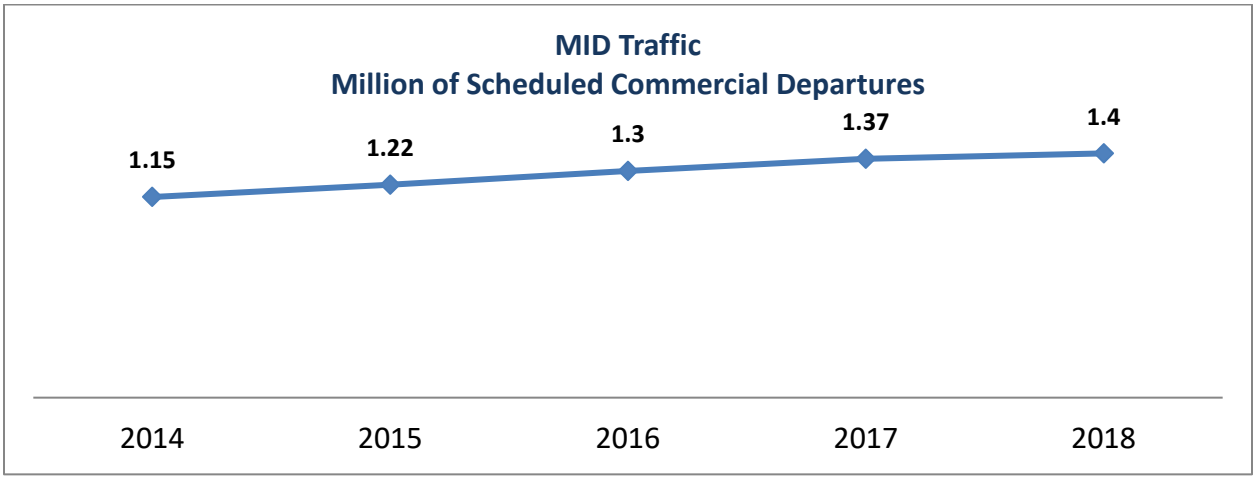
The global scheduled commercial international operations accounted for approximately 37.7 million departures in 2018, compared to 31.9 million departures in 2014.



Graph 1: Global Traffic Volume (Source iSTARSs of 23 Sep 2019)

MID Traffic

The MID Region shows a stable growth in traffic volumes. Total scheduled commercial departures in 2018 accounted approximately for 1.4 million departures compared to 1.15 million departures in 2014.



Graph 2: MID Traffic Growth (Source iSTARSs of 23 Sep 2019)

4. Reactive Safety Information

4.1 Safety Risk Assessment Methodology

In order to facilitate the identification and prioritization of the main Regional Risk Category Focus Areas (FAs), accidents and serious incidents are categorized in terms of frequency and severity. The severity assessment is based on the fatalities, injuries and damage to aircraft, property and equipment. (For Frequency rating: 1 is the most frequent and 6 is the least frequent. For Severity: 1 is the most severe and 4 is the least severe)

The MID ASRT/2 meeting (Cairo, Egypt, 4-5 February 2018) agreed to the following improvements to the methodology used for risk assessment:

a) improvement of the current risk matrix used for the identification of focus areas (four (4) levels of severity instead of three (3)), as follows:

improvement of the current risk matrix used for the identification of focus areas (four (4) levels of severity instead of three (3)), The level of severity is categorized as follows:

1) Catastrophic: multiple deaths; serious damage to aircraft/equipment (destroyed)
2) Major: serious injury/fatalities; major aircraft/equipment damage
3) Minor: little consequences (minor injuries, minor damage to aircraft);

4) No potential damage or injury

Frequency / Severity	1	2	3	4	5	6
1	1	2	3	4	5	6
2	2	4	6	8	10	12
3	3	6	9	12	15	18
4	4	8	12	16	20	24

b) Adoption of the "feared consequences" of the risk portfolio of DGAC France:

The Table below shows that each identified Undesirable event/safety issue is linked to the potential accident outcome.

Nb	Identfication of Undesirable Event	Potential Accident outcome						
		CFIT	LOC-I	MAC	Ground Collision	RE	Damage to aircraft or injury inflight	Damage to aircraft or /injury on ground
UE.1	Unstabilised or non-compliant approach	X	X			X		X
UE.2	Abnormal airplane attitude (Roll, pitch, speed…)		X				X	
UE.3	Events relating to aerodrome conditions (Runway surafce condition and aerological parameters)		X			X	X	X
UE.4	En-route encounter of dangerous weather phenomena (Thunderstorm, turbulence, Icing)		X	#			X	X
UE.5	Misuse of aircraft system (Weight and Balance, speed track, aircraft config)	X	X	X	X	X	X	X
UE.6	Event pertaining to works/maintenance operations on or close to a runway		#		X	X		X
UE.7	Bad coordination/execution of ground operations (deicing, loading, stowing, line maintenance, etc)	X	X		X		X	X
UE.8	Runway/taxiway incursion				X	X		X
UE.9	Loss of separation in flight/ and/or airspace infringement /level bust		X			X	X	X
UE.10	Wildlife hazard, including bird strike		X		X	X	X	
UE.11	Ground-onboard interface failure (Misunderstanding, unsuitability of transmitted information,etc)	X	X	X	X	X	X	X
UE.12	Aircraft maintenance event	X	X		#	X	X	X
UE-13	Fire/Smoke inflight	#	X				X	X
UE-14	Aircraft system failure resulting in flight management disturbance	X	X		#	X	X	X
UE-15	Loss of cabin pressure		X	#			X	
UE-16	Aircraft damage due to FOD		X			X	X	X

4.2 ICAO Data

ICAO's primary indicator of safety in the global air transport sector is the accident rate based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg.

Exposure data is comprised of scheduled commercial operations that involve the transportation of passengers, cargo and mail for remuneration or hire, and is a preliminary estimate solely for the calculation of the accident rates.

ICAO iSTARS (ADREP et al and API Data service.) applications contain an aggregation of different accident and incident data sources including ADREP, Aviation Safety Network and Aviation Herald to provide official ICAO accident statistics used for the development of the ICAO Safety Reports.

Note: *The accident and serious incidents data presented here is the official ICAO accident statistics, used for the development of the ICAO safety reports. The data is based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg (validated or under validation by ICAO).*

The main part of this Section provides analysis of the accidents that occurred in the MID Region (State of Occurrence) for the period (2014-2018), which is used for monitoring the progress of achieving the Safety Targets in the MID Region Safety Strategy.

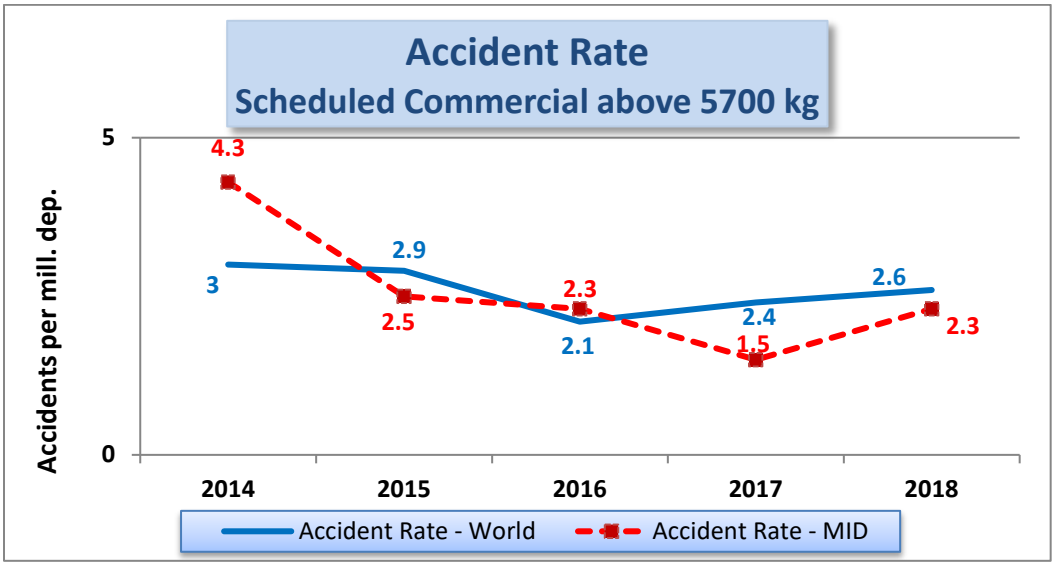
In addition, it provides data analysis regarding accidents and serious incidents of aircraft registered in the MID Region (State of Registry) as well as for the MID air operators (State of the Operator) using the same criteria mentioned above. It is to be highlighted that the State of registry and State of operator Section focuses mainly on counts and percent distribution (no rates).

4.2.1 MID State of Occurrence

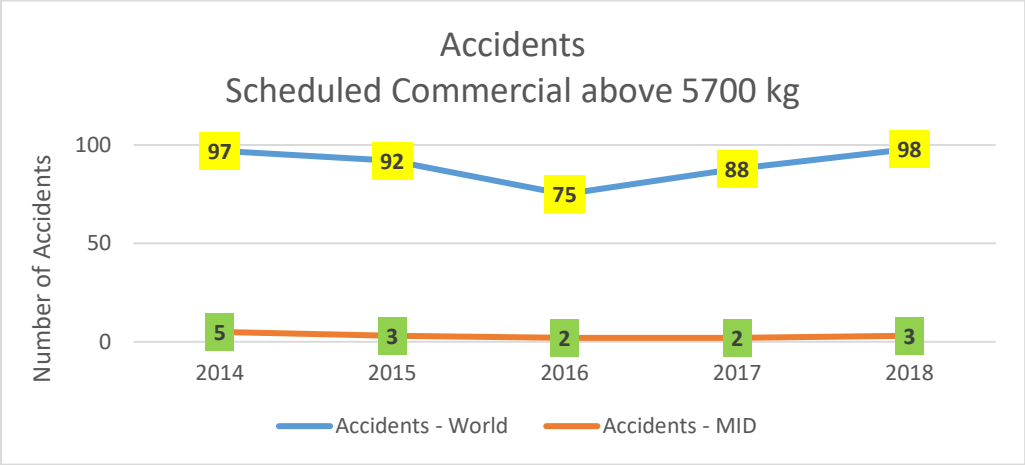
Accidents Rates and Fatalities

The Graph 3 shows that the MID Region had an accident rate of 2.3 accidents per million departures in 2018, which increased compared to the previous year (2017). However, the 5-year average accident rate for 2014-2018 is 2.6, which is almost similar to the global average rate (2.58) for the same period.

The Graph 4 shows that 15 accidents occurred in the MID Region during the period (2014-2018), whereas (450) accidents occurred globally.

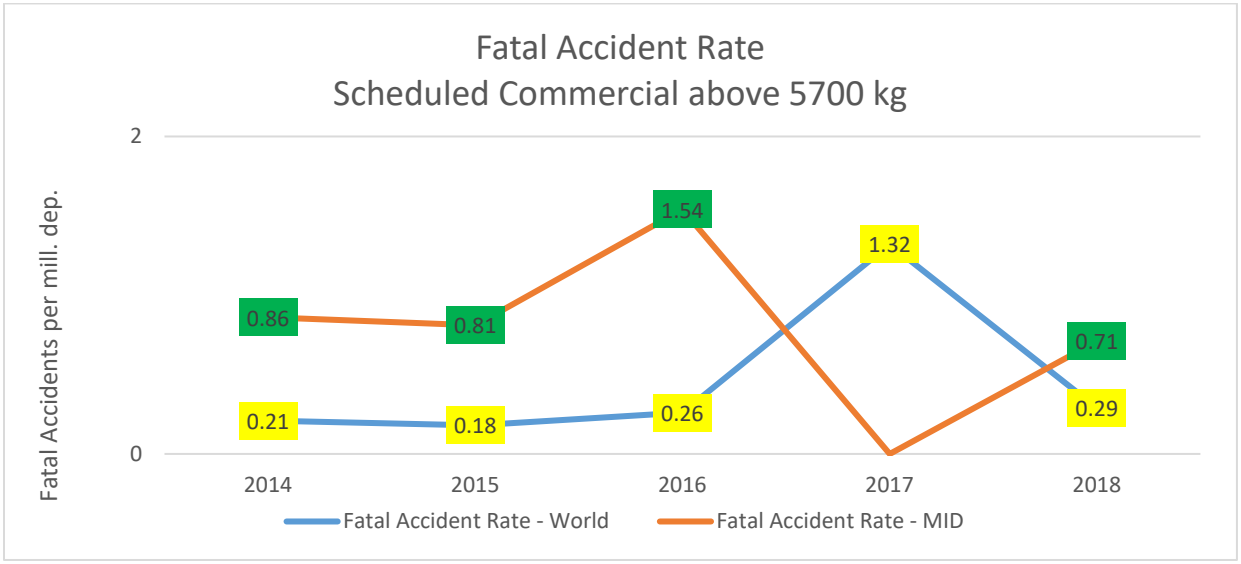


Graph 3: Global Accident Rate Vs MID Accident Rate (Source iSATRS as of 24 Sep 2019)

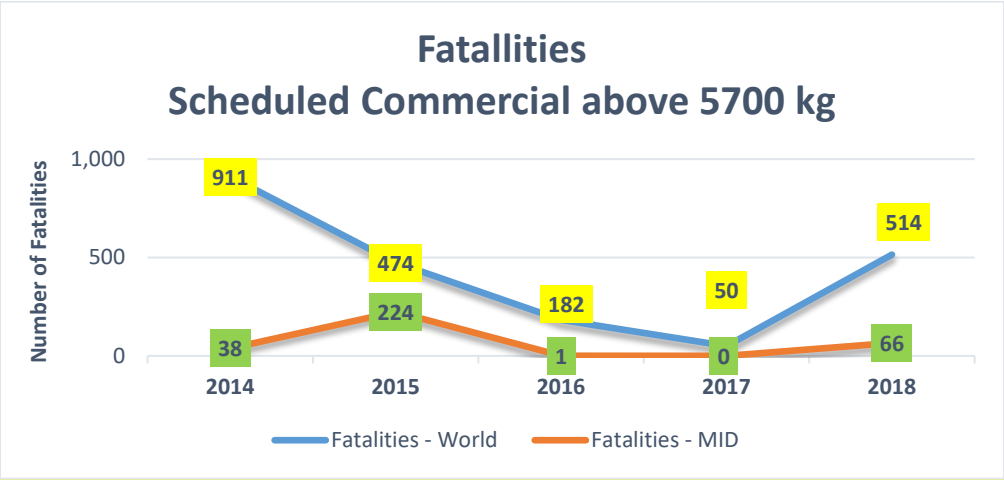


Graph 4: Number of MID Accidents Vs. Number of Global Accidents Per Year (Source: iSTARS as of 24 sep 2019)

The Graph 5 shows that the MID Region had a fatal accident rate of 0.71 accidents per million departures in 2018, which increased compared to the previous year (2017). However, the 5-year average fatal accident rate for 2014-2018 is 0.78, which is above the global average rate (0.45) for the same period. The MID Region had no fatal accidents in 2017. However, four fatal accidents occurred in 2014, 2015, 2016, and 2018. The 2014 accident caused 38 fatalities, 224 fatalities were registered in 2015, 1 fatality in 2016, and the year 2018 caused 66 fatalities as shown in Graph 6.

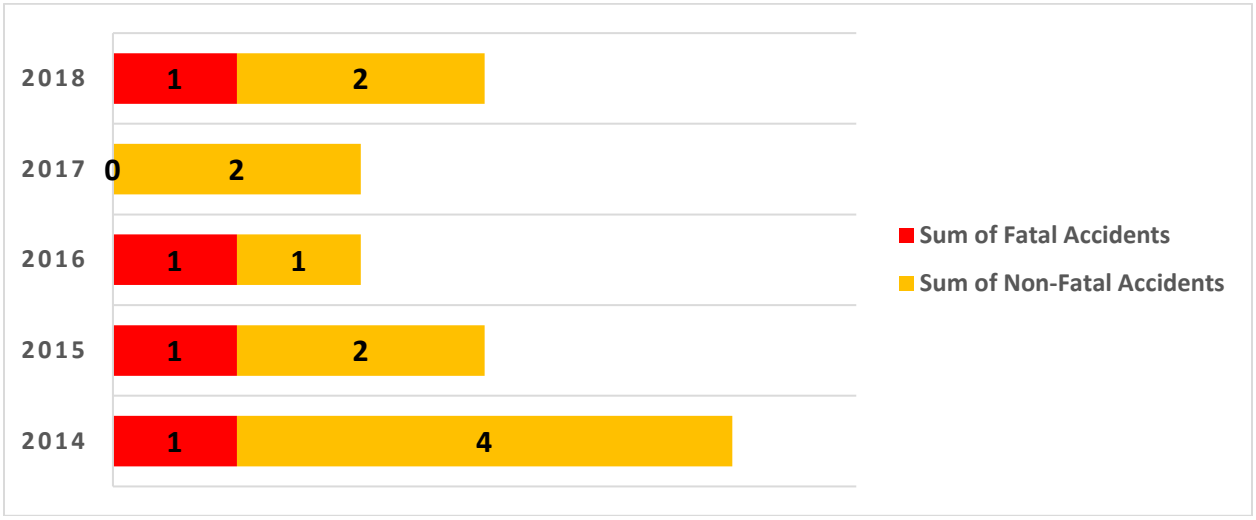


Graph 5: Global Fatal Accident Rate Vs MID Fatal Accident Rate (Source: iSTARS as of 24 Sep 2019)



Graph 6: Number of MID Fatalities Vs. Global Fatalities (Source: iSTARS as of 24 Sep 2019)

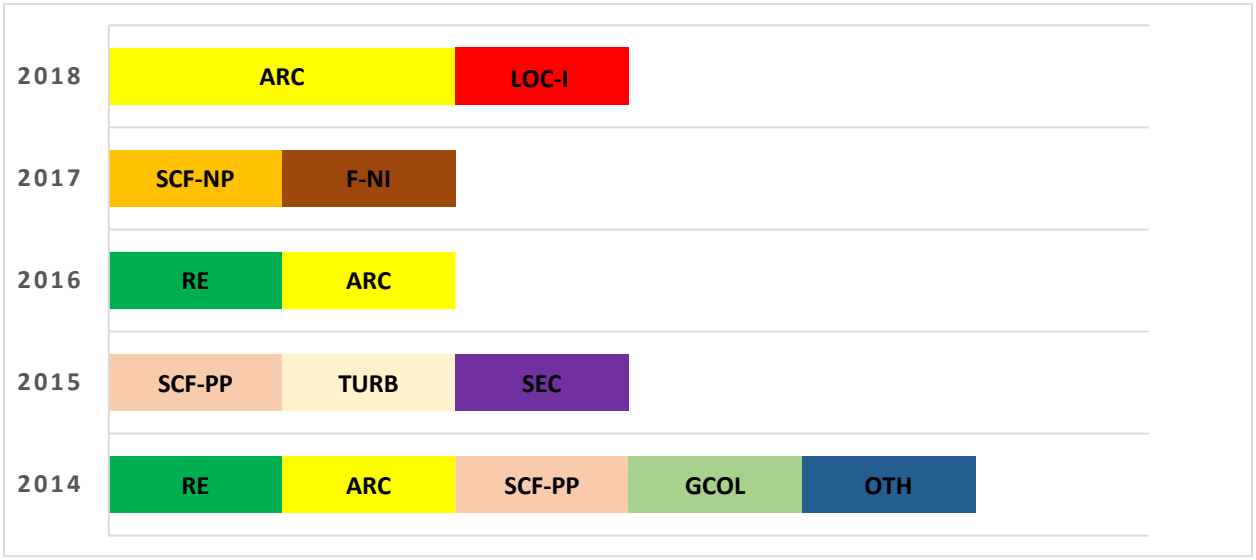
The Graph 7 shows that 15 accidents occurred during the period of 2014-2018 and no fatal accident occurred during the year of 2017. Four fatal accidents occurred respectively during 2014, 2015, 2016, and 2018.



Graph 7: Number of Fatal Accidents Vs Non-Fatal Accidents Per Year (2014-2018) (Source: iSTARS as of 24 Sep 2019)

Occurrence Category

The Graph 8 indicates that during the period (2014-2018), the CFIT accidents has not been reported. However, the Loss of control-inflight (LOC-I), the engine failure/malfunction (SCF-PP), Non-Power plant (SCF-NP), runway excursion (RE), abnormal runway contact (ARC), and security (SEC) events represent the main areas of concern.

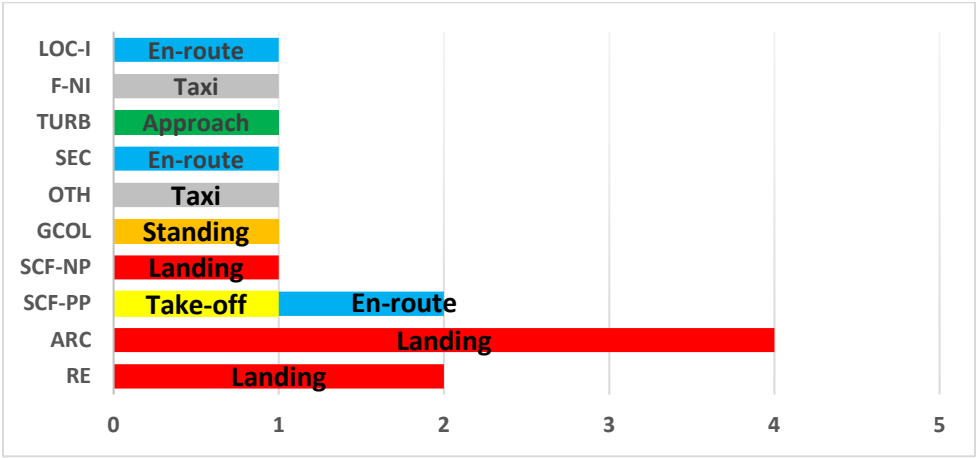


Graph 8: Distribution of Occurrence Category Per Year (2014-2018) (Source: iSTARS as of 24 Sep 2019)

Phase of Flight

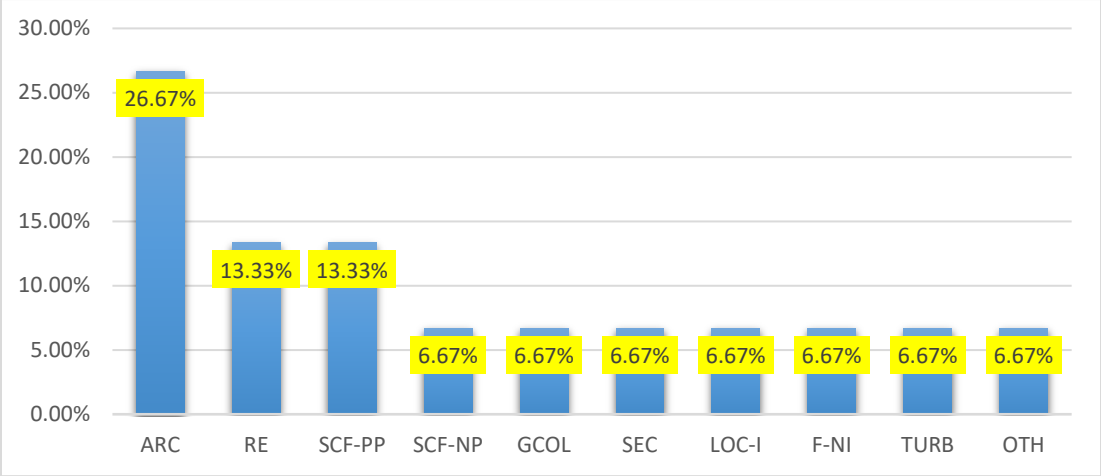
The Graph 9 shows that the majority of accidents occurred during landing phase of flight.

The majority of Abnormal Runway Contact (ARC) and Runway Excursion (RE) events took place during landing flight phase. However, one abnormal runway contact accident took place during landing (Go-around) flight phase. The engine failure/malfunction events occurred during take-off and En-route flight phases. The Loss of Control-Inflight (LOC-I) occurred during En-route flight phase.



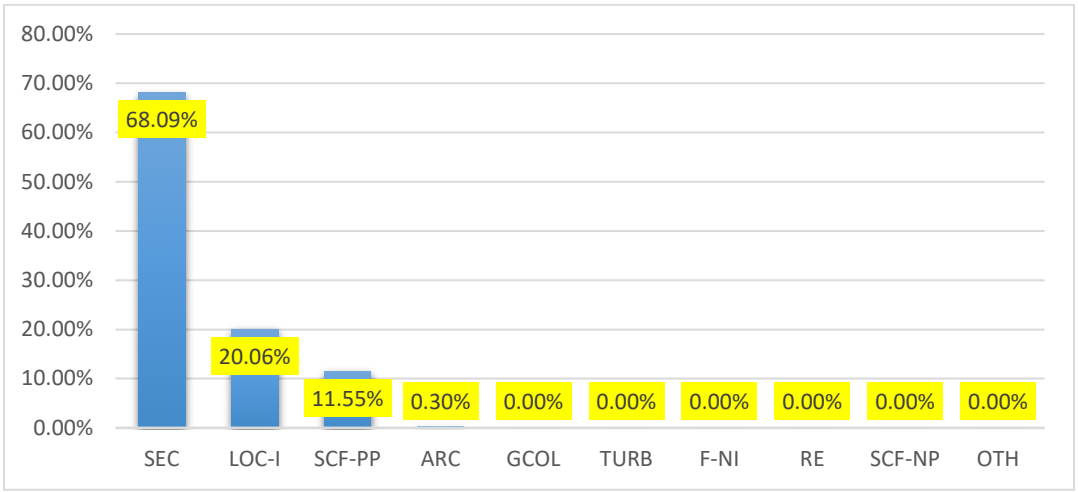
Graph 9: Distribution of Occurrence Category Per Phase of Flight (2014-2018) (Source: iSTARS as of 24 Sep 2019)

The Graph 10 shows that most of the accidents categories experienced during the 2014-2018 were the abnormal runway contact (ARC) and Runway Excursion (RE), followed by system component failures.



Graph 10: Occurrence Category Distribution as Percentage Per Accident (Source: iSTARS as of 24 Sep 2019)

The Graph 11 shows that the fatalities for the period 2014-2018 were mainly associated to the following Occurrence Categories: Security (SEC), Loss of Control-Inflight (LOC-I), and engine failure/malfunction (SCF-PP).



Graph 11: Fatalities Distribution as Percentage by Occurrence Category (2014-2018) (Source: Istars as of 24 Sep 2019)

Taking a more in-depth look at the fatal accidents and accidents for the MID Region (State of occurrence) for the period 2014-2018, the following observations are made:

a) In terms of fatality, the top three fatal accidents categories in the MID Region are:

1. Security – SEC;
2. Loss of control-Inflight- (LOC-I); and
3. System Component Failure- Power Plant - (SCF-PP)

b) In terms of frequency, the most frequent accidents categories in the MID Region (State of occurrence) are:

1. Runway Safety (RS) – including (RE, ARC, and GCOL);
2. System Component Failure – Power Plant (SCF-PP);
3. System Component Failure– Non-Power Plant (SCF-NP);
4. Fire/Smoke (F-NI); and
5. Turbulence Encounter (TURB)

Identification of the main Risk Areas based on the analysis of accident data related to the State of Occurrence (2014-2018)

To facilitate the identification of the safety priority areas; the safety risk assessment methodology is applied. Applying the "feared consequences" of the risk portfolio of DGAC France, the system component failure- Power Plant fatal accident has led to the potential outcome of Loss of control inflight (LOC-I), consequently, the SCF-PP was considered under the risk of loss of control-inflight. In addition, two fatal accidents had led to the LOC-I.

Main Risk Area	Frequency	Severity	Risk Level
Loss of Control-Inflight (LOC-I)	2	1	2
Runway Safety (RS)	1	3	3
Security (SEC)	3	1	3

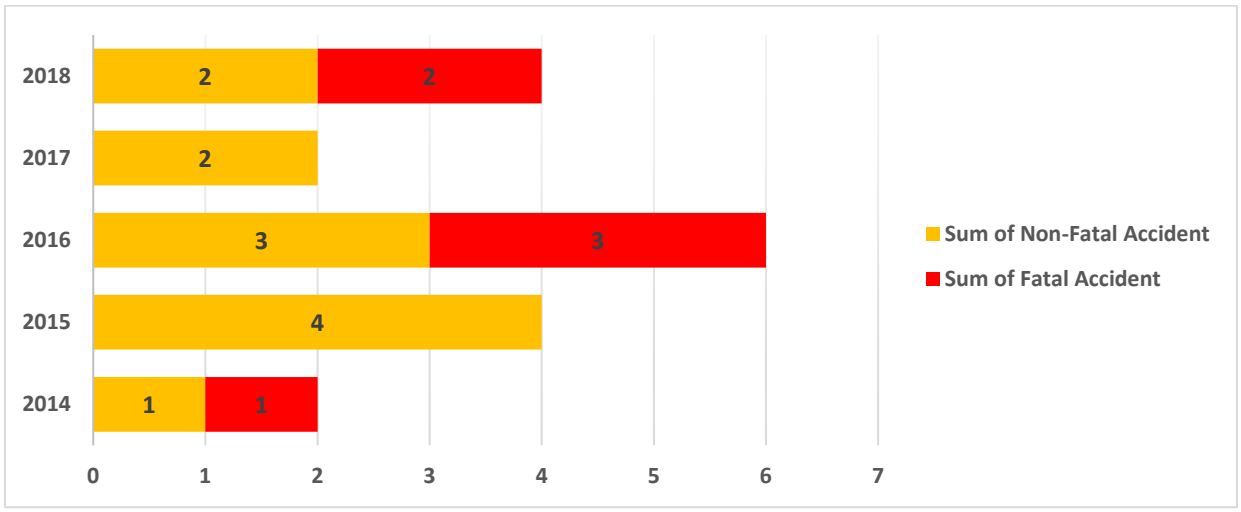
Therefore, the safety risk areas according to the State of occurrence's accidents data are

a) Loss Of Control -Inflight – (LOC-I);
b) Runway Safety (RS): Runway Excursion (RE) and Abnormal Runway Contact (ARC) during landing; and
c) Security related-(SEC).

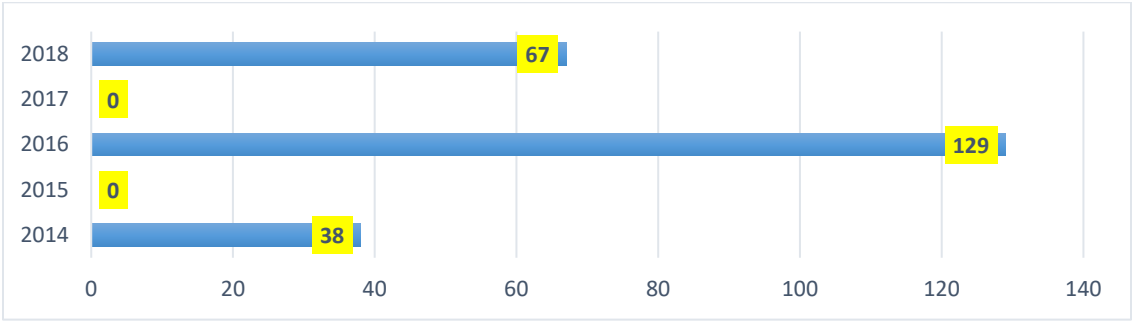
4.2.2 MID State of Registry and Operator

Accident Data Analysis

The Graph 12 shows the change in the number of Fatal Accidents and non-Fatal Accidents over the last five years involving MID State of registry and State of operator airplanes. The Graph 12 also indicates that two fatal accidents were recorded during 2018, which indicated an increased number of fatal accidents in 2018 compared to the previous years. Three fatal accidents occurred in 2016 involving MID Operators and one in the year of 2014. In terms of fatalities, the Graph 13 shows that the four fatal accidents, which occurred in 2014 and 2016, resulted in 234 fatalities.



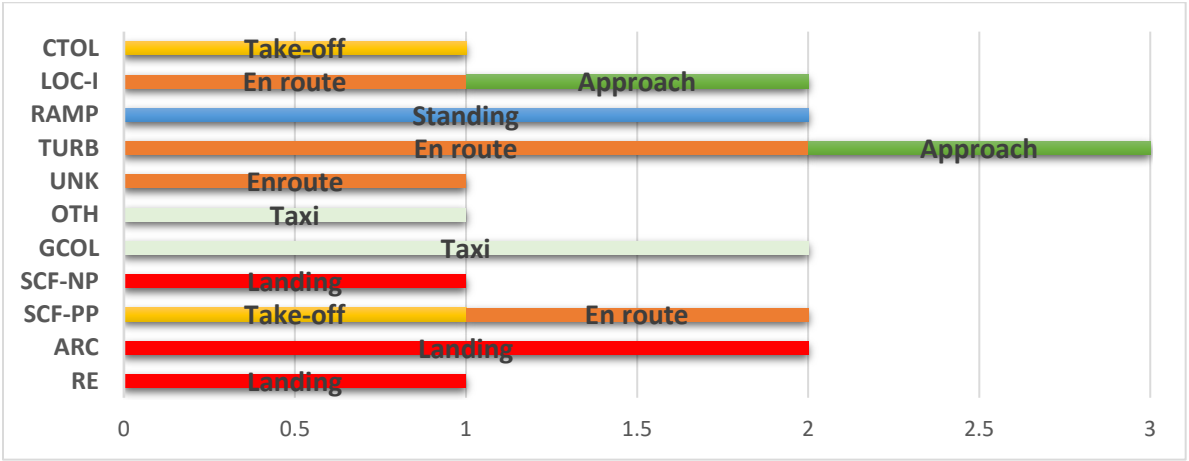
Graph 12: Number of Fatal and Non-Fatal Accidents per Year (2014-2018) (Source: iSTARS as of 24 Sep 2019)



Graph 13: Number of Fatalities per Year (2014-2018) (Source: iSTARS as of 24 Sep 2019)

Phase of Flight

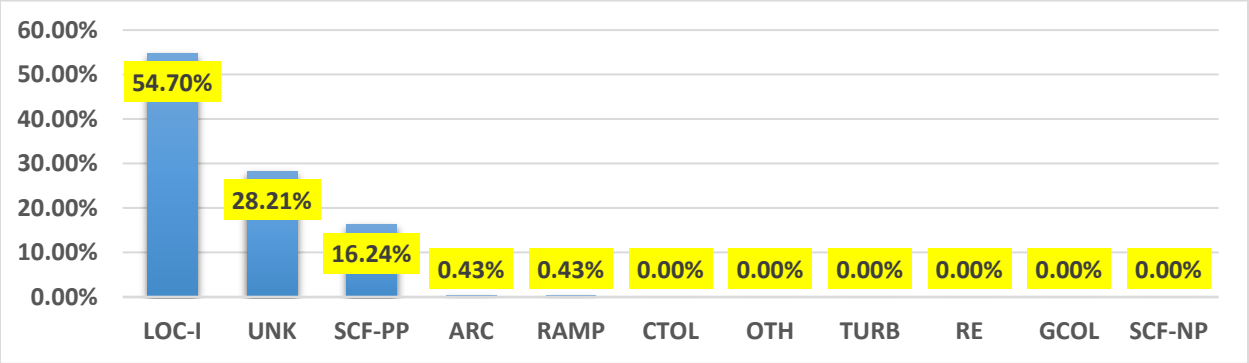
The Graph 14 shows that the majority of accidents related to Runway Excursion (RE), Abnormal Runway Contact (ARC), and system component failure- Non-power plant (SCF-NP) occurrence categories took place during landing flight phase. It was also noted that the engine failure/malfunction-related accident occurred during take-off (initial climb) and en-route phases of flight. Regarding, Loss of Control Inflight (LOC-I), it took place during en-route and approach (Go-around) flight phase.



Graph 14: Distribution of the Number of Accidents Category per Phase of Flight (2014-2018) (Source: iSTARS as of 24 Sep 2019)

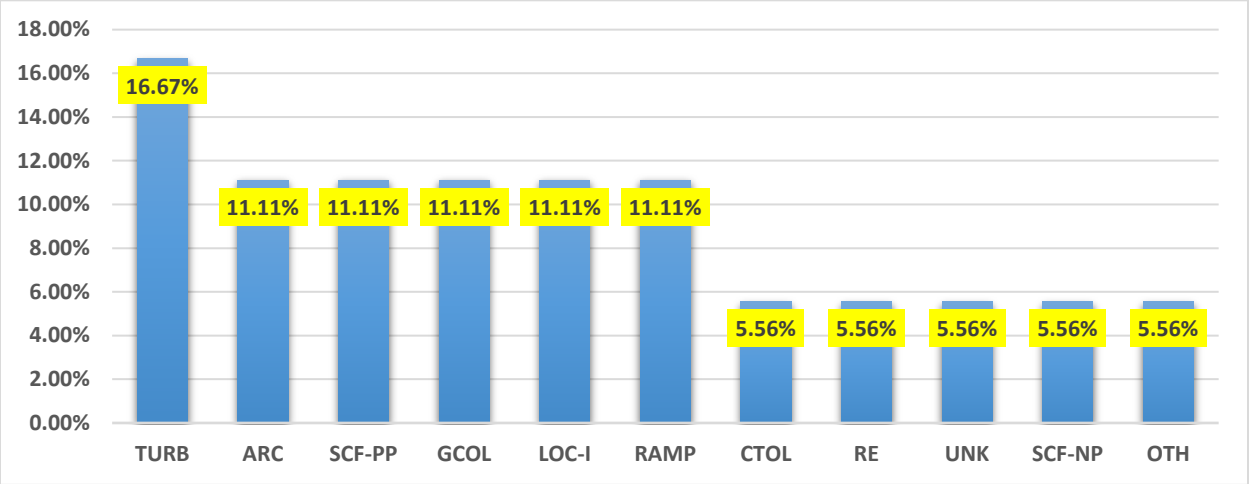
Occurrence Category

The Graph 15 shows the percentage of fatalities associated with the accident Categories for the period 2014-2018: Loss of Control in flight (LOC-I), Unknown (UNK), engine failure/malfunction (SCF-PP), Abnormal Runway Contact (ARC) and RAMP.



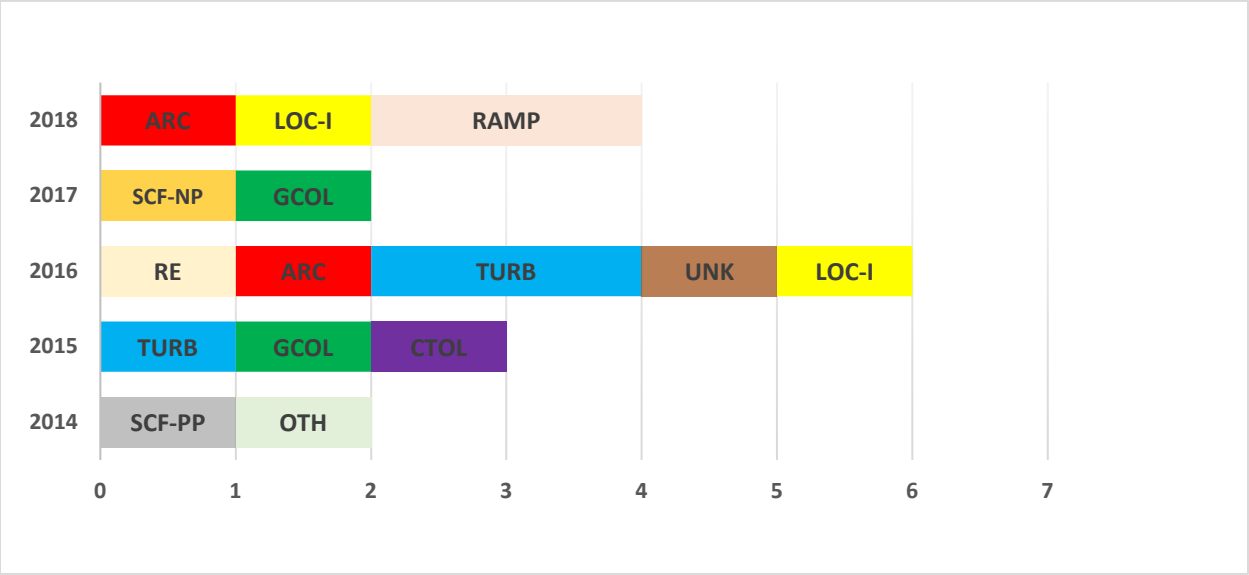
Graph 15: Fatalities Distribution as Percentage by Occurrence Category (2014-2018) (Source: iSTARS as of 24 Sep 2019)

The Graph 16 shows that most of the accidents categories experienced during the period 2014 – 2018 was Turbulence (TURB), followed by ARC, SCF-PP, LOC-I, GCOL and RAMP. However, considering that RE, GCOL, RAMP, CTOL and ARC are all considered part of the Runway Safety (RS) Risk Category, RS is still the most frequent. Two LOC-I occurrence had resulted in fatalities. Regarding "Unknown" occurrence category, the causal factors of the accident are still under investigation and thus the occurrence category could not be defined at this stage.



Graph 16: Accident Distribution as Percentage per Occurrence Category (2014-2018) (Source: iSTARS as of 24 Sep 2019)

During 2014-2018, no CFIT accident occurred. However, two LOC-I accidents had taken place during the period of 2016 and 2018. Engine failure/malfunction (SCF-PP), Runway Excursion (RE), Abnormal Runway Contact (ARC), and Turbulence (TURB) events were registered and are still prevailing.



Graph 17: Accident Category Distribution per Year (Source: iSTARS as of 24 Sep 2019)

Taking a more in-depth look at the fatal and non-fatal accidents for the MID Region (State of registry and State of operator) for the period 2014-2018, the following is to be highlighted:

a) In terms of fatality, the fatal accidents categories in the MID Region for the period 2014 – 2018 are:

1. Loss Of Control- In-flight (LOC-I);
2. Unknown (UNK);
3. System Component Failure – Power Plant (SCF-PP); and
4. Runway Safety – Abnormal Runway Contact (ARC).

b) In terms of frequency, the most frequent accidents categories in the MID Region (State of registry and State of occurrence) for the period 2014 – 2018 are:

1. Runway Safety (RS) – (RE, ARC, GCOL, RAMP, and CTOL);
2. Turbulence encounter – (TURB);
3. System Component Failure-Power Plant (SCF-PP); and
4. System Component Failure- non-power plan (SCF-NP).

Identification of the main Risk Areas based on the analysis of safety data related to the State of registry and State of operator (2014-2018)

To facilitate the identification of the safety priority areas; the safety risk assessment methodology is applied. Applying of the "feared consequences" of the risk portfolio of DGAC France, the system component failure- Power Plant fatal accident has led to the potential outcome of Loss of control inflight,

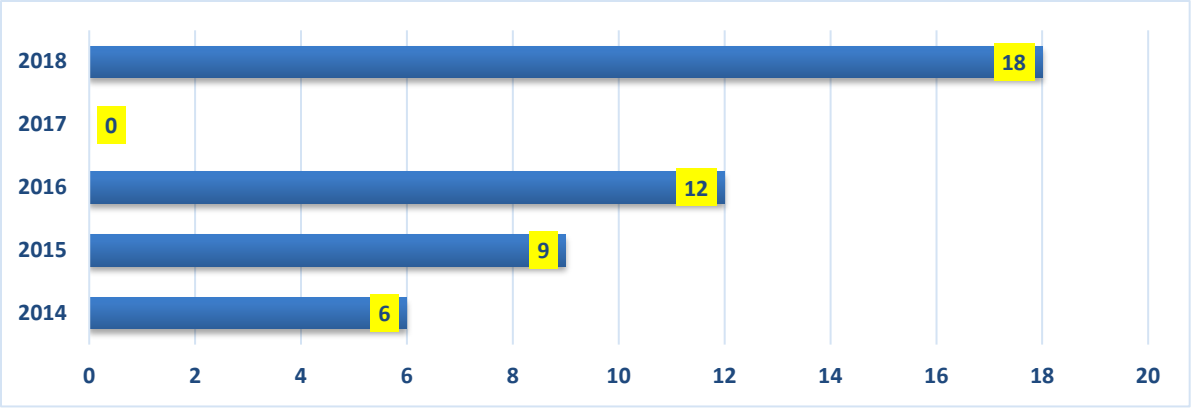
consequently, the SCF-PP was considered under the risk of loss of control-inflight. Therefore, the safety risk areas according to the State of registry and operator accidents data are:

Main Risk Area	Frequency	Severity	Risk Level
Loss of Control-Inflight (LOC-I)	2	1	2
Runway Safety (RS)	1	3	3
Turbulence (TURB)	2	5	10
System Component Failure- non power plan (SCF-NP)	4	4	16

a) Runway Safety (RS): Runway Excursion (RE) and Abnormal Runway Contact (ARC) during landing; and
b) Loss of Control-Inflight (LOC-I).

Serious Incidents Data Analysis

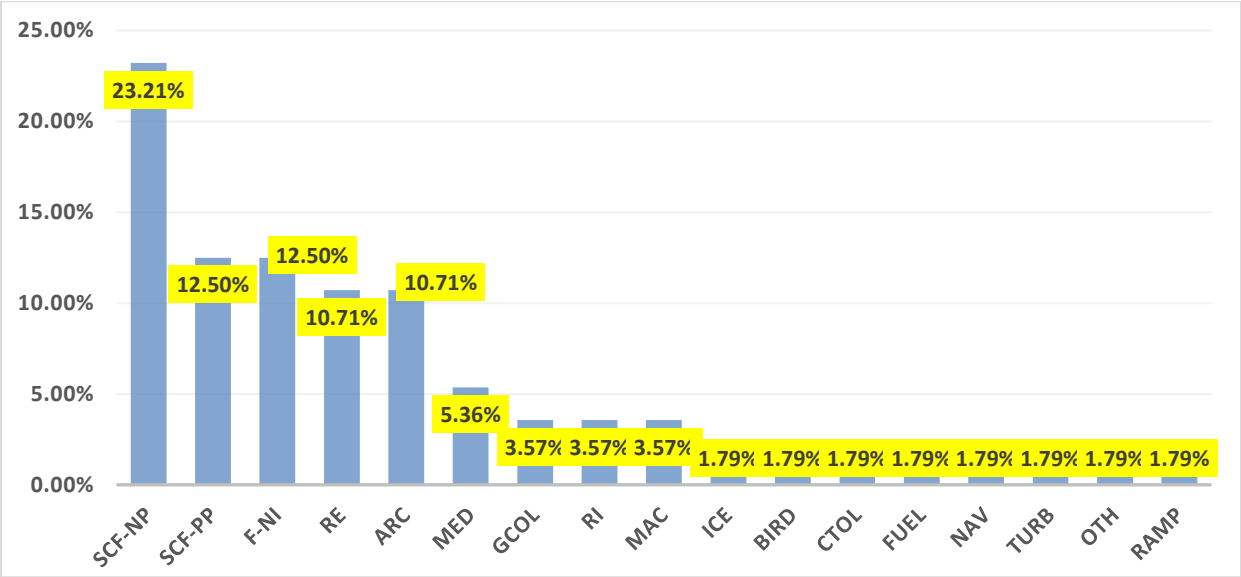
The Graph 18 shows that there were no reported serious incidents during the year of 2017 compared to the previous years.



Graph 18: Number of Serious Incidents per Year (2014-2018)

Occurrence Category

The Graph 19 shows that most of the serious incident categories experienced during the period 2014 - 2018 were the system component failures (PP and NP combined), followed by the fire/smoke; Runway Excursion and abnormal runway Contact categories. The near midair collision events have been recorded, but took place outside the MID Region airspace.



Graph 19: Serious Incidents Distribution as Percentage per Occurrence Category (2014-2018)

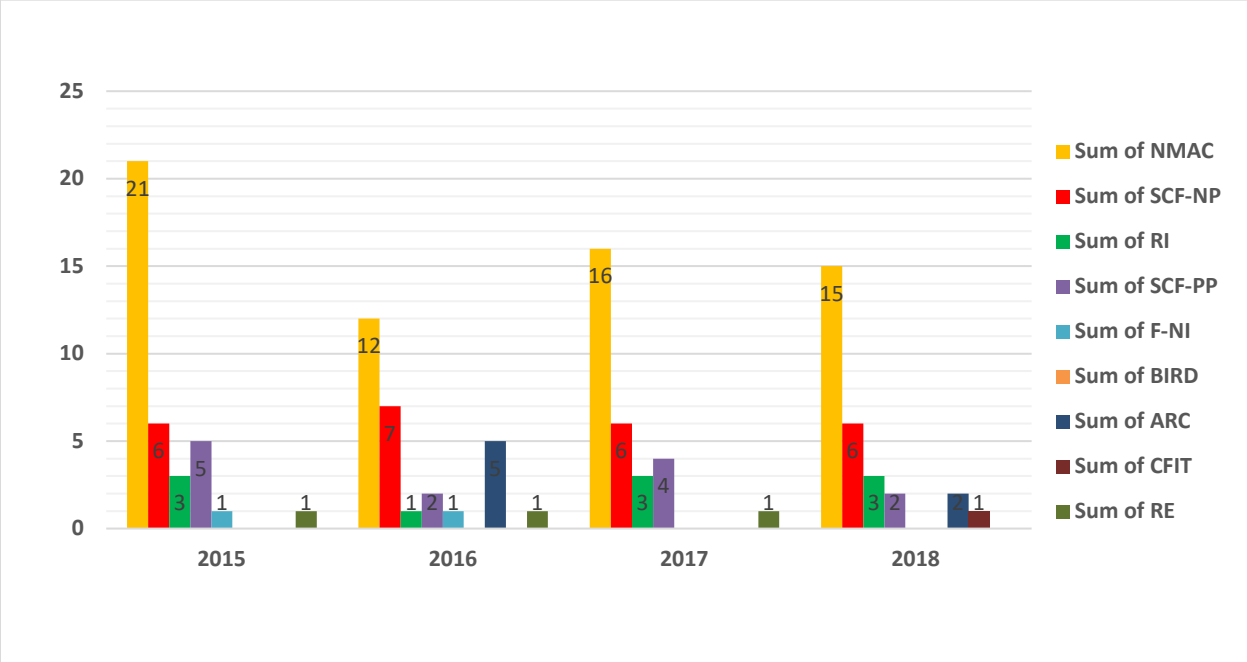
Taking a more in-depth look at the serious incidents for the MID Region (State of registry and State of operator) for the period 2014-2018, the following is to be highlighted:

a) In terms of frequency, the most frequent serious incidents categories in the MID Region are:

1. Runway Safety (RS) – (RE, ARC, GCOL, RAMP, CTOL, BIRD, RI);
2. System Component Failure (SCF)- (SCF-PP and SCF-NP);
3. Fire/smoke- (FN-I);
4. Medical (MED);
5. Near Mid Air Collision (NMAC);
6. Turbulence (TURB);
7. Fuel; and
8. ICE.

Total number of serious incidents provided by the MID States for the period 2015-2018.

The data shows that there was a significant increase on the number of NMAC Occurrences. The number of serious incidents data shared by the MID States have been considered and included in the analysis to shed light and identify the potential safety concerns in the MID region. However further data analysis should be provided by the MID States for an in-depth analysis.



Graph 20: Number of Serious Incidents Distribution Per Year (2015-2018)

Taking a more in-depth look at the serious incidents reported by the MID Region for the period 2015-2018, the following is to be highlighted:

b) In terms of frequency, the most frequent serious incidents categories in the MID Region are:

1. Near Mid Air Collision (NMAC);
2. System Component Failure (SCF)- (SCF-NP); and
3. Runway incursion- (RI)

4.2.3 ICAO In-depth Analysis of Accidents

A. Runway Excursions and Abnormal Runway Contact: During 2014-2018, Runway Excursions and abnormal runway contact accidents and serious incidents mainly occurred in the landing phase of flight and counted for approximately 1% of fatality. This focus area covers the risk of runway excursions, including the direct precursors such as hard landings, high speed landing, landings following an un-stabilized approach. The MID Region continued improvement in runway safety, which is one of the industry's principal risk areas.

Root Cause Analysis

Latent Conditions:

i. Ineffective safety management system
ii. Incomplete/inefficient operator SOP
iii. Deficient flight crew training
iv. Regulatory oversight

Threat:

i. Decision to make a landing on short runway with tailwind.
ii. Poor judgment and continued landing after an un-stabilized approach
iii. Improper calculating of landing speed without focusing on the tailwind component
iv. Technical failures Pilot information
v. Ineffective reporting of runway surface condition/Contaminated runways
vi. Airport facilities including poor runway paintings/markings/signage lighting
vii. Meteorology

Errors:

i. Timely crew decisions (very low-level go-arounds)
ii. Failed to go around after un-stabilized approach
iii. SOP Manual not updated and maximum tailwind not mentioned
iv. Manual handling/flight controls
v. Contaminated runways

Contributing factors:

i. Anti-skid failures of landing gear causing prolong landing distance.
ii. Instantaneous variable wind condition on aerodrome traffic pattern.
iii. Late activation of airbrakes and spoilers (especially airbrakes) with tailwind cause to increase the landing roll distance.

Some of the Precursors, which could Lead to Runway Excursion

1. Precursors for aircraft overrunning the end of the runway on landing (landing overrun)
   Precursors could include: Long landing / high across threshold / extended flare / floating, incorrect performance calculation, ineffective use of stopping devices / time to apply reverse thrust or braking / inappropriate use of auto brake setting, weather related / runway condition / aquaplaning, unsterilized approach, tailwind landing.

2. Precursors for aircraft veering off the side of the runway during landing (landing veer-off)
   Precursors could include: Crosswind and wet /contaminated runway, hard landing / inappropriate use of stopping devices / asymmetric braking or reverse thrust, inappropriate use of nose wheel steering.

B. SCF-PP: Engine Failure or malfunction of an aircraft system or component. The engine failure/malfunction contributed to the accidents and serious incidents and counted for 16% of fatalities. The majority of SCF-PP accidents and serious incidents between 2014 and 2018 occurred mainly during take-off and en-route phase of flight, with one fatal accident involving turboprop aircraft.

Root Cause Analysis

1. Latent Conditions:
   i. Regulatory oversight
   ii. Deficient maintenance standard operating procedures
   iii. Ineffective safety management system
   iv. Insufficient resource availability
   v. Deficiencies in the evaluation to monitor changes

2. Threats:
    i. Improper Airworthiness Directive implementation and Control
    ii. Poor maintenance and errors related to aircraft dispatch or release
    iii. Lack of information sharing and support from the State of manufacturer
    iv. Embargo on aircraft equipment/Spare parts acquisition
    v. Incorrect or incomplete aircraft performance limitations verification
    vi. Errors related to the Aircraft Flight Maintenance adherence
    vii. Extensive/uncontained engine failure
    viii. Incorrect/Unclear aircraft maintenance manual

3. Errors:
    i. Crew inadequate aircraft handling
    ii. Crew SOP Adherence / SOP Cross-verification
    iii. Improper weight and balance calculations

4. Contributory Factors
    i. CAMOs' and AMO organization's responsibilities and communication issue
    ii. Non-compliance with the regulator operational requirements
    iii. Ineffective monitoring in operators line maintenance
    iv. Inadequate monitoring in operations, training and technical divisions

C. Loss of Control-Inflight: During 2014-2018 Aircraft upset or loss of control only contributed to one accidents but counted for around 55% of fatalities. During the years 2016 and 2018, the LOC-I occurred during go around (GOA) and en-route phases of flight.

Root Cause Types

The below root-cause analysis is based mainly on industry's analysis of the LOC-I accidents:

1. Latent Conditions:

    i. Inadequate safety management system including the use of the FDM data
    ii. Regulatory oversight
    iii. Incomplete/Inefficient Flight operations

2. Threats:

    i. Inappropriate Flight Crew Automation training
    ii. Type-rating related issues on complex and highly automated aircraft
    iii. Contained engine/power plant malfunction
    iv. Severe turbulence, Thunderstorms, wind shear/Gusty wind
    v. Poor visibility/IMC conditions
    vi. Spatial disorientation/Somatogravic illusion
    vii. Flt Crew misdiagnose the problem leading to the application of an incorrect recovery procedure
    viii. Lack of exposure to the required maneuvers during normal line flying operations
    ix. Limitations in simulator fidelity could lead to pilots not having the manual flying skills required to recover from some loss of control scenarios.

3. Errors:

   i. Inappropriate/Incorrect use of Automation by flight crew
   ii. Inadequate flight crew monitoring skills/awareness or communication
   iii. Flt Crew mishandling of manual flight path and/or speed control
   iv. Abnormal checklist
   v. Incorrect recovery technique by flight crew when their aircraft has become fully stalled

4. Contributory Factors:

   i. Unnecessary weather penetration
   ii. Operation outside aircraft limitations
   iii. Unstable approach
   iv. Vertical/lateral speed deviation

5. Direct Precursors to a Loss of Control Event:

   i. Deviation from flight path
   ii. Abnormal airspeed or triggering of stall protections

4.3 MID Region Safety Performance - Safety Indicators-Reactive

		Average 2014-2018		2018	
Safety Indicator	Safety Target	MID	Global	MID	Global
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**	2.58	2.6	2.3	2.6
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**	0.78	0.45	0.71	0.29
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**	0.82	1.23	0	1.24
	Reduce/Maintain the Runway Safety related accidents to be less than 1 accident per million departures by **2016**	1.54			
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**.	0.14	0.08	0.7	0.13
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**.	0	0.01	0	0.02

5. Proactive Safety Information

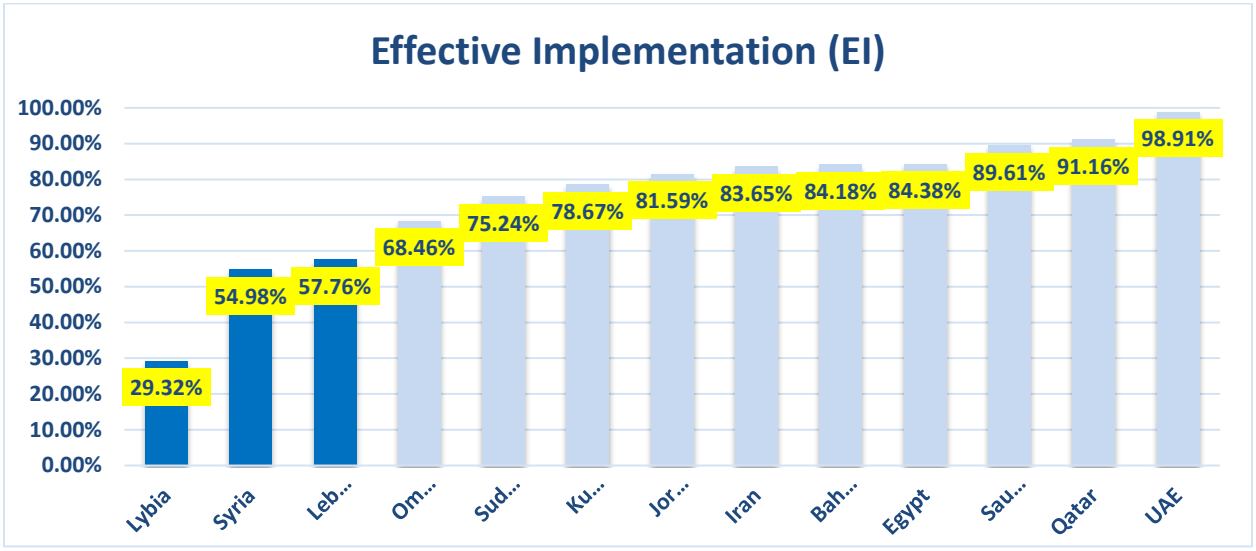
A mature safety management system requires the integration of reactive, proactive and predictive safety data. This section of the Annual Safety Report focuses on proactive safety data analysis to identify additional focus areas that form the basis for the development of SEIs and DIPs for Emerging Risks under RASG-MID.

5.1 ICAO USOAP-CMA

The regional average overall Effective Implementation (EI) in the MID Region (13 out of 15 States have been audited) is 75.23 %, which is above the world average 68.53% (as of 25 Sep 2019). Three (3) States are currently below EI 60%.

Currently, 77% of the audited States achieved the target of 60% EI, as suggested by the Global Aviation Safety Plan (GASP) and the MID Region Safety Strategy.

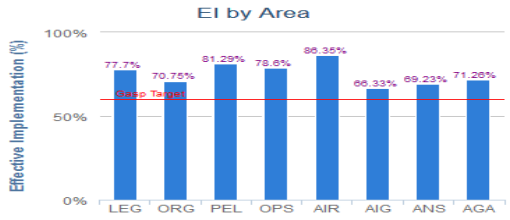
Effective Implementation (EI)



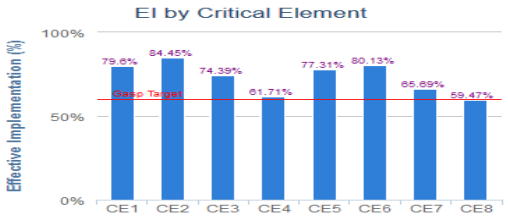
Source: ICAO USOAP CMA On Line Framework (OLF), as of 25 Sep 2019

The EI by Area (e.g. Operations, Airworthiness) shows that all areas are above 60% EI, which reflect the improvement in the oversight capabilities particularly in the area of ANS and AGA. With respect to the Critical Elements (CEs), CE4 (Qualified technical personnel) improved and is above 60% (61.71%) EI, whereas CE8 (resolution of safety issues) is the only one below EI 60% (59. 47%) EI.

EI by Area



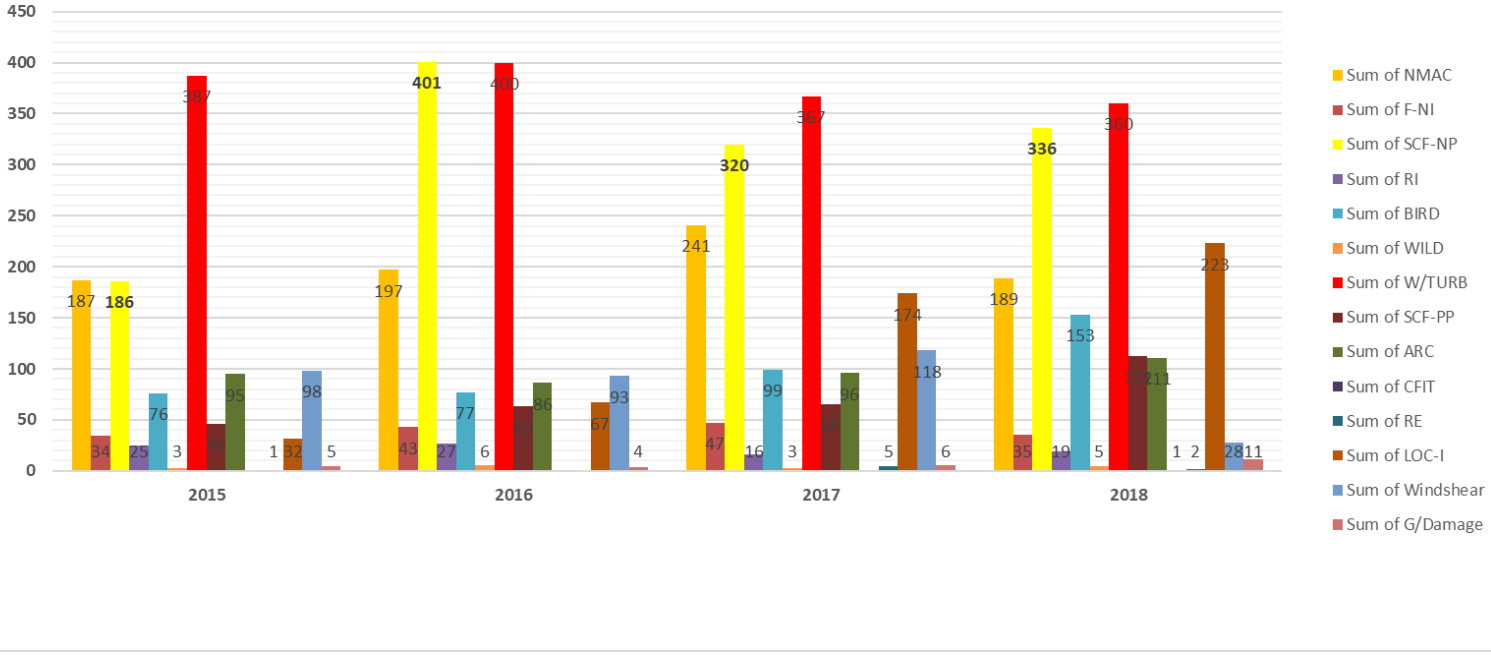
EI by Critical Element



Source: ICAO iSTARS, as of 25 Sep 2019

Incident data provided by the MID States for the period (2015-2018)

The graph below shows that the number of Wake Turbulence incidents reported is the highest one, followed by system component system-non-power plant and airborne conflict incidents (near midair collision). For an in-depth analysis and to identify the underlying safety issues, MID States should provide further data analysis in order to come out with strategic initiatives and mitigations. In addition, the year of 2018 showed an increase in incidents reporting.

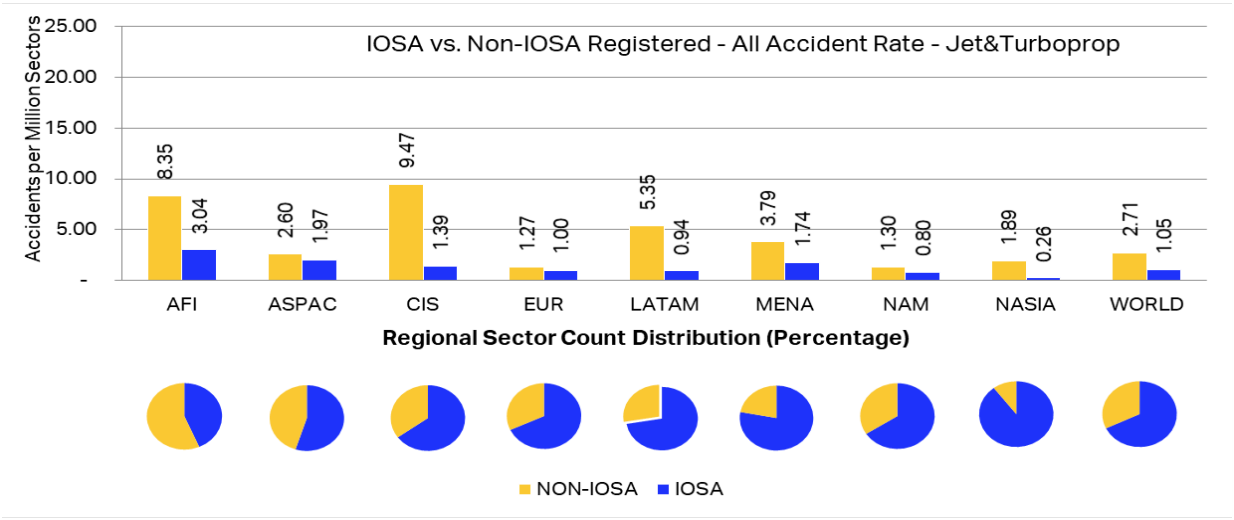


Graph 21: Total number of incidents provided by the MID States for the period 2015-2018

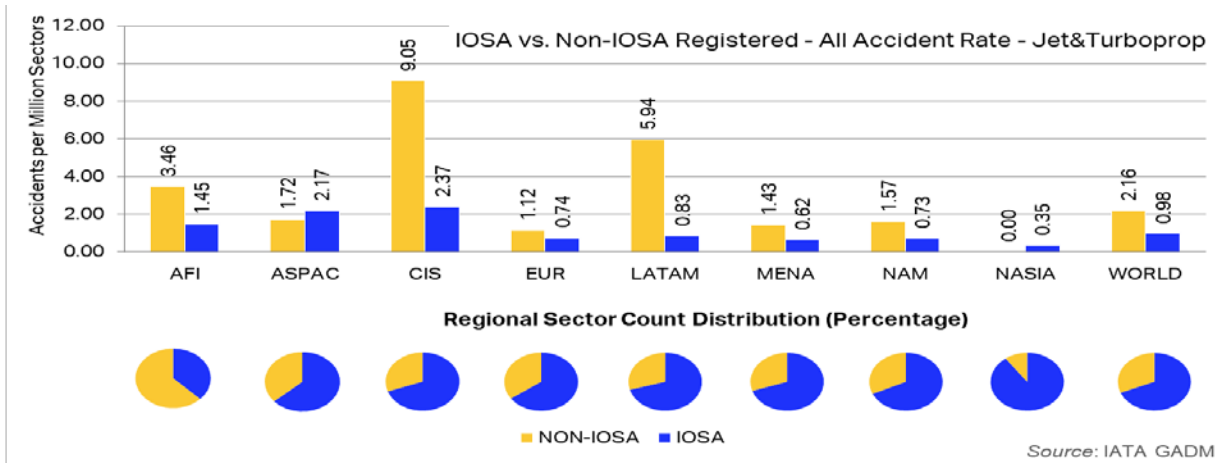
5.2 IATA Operational Safety Audit (IOSA)

There are currently 430 airlines on the IOSA Registry of which 142 are non-IATA Members. Over the next few years, IOSA will undergo a digital transformation that will enable IOSA airlines to compare and benchmark their performance. In the long run, the digital transformation will help to focus auditing on areas with the highest level of safety risk.

IOSA is an internationally recognized and accepted evaluation system designed to assess the operational management and control systems of an airline. It is worth mentioning that IOSA registered airlines outperform non-IOSA airlines in MENA. The accident rate among non - IOSA registered operators for the period 2014 - 2018, was above MENA IOSA registered airlines average by an average of 3.79.

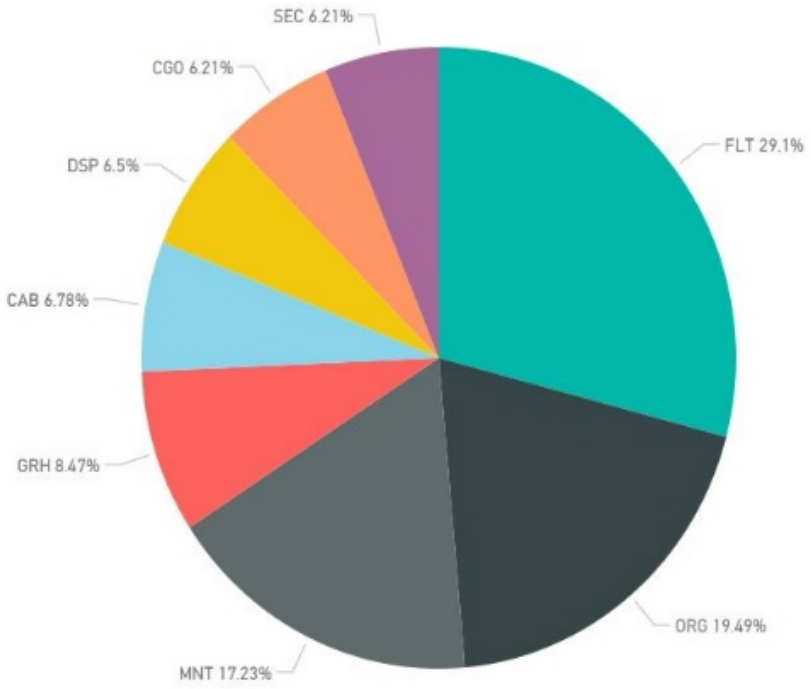


The accident rate for IOSA carriers in 2018 was more than 2 times lower than the rate for non-IOSA carriers.



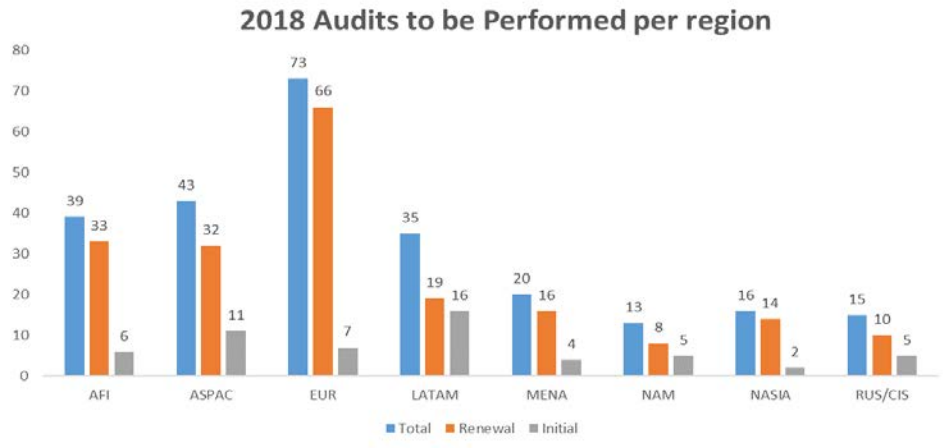
The IOSA audit results analysis captured under this section cover the period January-December 2018. A summary of the IOSA audit findings is as follows:

1. 23 audits were performed in the MENA Region with an average of 12.5 findings per audit.
2. Findings were mainly in the areas of Maintenance (MNT), Flight Operations (FLT), Organization Management (ORG), Ground Handling Operations (GRH), and Cabin Safety (CAB). Below chart demonstrates the percentage of findings per area:



5.3 IATA Safety Audit for Ground Operations (ISAGO)

The ISAGO new operational audit model has been developed in consultation with stakeholders. The program is managed and administered by IATA. The ISAGO new operational audit model implemented in January 2018 have made a significant difference. Ground service providers are experiencing audits that get to the detail of their management and operational processes.
The total audits performed in 2018 are **254** of which **20** performed in MENA, 20 with an average of 19 findings raised per audit

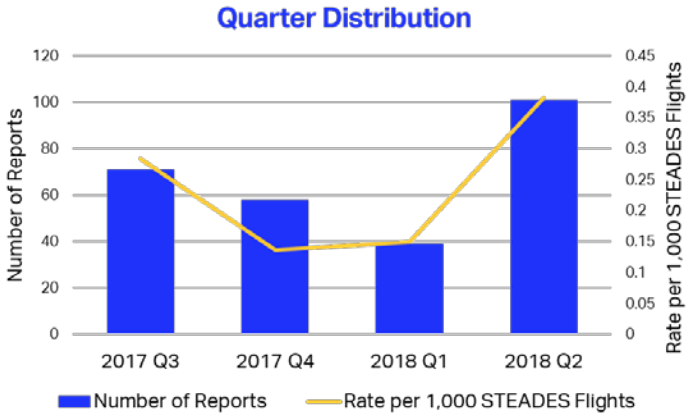


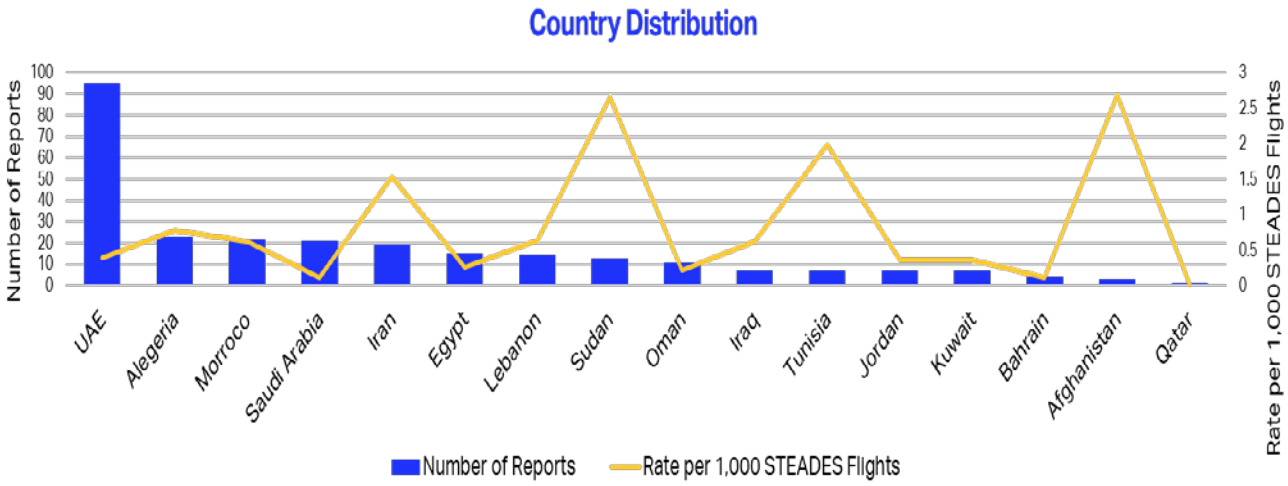
5.4 Incidents Reported by Airlines - STEADES Data

Bird strikes Analysis

The analysis is conducted on Air Safety Reports (ASR) and Cabin Safety Reports (CSR) held in IATA's Safety Trend Evaluation, Analysis & Data Exchange System (STEADES) database. The STEADES database is comprised of de-identified safety incident reports from over 210 participating airlines throughout the world, with an annual reporting rate now exceeding 200,000 reports/year. The STEADES database incorporates a number of quality control processes that assure analysis results.

The data query resulted in **269 reports**. This equals to 0.2245 reports per 1,000 STEADES flights.





95 bird strike events (35%) were reported in United Arab Emirates (UAE), but the rate per 1,000 STEADES flights did not show significance compared to other countries.

85% (210) of bird strikes occurred during Aircraft Approach, Take-off and Landing.

Engine Damage occurred only in 1% (3) of the bird strike reports. One bird strike with engine damage resulted in the aircraft AOG.

5.5 Region Safety Performance - Safety Indicators-Proactive

Safety Indicator	Safety Target	MID	Remark
Regional average EI	Increase the regional average EI to be above 70% by **2020**	75.23	Target Achieved
Number of MID States with an overall EI over 60%.	11 MID States to have at least 60% EI by **2020**	10 States	
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).	Max 3 MID States with an EI score less than 60% for more than 2 areas by 2017	7 States	
Number of Significant Safety Concerns	MID States resolve identified Significant Safety Concerns as a matter of urgency and in any case within 12 months from their identification. No significant Safety Concern	None	Target Achieved

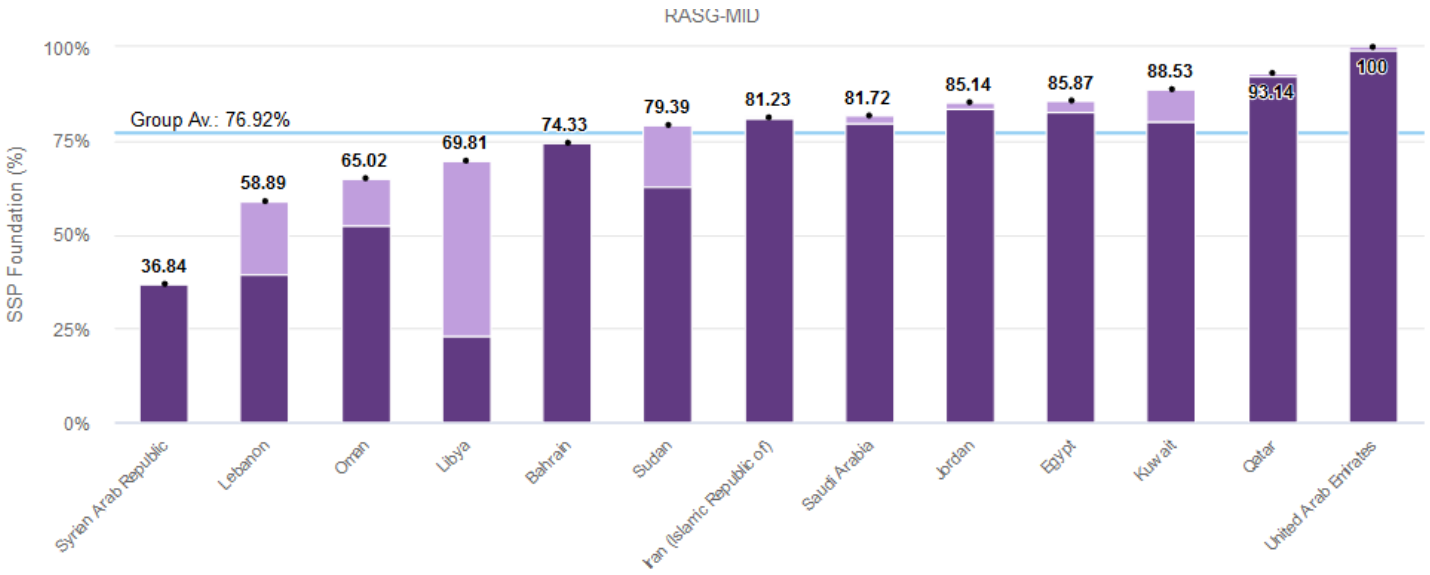
	by **2016**.		
Use of the IATA Operational Safety Audit (IOSA), to complement safety oversight activities.	a. Maintain at least 60% of eligible MID airlines to be certified IATA-IOSA at all times. b. All MID States with an EI of at least 60% use the IATA Operational Safety Audit (IOSA) to complement their safety oversight activities, by 2018.	57% (As of Sep 2017) 4 out of 10 States (40%)	
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.	67%	
Number of established Runway Safety Team (RST) at MID International Aerodromes.	50% of the International Aerodromes by 2020.	57%	Target achieved

6. Predictive Safety Information

6.1 MID Region State Safety Programme (SSP) Foundation

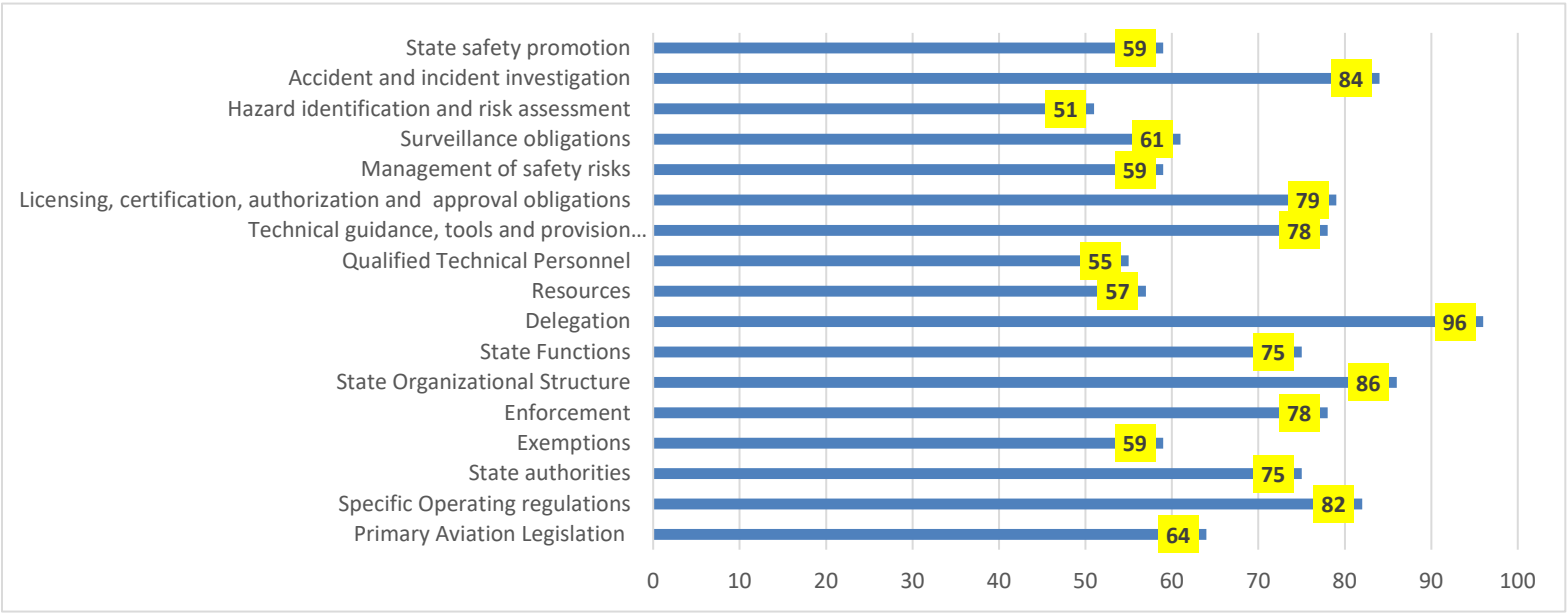
A sub-set of 299 Protocol Questions (PQs) out of the 1,047 PQs used to calculate the USOAP Effective Implementation (EI). This sub-set of questions are considered as the foundation for a State Safety Programme (SSP) implementation. A SSP Foundation indicator is calculated, as the percentage of PQs which are either validated by USOAP or submitted as completed through the corrective action plans(CAP) on the USOAP CMA Online Framework.

The average EI for SSP foundation PQs for States in the MID Region is 76, 92%. The SSP foundation EI for MID Region States is shown in the graph below.



Graph 21: Overall SSP foundation for MID Region States (Source: iSTARS as of 25 Sep 2019)

The sub-set of PQs are grouped by 17 subjects based on the Annex 19 amendment 1 and the 4th edition of the Safety Management Manual (forthcoming). States with EI above 60% may still have PQs to address which are fundamental for their SSP. Hazard identification and risk assessment is the lowest one with 51%, followed by qualified technical personnel with 55%.



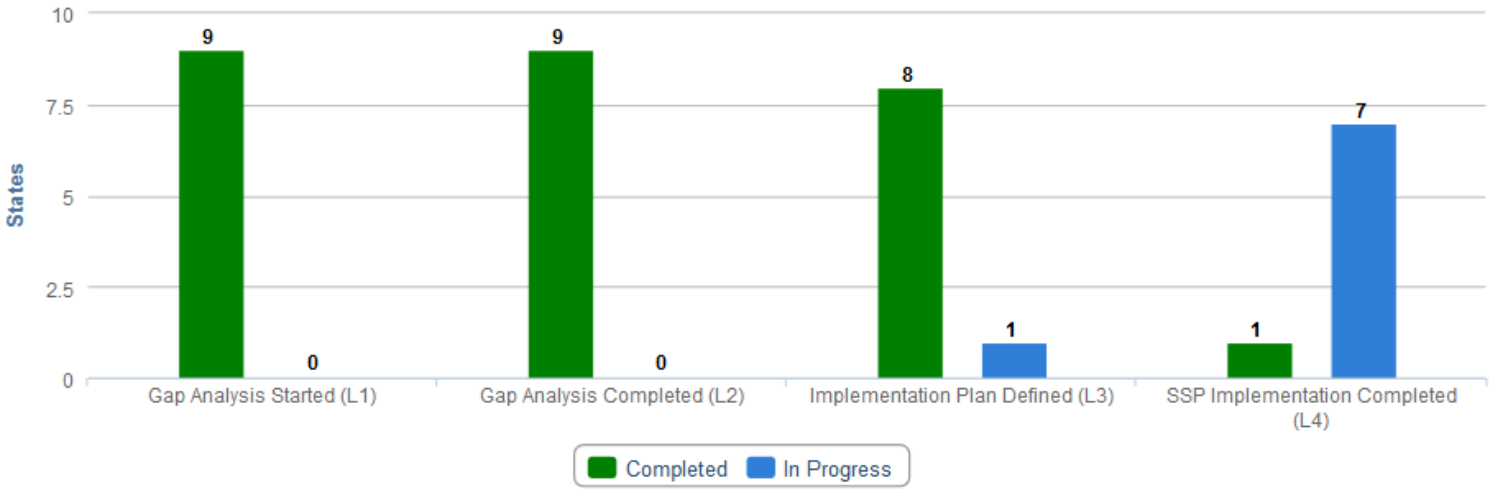
Graph 22: Average EI by Safety Management subjects for States in MID Region (Source: iSTARS as of 30 Oct 2019)

These PQs can be prioritised and addressed when conducting the SSP gap analysis or while defining the SSP implementation/action plan. States can use the ICAI iSTARS online to perform an SSP Gap Analysis-SMM 4th Edition. This provides an indication of the broad scope of gaps and hence overall workload to be

expected. This initial information can be useful to senior management in anticipating the scale of the SSP implementation effort and hence the resources to be allocated/provided.

The SSP statistics shown in the graph 22 are high-level information about each Gap analysis project performed by States themselves (Self-reported by the State and not validated by ICAO). SSP implementation progress has been measured for each State using simple milestones as per the entered data. A State having reviewed all Gap analysis Questions (GAQs) has reached level 2. A State having reviewed and defined actions for all GAQs has reached level 3. A State having completed all actions has reached 4.

The completion percentage of GAQs in each level is given in graph 23 for States in the MID Region.



Graph 23: SSP Implementation Progress for States in MID Region, Limited to States with EI>=60%- States number: 9 (Source: iSTARS as of 26 Sep 2019)

6.2 MID Region State Safety Programme (SSP) Implementation challenges

Implementation of SSP is one of the main challenges faced by the State in the MID Region. The RASG-MID addresses the improvement of SSP implementation in the MID Region as one of the top Safety Enhancement Initiatives (SEIs). Common challenges/difficulties have been identified based on the States' feedback, as follows:

1. establishment of an initial Acceptable Level of Safety Performance (ALoSP), which necessitates effective reporting system to support collection/analysis of safety data;
2. allocation of resources to enable SSP implementation
3. identification of a designated entity (SSP Accountable Executive and SSP Implementation Team); and
4. lack of qualified and competent technical personnel to fulfil their duties and responsibilities regarding SSP implementation.

The following actions were recommended to support the SSP implementation:

- continuous update of the SSP Gap Analysis available on iSTARS (13 States completed the Gap Analysis);

- participate in the new ICAO Safety Management Training Programme (SMTP), with the CBT part and the Safety Management for Practitioners Course;
- work with the ICAO Regional Office to make use of available means (e.g. Technical Co-operation Bureau) to provide assistance needed for SSP implementation; and
- identify safety management best practices in coordination with States (champion State to promote best practices among other States) including sharing of technical guidance and tools related to SSP (e.g. advisory circulars, staff instructions);
- establishment of voluntary and mandatory safety reporting systems.

The RASG-MID also supported the establishment of the MENA RSOO, with a primary objective to assist member States to develop and implement SSP. The MENA RSOO is still in the establishment process.

Several Safety Management Workshops, training courses, and meetings have been organized to support the implementation of SSP/SMS and address the challenges and difficulties, as well as sharing of experiences and best practices.

6.3 IATA Safety Data

IATA's main database for collecting predictive safety information is Flight Data Exchange (FDX). It is an aggregated de-identified database of FDA/FOQA type events that allows the user to proactively identify safety hazards.

Due to the low levels of participation by the MID Region carriers in FDx program, no useful information could be extracted.

6.4 MID Region Safety Performance – Safety Indicators – Predictive

Safety Indicator	Safety Target	MID
Number of MID States, having completed the SSP gap analysis on iSTARS.	10 MID States by 2015	10 States
Number of MID States that have developed an SSP implementation plan.	10 MID States by 2015	8 States
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 (4 States-partially)
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 the end of **2017**.	1 State (6 States-partially)

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 the end of **2018**.	(7 States-partially)
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 States with EI>60% by 2015. b. 70% of MID States with EI>60% by 2016. c. 100% of MID States with EI>60% by 2017.	75%

7. Overall Analysis

7.1 Identification of Focus Areas for MID Region

The reactive and proactive safety information provided by ICAO, IATA, MID Region States and the "feared consequences" of the risk portfolio of DGAC France were considered for identifying the main risk areas for the MID Region as follow:

		Potential Accident Outcome						
Safety Issues	**Accident Severity**	**CFIT**	**LOC-I**	**MAC**	**GCOL**	**RE/ARC**	**Injury or Damage inflight**	**Injury or Damage on Ground**
Technical Problems with Landing Gear Collapse/not Extended during landing	Major					x		x
Contained engine Failure/Power Plant Malfunctions	Catastrophic	x	x				x	
Flight Planning and Preparation	Catastrophic	x	x			x		
Fire/Smoke-non impact	Catastrophic		x				x	x
Un-stable or non-complaint Approach	Catastrophic	x	x			x		x
Convective weather (Turbulence, Hail, Lightning)								

Deviation from pitch or roll attitude	Catastrophic	x	x			x				
Security Risks with impact on safety	Catastrophic		x							
Monitoring of flight parameters and automation modes	Catastrophic		x							
Tail/Cross wind/Winds hear	Catastrophic		x			x			x	
Loss of separation in flight/ and or airspace/TCAS RA infringement	Catastrophic		x	x				x		
Runway Incursion	Catastrophic				x	x			x	
Maintenance events and technical failures	Catastrophic	x	x			x		x	x	
Contaminated runway/Poor braking action	Major					x			x	
Birdstrike/Engine Bird ingestion	Catastrophic		x			x		x	x	
Wake Vortex	Catastrophic			x				x		
Handling and execution of Go-arounds	Catastrophic		x			x		x		

The table shows that each identified safety issue is linked to the potential accident outcome (s).

First, Considering ICAO reactive safety information, the focus areas identified were the Loss of Control-in Flight (LOC-I) and runway safety (RE/ARC). Considering also the reactive and proactive safety information, safety events identified which could lead to the potential accident outcomes of Controlled Flight Into Terrain (CFIT) and Mid Air Collision (MAC) as detailed in the above table of feared consequences" of the risk portfolio of DGAC France. Therefore, the CFIT and MAC were also considered as focus areas due to the potential risk of these type of accidents though the MID States did not experience those accidents during the period 2014-2018.
Based on the analyses of reactive and proactive safety information, it is concluded that the Focus Areas for the MID Region are:

1. Loss of Control-In Flight (LOC-I);
2. Runway Safety (RS); mainly (RE and ARC during landing);
3. Controlled Flight Into Terrain (CFIT); and
4. Mid-Air Collision (MAC)

Further information about the potential accident outcomes regarding the focus areas is provided below:

Loss of control-inflight (LOC-I)
Loss of control usually occurs because the aircraft enters a flight regime that is outside its normal envelope, usually, but not always, at a high rate, thereby introducing an element of surprise for the flight crew involved. Prevention of loss of control is a strategic priority.

During 2014-2018 aircraft, upset or loss of control contributed three accidents. It includes uncontrolled collisions with terrain following engines failures after take-off, but also occurrences where the aircraft deviated from the intended flight path or aircraft flight parameters, regardless of whether the flight crew realized the deviation and whether it was possible to recover or not.

Runway Excursions (RE):

RE is a veer or overrun off the runway surface. RE events can happen during take-off or landing. During the period 2014-2018, Runway Excursions and abnormal runway contact accidents and serious incidents mainly occurred in the landing phase of flight. This includes materialized runway excursions, both high and low speed and occurrences where the flight crew had difficulties maintaining the directional control of the aircraft or of the braking action during landing, where the landing occurred long, fast, off-centred or hard, or where the aircraft had technical problems with the landing gear (not locked, not extended or collapsed) during landing.

MID-Air Collision (MAC)

Refers to the potential collision of two aircraft in the air. It includes direct precursors such as separation minima infringements, genuine TCAS resolution advisories or airspace infringements. Although there have been no aero-plane mid-air collision accidents in recent years within the MID States, this key risk area has been raised by some MID States. This is one specific safety issue that is a main priority in this key risk area. However, additional data is needed for further analysis in order to identify the underlying safety issues.

Controlled Flight In to Terrain (CFIT)

It comprises those situations where the aircraft collides or nearly collides with terrain while the flight crew has control of the aircraft. It also includes occurrences, which are the direct precursors of a fatal outcome, such as descending below weather minima, undue clearance below radar minima, etc. There was no fatal accident involving MID States operators during this period. This key risk area has been raised by some MID States and in other parts of the world that make it an area of concern. However, additional data is needed for further analysis in order to identify the underlying safety issues.

7.2 Identification of emerging risks for MID Region

Emerging risks have been identified, as follows:

Regarding the emerging risks mainly identified from ICAO, IATA data, serious incidents and the incidents data provided by the States except the risk of security related which was included under the accident data of the State of occurrence.

1. Security Risks with impact on safety-SEC;
2. Fire/smoke- (non-impact)- (FN-I);
3. Runway incursion (RI);
4. Birdstrike-(BIRD); and
5. Wake Vortex.

Runway incursion (RI)

A Runway Incursions refers to the incorrect presence of an aircraft, vehicle or person on an active runway or in its areas of protection. Their accident outcome is runway collisions. While there were no fatal accidents or accidents involving MID States operators in the last years involving runway collision, the risk of the reported occurrence demonstrated to be very real. In addition to this, MID States should provide further data analysis regarding runway incursion in order to identify the root causes and associated safety issues.

Fire/Smoke- (non-impact) (FN-I)
Uncontrolled fire on board an aircraft, especially when in flight, represents one of the most severe hazards in aviation. In-flight fire can ultimately lead to loss of control-inflight, either because of structural or control system failure, or again because of crew incapacitation. Fire on the ground can take hold rapidly and lead to significant casualties if evacuation and emergency response are not swift enough. Smoke or fumes, whether they are associated with fire or not, can lead to passenger and crew incapacitation and will certainly raise concern and invite a response. Even when they do not give rise to a safety impact, they can give rise to concerns and need to be addressed. While there were no fatal accidents involving MID States operators in the last years involving fires, there have been incidents reported by MID States, which make it an area of concern.

Security related (SEC)
The impact of security in safety is a real concern and should be considered as a strategic priority. In addition, it should be shared with MID shared with MID States and ICAO MID Office (AVSEC) for further data collection and analysis and come out with strategic initiatives.

Birdstrike (BIRD)
Their accident outcomes could lead to runway collisions or Loss of control-inflight or runway excursions. While there were no fatal accidents involving MID States air operators in the last years involving birdstrike, there have been huge number of birdstrike occurrences reported by MID States and analysis provided by IATA that make it an area of concern. Thus, MID States should provide further data analysis in order to identify the root causes and associated safety issues.

Wake Vortex
Their accident outcomes could lead to Loss of control-inflight. While there were no fatal accidents involving MID States air operators in the last years involving wake turbulence. However, there have been number of wake vortex occurrences reported by MID States which make it an area of concern. Therefore, further attention should be given this safety issue.

8. Final Conclusions

Following the analysis of the reactive and proactive safety information provided by ICAO, IATA, and MID Region States for the period 2014 - 2018, it was concluded that the main Focus Areas for the MID Region are:

1. Loss of Control-Inflight (LOC-I);
2. Runway Safety (RS)-(RE and ARC during landing);
3. Controlled Flight Into Terrain- (CFIT); and
4. Mid-Air Collision- (MAC).

The following are identified as Emerging Risks in the MID Region besides the old ones:

1. Security risks with impact on safety- SEC;
2. Fire/Smoke (non-impact)- F-NI;
3. Runway Incursion (RI);

4. Birdstrike- (BIRD); and
5. Wake vortex.

The regional average overall Effective Implementation (EI) in the MID Region (13 out of 15 States have been audited) is 75.23 %, which is above the world average 68.53% (as of 25 Sep 2019). Three (3) States are currently below EI 60%.

The EI by Area (e.g. Operations, Airworthiness) shows that all areas are above 60% EI, which reflect the improvement in the oversight capabilities particularly in the area of ANS and AGA. With respect to the Critical Elements (CEs), CE4 (Qualified technical personnel) improved and is above 60% (61.71%) EI, whereas CE8 (resolution of safety issues) is the only one below EI 60% (59. 47%).

Implementation of SSP is one of the main challenges faced by the State in the MID Region. The RASG-MID addresses the improvement of SSP implementation in the MID Region as one of the top Safety Enhancement Initiatives (SEIs). Common challenges/difficulties related to SSP implementation include identification of a designated entity, establishment of an initial Acceptable Level of Safety Performance (ALoSP), allocation of resources to enable SSP implementation and lack of qualified and competent technical personnel.

It should be highlighted that reporting of incidents is still low in the MID Region (Confidentiality concerns). Moreover, mechanisms for gathering and processing predictive safety information at regional level should be established in order to collect and analyse safety data to proactively identify safety concerns before accidents and/or incidents occur, to develop timely mitigation and prevention measures.

It is to be highlighted that the RASG-MID/7 meeting held in Cairo during 15-18 April 2019 endorsed the revised version of the MID Region Safety Strategy. Therefore, in the next MID Annual Safety Report Edition the revised safety indicators and targets will be included.

Appendix A: List of Acronyms

ARC	Abnormal Runway Contact
ADRM	Aerodrome
ANSP	Air Navigation Service Provider
ATC	Air Traffic Control
ATS	Air Traffic Services
ASRT	Annual Safety Report Team
BIRD	Birdstrike
CTOL	Collisions with Obstacles during Take Off or Landing
CFIT	Controlled flight into terrain
DIP	Detailed Implementation Plan
EVAC	Evacuation
F-IN	Fire/Smoke (Non-Impact)
FDA	Flight Data Analysis
FOQA	Flight Operations Quality Assurance
FUEL	Fuel Related
GCOL	Ground Collision
RAMP	Ground Handling
GASP	ICAO Global Aviation Safety Plan
ICE	Icing
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
LOC-G	Loss of Control - Ground
LOC-I	Loss of control - inflight
LALT	Low Altitude Operations
MAC	Mid Air Collision
MED	Medical
MTOW	Maximum Take-off Weight
MENA	Middle East & North Africa (IATA Region)
MID	Middle East Region (ICAO Region)
NAV	Navigation Errors
OTHR	Other
RAST	Regional Aviation Safety Group
RE	Runway Excursion (departure or landing)
RI	Runway Incursion
RS	Runway Safety
SEC	Security Related
SEI	Safety Enhancement Initiative
SMS	Safety Management System

SOP	Standard Operating Procedure
SSP	State Safety Programme
SCF-NP	System Component Failure-Non-Power Plant
SCF-PP	System Component Failure-Power Plant
TURB	Turbulence Encounter
USOS	Undershoot/Overshoot
UNK	Unknown or Undetermined
UAS	Undesirable Aircraft State
USOAP	Universal Safety Oversight Audit Program
WILD	Wildlife
WSTRW	Wind shear or Thunderstorm

CREDITS

The RASG-MID thanks all those who contributed to the elaboration of this Annual Safety Report and provided necessary support and information to the members of the Annual Safety Report Group (ASRG). Special thanks go to:

Mr. Jehad Faqir,
International Air Transport Association (IATA)

Mr. Mohamed Smaoui, Mr. Mohamed Chakib, and Mashhor Alblowi
International Civil Aviation Organization (ICAO)

-END-

ICAO

SAFETY

ICAO, Middle East Office
Egyptian Civil Aviation Complex, Cairo Airport Road, Cairo, Egypt

Mail: P.O. Box 85, Cairo Airport Post Office Terminal One, Cairo 11776,
Arab Republic of Egypt
Tel.: +20 2 2267 4840
Fax: +20 2 2267 4843

E-mail: icaomid@icao.int

APPENDIX 3C

LIST OF FOCUS AREAS AND EMERGING RISKS TAXONOMY

Scope: State of Occurrence

The data to be collected be based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg.

Occurrence Category	ADREP/CICTT taxonomy	Remarks
Runway Excursion (RE)	Veer off or overrun off the runway surface.	
Abnormal Runway Contact (ARC)	Any landing or take-off involving abnormal runway or landing surface contact.	
Loss of Control-Inflight (LOC-I)	Loss of Control while, or deviation from intended flight path, in flight.	Including occurrences which lead to the LOC-I accident
Controlled Flight Into Terrain (CFIT)	Inflight collision or near collision with terrain, water, or obstacles without indication of loss of control.	Including occurrences which lead to the CFIT accident
MID Air Collision (MAC)/ NMACs	Airprox/TCAS Alerts, Loss of separation as well as NMAC or collisions between aircraft inflight.	Including, RPAS/Drones, Call Sign Confusion
Fire/Smoke (F-NI)	Fire or smoke in or on the aircraft, in flight, or on the ground, which is not the result of impact.	
Runway Incursion (RI)	Any occurrence at aerodrome involving the incorrect presence of an aircraft, vehicle, or person on the protected area of a surface designated for landing and takeoff of aircraft.	
System Component Failure –Non-Power Plant (SCF-NP)	Failure or malfunction of an aircraft system or component other than the power plant.	
Turbulence Encounter (TURB)	In-flight turbulence encounter.	Mainly occurrences related to wake turbulence (Vortex)

Birdstrike (BIRD)	Occurrences involving collisions/near collisions with bird(s).	
System Component Failure- Power Plant (SCF-PP)	Failure or malfunction of an aircraft system or components related to the power plant.	
Security related (SEC)	Criminal/Security acts which result in accidents or incidents (per Annex 13 to the Convention on International Civil Aviation).	
Wind shear	Flight into wind shear or thunderstorm	

NB: States may share any other national safety concern.

APPENDIX 3D

TEMPLATE FOR THE COLLECTION OF

ACCIDENT, SERIOUS INCIDENT AND INCIDENT DATA AND SAFETY ANALYSIS

Name of State: ……..

Traffic: Nb. of Departures per year [2015: ……] [2016: ……] [2017: ……] 2018: ……]2019: ……]

1- Occurrences: *The data to be collected be based on scheduled commercial operations involving aircraft having a Maximum Take-off Weight (MTOW) above 5700 kg.*

#	Occurrence Category	2015			2016			2017			2018			2019		
		# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents	# Accidents	# Serious incidents	# Incidents
1	Runway Excursion (RE)															
2	Abnormal Runway Contact (ARC)															
3	Loss of Control-Inflight (LOC-I)															
4	Controlled Flight Into Terrain (CFIT)															
5	Mid Air collision (MAC)/ NMAC															
6	Fire/Smoke (F-NI)															
7	Runway Incursion-(RI)															
8	System Component Failure-Non-Power Plant (SCF-NP)															

9	Wake Turbulence															
10	Bird Strike															
11	Security related (SEC)															
12	System Component Failure-Power Plant (SCF-PP)															
13	Wind shear															

States should provide the number of accident, serious incidents, and incidents related to each category mentioned in the template above for the past three years (2015-2018)

Scope: State of Occurrence

2- Safety data Analysis (root-cause analysis, trends, etc.)

3- Main safety risks

4- Safety Recommendations

APPENDIX 3E

AERODROME CERTIFICATION BASIC REGULATORY FRAMEWORK

FOR THE STATE

Member State	Basic law for the establishment of a CAA responsible for Aerodromes Certification (*) (Yes/No)	Appropriate aerodrome certification regulations developed (Yes/No)	Appropriate aerodrome certification regulations approved and promulgated (*) (Yes/No)	Appropriate safety management regulations developed (Yes/No)	Appropriate safety management regulations approved and promulgated (*) (Yes/No)	CCA responsible for aerodrome certification (Yes/No)	Enforcement/ sanctions for non-compliance regulations promulgated (*) (Yes/No)

Table 1: Basic Aerodrome Certification Regulatory Framework

PROMULGATED REFERENCES

ON AERODROME CERTIFICATION BASIC REGULATORY FRAMEWORK FOR THE STATE

Member State	**Basic law for the establishment of a CAA responsible for Aerodromes Certification** **(*)** (Ref / paragraph / Date of Promulgation)	**Appropriate aerodrome certification regulations approved and promulgated** **(*)** (Ref / Date of Promulgation)	**Appropriate safety management regulations approved and promulgated** **(*)** (Ref / Date of Promulgation)	**Enforcement/ sanctions for non- compliance regulations promulgated** **(*)** (Ref / Date of Promulgation)

Table 2: Promulgated References related to Table 1

AERODROMES CERTIFICATION PROCEDURES

Member State	**Aerodrome certification procedures developed and approved** (Yes/No)	**Requirement of an Aerodrome Manual** (Yes/No)	**Assessment of facilities/ equipment** (Yes/No)	**Specific conditions for issuing/ suspending/ refusing the Aerodrome certificate** (Yes/No)**e**

Table 3: Aerodromes Certification Procedures

APPENDIX 3F

PROGRESS/PLAN ON
AERODROMES CERTIFICATION IMPLEMENTATION
IN THE MID REGION

Member State	International Airports listed in the MID ANP (AOP Table 3-1)		Aerodrome City	Aerodrome Certification Status	SMS implemented at airport	Date of Initial Certification	Date of Most Recent Re-Certification or Audit	Date of Most Recent ARFF Compliance Verification
	Aerodrome ICAO Reference Code	Aerodrome Name / (IATA CODE)		(Yes/No)	(Yes/No)	(Month, Year)	(Month, Year)	(Month, Year)

Table 1: Aerodromes Certification Status

STATE AERODROME CERTIFICATION DETAILED IMPLEMENTATION PLAN FOR 2020 - 2022

PART A								
State	**Number of Aerodromes included in AOP Table 1-1 of the MID ANP**	**Responsible Oversight Body**	**Number of Aerodromes**					
			Certified	**On-final phase**	**Planned to be Certified**	**Planned Starting Date**	**Planned End Date**	**Remarks**

PART B										
State	**Aerodrome Name included in AOP Table 1-1 of the MID ANP / ICAO Reference Code**	**Certified**	**Planned for Certification (*)**					**Aerodrome Traffic density (**)**		
			Phase 1 (Month, Year)	**Phase 2** (Month, Year)	**Phase 3** (Month, Year)	**Phase 4** (Month, Year)	**Phase 5** (Month, Year)	**Light**	**Medium**	**Heavy**

Table 2 : State Implementation Plan for Aerodromes Certification

Legend:

: Aerodrome certification process:

***Phase 1**: Dealing with the expression of interest by an intending applicant for the aerodrome certificate;*
***Phase 2**: Assessing the formal application, including evaluation of the aerodrome manual;*
***Phase 3**: Assessing the aerodrome facilities and equipment;*
***Phase 4**: Issuing or refusing an aerodrome certificate; and*
***Phase 5**: Promulgating the certified status of an aerodrome and the required details in the AIP.*

****: Aerodrome Traffic Density***

***a) Light.** The number of movements in the mean busy hour is not greater than 15 per runway or typically less than 20 total aerodrome movements.*
***b) Medium**. The number of movements in the mean busy hour is of the order of 16 to 25 per runway or typically between 20 to 35 total aerodrome movements.*
***c) Heavy**. The number of movements in the mean busy hour is of the order of 26 or more per runway or typically more than 35 total aerodrome movements.*

***Note 1.** The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.*
***Note 2.** Either a take-off or a landing constitutes a movement.*

APPENDIX 3G

STATE RUNWAY SAFETY DETAILED IMPLEMENTATION PLAN

FOR 2020 - 2022

PART A			
	(Yes/No)	**If No indicate**	
		Planned Starting Date (Month, Year)	**Planned END Date** (Month, Year)
CAA established requirements and activities aimed at improving runway safety through a State Runway Safety Programme			
CAA included the prevention of runway safety accidents and incidents is in the State's SSP			
CAA include requirements for manual flying skills on approach and landing in recurrent training for pilots			
CAA established requirements for a reporting format for assessing and reporting runway surface conditions in accordance with the ICAO Global Reporting Format (GRF)			

PART B								
State	**Number of Aerodromes included in the AOP Table 1-1 of the MID ANP**	**Responsible Oversight Body**	**Number of RST**					
			Implemented	**Registered on ICAO Data Base**	**Planned to be Implemented**	**Planned Starting Date**	**Planned End Date**	**Remarks**

PART C									
State	**Aerodrome Name included in AOP Table 1-1 of the MID ANP / ICAO Reference Code**	**Certified** (Yes/NO)	**Aerodrome Traffic Density (*)**			**GRF Deployed** (Yes/NO)	**RST Implemented** (Date)	**RST Registered on ICAO Data Base** **(**)**	**RST planned to be Implemented** (Date)
			Light	**Medium**	**Heavy**				

Legend:

: Aerodrome Traffic Density

a) Light. The number of movements in the mean busy hour is not greater than 15 per runway or typically less than 20 total aerodrome movements.

b) Medium. The number of movements in the mean busy hour is of the order of 16 to 25 per runway or typically between 20 to 35 total aerodrome movements.

c) Heavy. The number of movements in the mean busy hour is of the order of 26 or more per runway or typically more than 35 total aerodrome movements.

Note 1. The number of movements in the mean busy hour is the arithmetic mean over the year of the number of movements in the daily busiest hour.

Note 2. Either a take-off or a landing constitutes a movement.

: RST Registered on ICAO Data Base

To register the Aerodrome RST, please fill the RST Survey at this **link**.

APPENDIX 3H

List of Actions to support the SEIs

Target Achieved	In Progress	Delayed

SEI: Improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region		
Actions	**Champion**	**Progress/Remarks**
Conduct of Safety Management Training Courses, Symposia and Workshops.	ICAO	ICAO Safety Management for Practitioners (SMxP) Course held in Cairo, Egypt, 14 – 18 January 2018. APAC/MID Safety Management Symposium held in Singapore, 23-26 April 2018. Fourth MID Region Safety Summit (Riyadh, 2-3 October 2018). Safety Management Capacity Building Workshop (ICAO MID Office, Cairo, Egypt, 24-28 March 2019). SSP Implementation Workshop for Jordan (Amman, 10-14 June 2019) SSP Implementation Workshop for Egypt (Cairo, 16-20 June 2019) SSP Implementation Workshop for Kuwait (Kuwait, 16-20 Feb 2020) ACAO/ICAO GASP 2020-2022 & NASP Workshop (Cairo, Egypt, 1-2 March 2020) ACAO/ICAO SSP Implementation Workshop (Casablanca, Morocco, 22-25 March 2020) SSP Implementation Workshop for Saudi Arabia (TBD, 2020) SSP Implementation Workshop for Oman (TBD, 2020)
Development of the MID Region Safety Management Implementation Roadmap	All Stakeholders	The MID Region Safety Management Implementation Roadmap was endorsed by the RSC/7 meeting (RSC Conclusion 7/10)
Establishment of the Safety	All Stakeholders	The Safety Management Implementation Team

SEI: Improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region		
Actions	**Champion**	**Progress/Remarks**
Management Implementation Team (SMIT)		(SMIT) was established by the RSC/7 meeting as the main Regional Framework for the provision of assistance to States through Safety Management Assistance Missions (RSC Conclusion 7/11)
Establish the MENA RSOO to support States in the expeditious implementation of SSP.	Saudi Arabia, ACAO and ICAO	First MENA RSOO Steering Committee (Riyadh, 1 October 2018). Revised LoI was signed by 15 States. 1st MENA RSOO Technical Meeting (Riyadh, 2-4 February 2019) to review MOA and Project Document. The meeting came up with a set of recommendations. 2nd MENA RSOO Technical Meeting (Riyadh, 9-10 March 2020) to review States comments and finalize MOA and next course of actions to launch the operations to be endorsed by the MENA RSOO Steering Committee. Second MENA RSOO Steering Committee (TBD).
Improve the status of implementation of SMS at International Aerodromes.	Egypt, Saudi Arabia and UAE	Aerodrome Customized SMS Workshop conducted back-to-back with the RGS WG/5 meeting with technical support provided by experts from Egypt and UAE. Aerodrome SMS Compliance and Effectiveness Toolkit have been developed by UAE and presented during the SMS Workshop. An SSP Implementation Ad-Hoc Action Group composed of experts from States and supported by ICAO was established by the RASG-MID/7 meeting to develop the Regional Roadmap for SSP implementation in the MID Region. Updates would be provided by the Chairperson of the Group to the RSC/7 meeting, which

SEI: Improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region		
Actions	**Champion**	**Progress/Remarks**
		includes a roadmap and proposals.
Improve the status of implementation of SMS by ANSPs (ATM) through: - Organize Joint Workshop with CANSO - States to share experience and best practices - Monitor the SMS implementation status; - Review and simplify the EUROCONTROL/CANSO Standard of Excellence in SMS Questionnaire - Disseminate the Questionnaire to the MID States. - Review and analyse feedback from States	CANSO/ICAO AD-Hoc Action Group for SMS by ANSPs ICAO	ICAO MID Office sent a reminder to States in order to urge their ANSPs to complete the EUROCONTROL/CANSO Standard of Excellence in SMS Questionnaire and send it back to CANSO before the end of October 2017 (only 2 replies received from Jordan and Oman). CANSO Middle East SMS Training Workshop (Muscat, Oman, 27-29 November 2017) with the objective to primarily focus on effective implementation of an SMS, mapping the CANSO Standard of Excellence in Safety Management Systems against Annex 19. AD-Hoc Action Group for SMS by ANSPs and ATM SG to follow up on the subject. An SSP Implementation Ad-Hoc Action Group composed of experts from States and supported by ICAO was established by the RASG-MID/7 meeting to develop the Regional Roadmap for SSP implementation in the MID Region. Updates would be provided by the Chairperson of the Group to the RSC/7 meeting, which includes a roadmap and proposals.
Improve the status of implementation of SMS by air operators.	IATA	A Survey was developed in coordination between ICAO MID Office and IATA and sent to the MID States through State Letters (December 2017) in order to measure and monitor the SMS implementation by air operators. A Reminder was sent on 10 January 2018. 6 replies received from Bahrain, Jordan, Oman, Qatar, Syria and Yemen.

SEI: Improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region		
Actions	**Champion**	**Progress/Remarks**
		According to IATA, 29 air operators have SMS in place as part of IOSA An SSP Implementation Ad-Hoc Action Group composed of experts from States and supported by ICAO was established by the RASG-MID/7 meeting to develop the Regional Roadmap for SSP implementation in the MID Region. Updates would be provided by the Chairperson of the Group to the RSC/7 meeting, which includes a roadmap and proposals.
Improve the status of implementation of SMS by maintenance organizations.	IATA	A Survey was developed in coordination between ICAO MID Office and IATA and sent to the MID States through State Letters (December 2017) in order to measure and monitor the SMS implementation by air operators. A Reminder was sent on 10 January 2018. 6 replies received from Bahrain, Jordan, Oman, Qatar, Syria and Yemen. No update provided An SSP Implementation Ad-Hoc Action Group composed of experts from States and supported by ICAO was established by the RASG-MID/7 meeting to develop the Regional Roadmap for SSP implementation in the MID Region. Updates would be provided by the Chairperson of the Group to the RSC/7 meeting, which includes a roadmap and proposals.
Improve the status of implementation of SMS by training organizations (involved in flight training).	ACAO and ICAO	A Survey was developed in coordination between ICAO MID Office and IATA and sent to the MID States through State Letters (December 2017) in order to measure and monitor the SMS implementation by air operators,

SEI: Improve the status of implementation of State Safety Programme (SSP) and Safety Management System (SMS) in the MID Region		
Actions	**Champion**	**Progress/Remarks**
		A Reminder was sent on 10 January 2018. 6 replies received from Bahrain, Jordan, Oman, Qatar, Syria and Yemen. An SSP Implementation Ad-Hoc Action Group composed of experts from States and supported by ICAO was established by the RASG-MID/7 meeting to develop the Regional Roadmap for SSP implementation in the MID Region. Updates would be provided by the Chairperson of the Group to the RSC/7 meeting, which includes a roadmap and proposals.

SEI: Strengthening of States' Safety Oversight capabilities		
Actions	**Champion**	**Progress/Remarks**
Conduct USOAP CMA Workshops including cost-recovery.	ICAO	USOAP-CMA Regional Workshop conducted in Cairo, Egypt 6-9 February 2017. ACAO/ICAO Safety Oversight Workshop (Casablanca, Morocco, 11-13 March 2019) for MID and Europe States USOAP-CMA Regional Workshop conducted in Cairo, Egypt 10-12 February 2020 Cost-Recovery Workshops provided when requested by States.
Establish the MENA RSOO to assist States to resolve safety oversight deficiencies and carry out tasks and functions in the area of PEL, OPS, AIR, AGA and ANS.	Saudi Arabia, ACAO and ICAO	First MENA RSOO Steering Committee (Riyadh, 1 October 2018). Revised LoI was signed by 15 States. 1st MENA RSOO Technical Meeting (Riyadh, 2-4 February

SEI: Strengthening of States' Safety Oversight capabilities		
Actions	**Champion**	**Progress/Remarks**
		2019) to review MOA and Project Document. The meeting came up with a set of recommendations. 2nd MENA RSOO Technical Meeting (Riyadh, 9-10 March 2020) review States comments and finalize MOA and next course of actions to launch the operations to be endorsed by the MENA RSOO Steering Committee. Second MENA RSOO Steering Committee (TBD).
Organize Government Safety Inspector (GSI) Courses (OPS, AIR, ANS, and AGA).	ICAO	GSI Course ATM (Cairo, Egypt, 17-21 September 2017). GSI-AIR Course (Cairo, Egypt, 1-18 July 2018).
Conduct ICAO missions to States to provide assistance related to the preparation of USOAP-CMA activities.	ICAO	ICAO MID Office conducts mission to States to all States scheduled for USOAP-CMA activities.
Develop and implement a specific NCLB plan of actions for prioritized States according to established criteria.	ICAO/States/Stakeholders	The MID Region NCLB Strategy endorsed by the DGCA-MID/4 Meeting (Muscat, Oman, 17-19 October 2017). MID Region NCLB Strategy (Second Edition) was endorsed by DGCA-MID/5 (Kuwait, 4-6 November 2019) ICAO MID Office develop/ implement NCLB plan of actions in accordance with the established criteria in the Strategy.

SEI: Improve Regional Cooperation for the provision of Accident & Incident Investigation		
Actions	**Champion**	**Progress/Remarks**
Improve the draft version of the Strategy for the establishment of a Middle East RAIO, in	UAE in coordination with Bahrain, Saudi Arabia,	**Completed**

SEI: Improve Regional Cooperation for the provision of Accident & Incident Investigation		
Actions	**Champion**	**Progress/Remarks**
order to be presented and reviewed during the Workshop.	Sudan and the ICAO MID Office	
Organize the ACAO/ICAO AIG Workshop.	Saudi Arabia	**Completed** ACAO/ICAO AIG Workshop (Jeddah, Saudi Arabia, 25-27 April 2017).
Finalize the Strategy for the establishment of a Middle East RAIO by the ACAO/ICAO AIG Workshop.	States/ACAO/ICAO/Stake holders	**Completed**
Final endorsement by RASG-MID and the ACAO Executive Council.	ICAO and ACAO	**Completed** The Strategy endorsed by the DGCA-MID/4 Meeting (Muscat, Oman, 17-19 October 2017). The Roadmap for the implementation of the Strategy be further finalized by the RASG MID.
Organize MENASASI 2017 Seminar in Saudi Arabia.	Saudi Arabia	**Completed** 5th Annual MENASASI Seminar & Workshop (7-9 Nov 2017)
Organize workshop on implementation processes and procedures in AIG	Saudi Arabia	**Ongoing** Workshop on implementation processes and procedures in AIG (26-28 March 2019 in Jeddah)
Establishment of the AIG Core Team	States/ICAO/ACAO	**Completed**
Roadmap for AIG Regional Cooperation	States/ICAO	**Completed** RSC/6 meeting reviewed and updated the Roadmap for AIG Regional Cooperation. (Cairo, Egypt, 25-27 June 2018)
Develop a questionnaire and disseminate to States for surveying the current status of bilateral cooperation between MENA States (Level 1)	AIG Core Team ICAO States	**Completed** Replies to the AIG Questionnaire were received from eight (8) States. (Bahrain, Egypt, Iran, Morocco, Saudi Arabia, Sudan, UAE, and Yemen)

SEI: Improve Regional Cooperation for the provision of Accident & Incident Investigation		
Actions	**Champion**	**Progress/Remarks**
Analyse the received responses including the assessment of the effective implementation of the cooperation elements as listed in the Strategy (Level 1)	AIG Core Team	**Completed** Analysis report reviewed by the SST-MID/5 meeting. The meeting agreed that the level 1 is completed
- Develop a Draft Questionnaire to survey States AIG capabilities (Level 2) - Draft to be presented to the RASG-MID/7 meeting for endorsement.	AIG Core Team	**Completed** Replies to the AIG Questionnaire were received from eight (8) States. (Bahrain, Egypt, Iran, Jordan, Oman, Saudi Arabia, Sudan, UAE, and Yemen). RASG-MID/7 meeting agreed that the level 2 is completed
- Develop a Draft AIG Regional Cooperation Mechanism (ARCM) - AIG Core Team review the Draft ARCM and provide inputs/ comments to the Secretariat in order to consolidate an improved draft to be presented to the RASG-MID/7 for review before endorsement by the DGCA-MID/5 meeting	AIG Core Team	**Completed** - RASG-MID/7 agreed to its presentation to the DGCA-MID/5 meeting for endorsement. DGCA-MID/5 endorsed the ARCM.

SEI: Improve implementation of ELP requirements in the MID Region		
Actions	**Champion**	**Progress/Remarks**
Finalize a Questionnaire to be used as the basis of a survey to assess the implementation of ELP requirements.	UAE in coordination with the ICAO MID Office Ad-Hoc Action Group for ELP	RASG-MID/7 endorsed the final ELP Questionnaire.
Disseminate the Questionnaire to the MID States.	ICAO	SL Ref: ME 4-19/320 issued on 21 Oct 2019 and reply was received from Qatar. Reminder SL ME 4-19/361 was issued on 24 Nov 2019.
Analyse the survey results and agree on next course of actions.	Ad-Hoc Action Group for ELP MID-SST in coordination with the ATM SG	Five (5) States, namely, Egypt, Iraq, Oman, Qatar, and UAE, replied to the Questionnaire. The results of the ELP Questionnaire analysis was reviewed by RSC/7 meeting.

SEI: Sharing of Safety Recommendations related to Accidents and Serious Incidents		
Actions	**Champion**	**Progress/Remarks**
- Establish an Ad-hoc Action Group - Develop a study to select the best mechanism for sharing of safety recommendations, as well as a supporting Charter of Cooperation	Saudi Arabia and UAE	The RSC/6 meeting noted with appreciation that UAE will be the Champion for the implementation of this SEI. It was also agreed that details on actions and deliverables should be addressed by the MID-SST/5 meeting. It was agreed that the Regional Database should include safety recommendations related to accidents and serious incidents. UAE to provide update on the subject.

SEI: Enhance State Oversight on Dangerous Goods		
Actions	**Champion**	**Progress/Remarks**
- Capacity building of States Inspectors	TBD	The RASG-MID/7 meeting, April 2019 in Cairo, Egypt, agreed to a new SEI related to Dangerous Goods and requested the RSC to develop a new SEI's objectives and actions.
- Develop guidance materials for the oversight of DG (RASG-MID Safety Advisory)	TBD	ACAO/ICAO Dangerous Goods Workshop (Casablanca, Morocco, 5-7 October 2020). Dangerous Goods – Using The Technical Instructions for The Safe Transport of Dangerous Goods by Air The RSC/7 meeting agreed to the following SEI "Enhance State Oversight on Dangerous Goods" with actions including capacity building of States Inspectors and development of guidance materials for the oversight of DG

		(RASG-MID Safety Advisory, etc.). The meeting noted the FAA's willingness to support the SEI related to Dangerous Goods. Egypt shared with the RSC/7 meeting their experience related to training programme to enhance ELP for pilots and ATC to mitigate the risk of accidents occurring due to miscommunication. Egypt will present a proposal to the SEIG/1 meeting.

APPENDIX 3I

MID REGION SAFETY MANAGEMENT IMPLEMENTATION ROADMAP 2020-2025

1. Introduction

1.1 An SSP comprises a range of processes and activities that together provide a State with the means to manage safety and to deliver well-directed safety oversight. An effective SSP assists States to proactively identify hazards and mitigate safety risks at the national level. It is the foundation on which a State builds a proactive approach to national aviation safety.

1.2 Effective SSP implementation is a gradual process. The State plans, organizes, develops, implements, maintains, controls and continuously improves the SSP in a manner that meets its safety objectives. The complexity of the air transportation system and the maturity of the State's safety oversight capabilities determine the time required to achieve a fully mature SSP. The level of effective implementation of an SSP in the State affects its relationship with the national aviation safety plan.

2. Objective

2.1 Assist MID States to comply with the requirement for the implementation of the State Safety Programmes (SSPs) by States and the SMS by service providers as established in the Annex 19, Safety Management, Global Aviation Safety Plan (GASP) and MID Region Safety Strategy. The Roadmap is to be linked to the MID NCLB Strategy in order to support the States in a prioritized manner and will be implemented within the RASG-MID framework.

GASP 2020-2022

2.2 Goal 3 of 2020-2022 edition of the GASP calls for the implementation of effective SSPs. The goal addresses organizational challenges faced by States when implementing an SSP and includes the implementation of SMS by service providers within individual States, in accordance with Annex 19. Two targets are linked to this goal and they represent a phased approach to SSP implementation, as follows:

- Target 3.1 calls for all States to implement the foundation of an SSP by 2022.

- Target 3.2 calls for all States to implement an effective SSP, as appropriate to their aviation system complexity by 2025. An "effective SSP" refers to an SSP that actually achieves the objectives that it is intended to achieve.

MID Region Safety Strategy

2.3 The Strategy was developed in line with the GASP taking into consideration specific needs identified within the framework of the Regional Aviation Safety Group-Middle East (RASG-MID). Goal 5 is related to the Implementation of Effective SSPs and SMSs with the following targets:

- 13 States that have completed the SSP Gap Analysis on iSTARS by 2020
- 13 States that have developed an SSP implementation plan by 2020
- Regional Average SSP Foundation of 70% by 2022
- 10 States that have fully implemented the SSP Foundation by 2022
- 10 States that have established an ALoSP by 2025
- 7 States that have implemented an effective SSP by 2025

SSP Gap Analysis

2.4 A State moving into SSP implementation should conduct an SSP gap analysis to ensure it is ready to begin SSP implementation. It should use the ICAO iSTARS SSP Gap Analysis application to complete this process. If a State already has an effective SSP, it can use the established safety risk management process to identify hazards.

SSP foundation PQs

2.5 The term "foundation of an SSP" refers to a subset of the USOAP PQs that have been identified as fundamentals and are considered as prerequisites for sustainable implementation of the full SSP. These are referred to as "SSP foundational PQs". SSP foundational PQs are grouped in nineteen subject areas derived from Annex 19 and Doc 9859. States can prioritize and address these PQs when conducting the SSP gap analysis or while defining the SSP implementation/action plan. The concept of "foundation of an SSP" is intended to replace the 60 per cent EI score previously used in the GASP as a threshold to progress into implementation of the SSP. The intent is that these PQs be included in the SSP implementation planning to ensure sustainability.

National Aviation Safety Plan

2.6 Assembly Resolution A39-12 on ICAO resolves that States should develop and implement national aviation safety plans, in line with the goals of the GASP. Each State should produce a national aviation safety plan. If the State has implemented an SSP, the plan should be linked to this Programme. If the State has other national plans, the national aviation safety plan should be linked to these, as appropriate. The national aviation safety plan presents the strategic direction for the management of aviation safety at the national level, for a set time period (e.g. over the next five years). It outlines to all stakeholders where the CAA and other entities involved in the management of aviation safety should target resources over the coming years.

SSP Implementation Assessment (SSPIA)

2.7 The SSPIA Programme has been rolled out beginning 2018, however the perquisite for scheduling an SSPIA as follows:

- Evidence of a robust and sustainable safety oversight system and aircraft accident/serious incident investigation system (including implementation aspects);
- Evidence of effective mandatory safety reporting system, aircraft accident and incident database and safety analyses; and
- Effective completion and updates of PQ self-assessment by the State (for both "legacy" PQs and SSP-related PQs.

-

2.8 The SSPIA broken down into 8 areas: GEN (SSP general aspects), SDA (safety data analysis), PEL, OPS, AIR (AMO aspects only), ANS (ATS aspects only), AGA, and AIG.

3. Scope

3.1 Based on the data analysis at **Appendix A**, the followings are grouping schemes of States for the SSP implementation proposed:

a. Tier 1: States that currently have a validated SSP Foundation Index above 85%, agree with the ICAO MID Office for an initial assessment mission to be followed by the development of a SSP Implementation Plan (in coordination with the State), in order to receive necessary technical assistance.

b. Tier 2: States that have a validated SSP Foundation Index between 75% and 85%, agree with the ICAO MID Office for an initial assessment mission to be followed by the development of a SSP Implementation Plan (in coordination with the State), in order to receive necessary technical assistance.

c. Tier 3: States that have a validated SSP Foundation Index below 75%, agree with the ICAO MID Office for an initial assessment mission to be followed by the development of a SSP Implementation Plan (in coordination with the State), in order to receive necessary technical assistance.

4. Implementation of the Roadmap

4.1 In order to achieve the objectives and goals of the Roadmap, a Safety Management Implementation Team (SMIT) will be established, with the objective to conduct assistance missions to States, provide workshops and training under the leadership of ICAO in line with the MID Region NCLB Strategy. The main functions and responsibilities of the SMIT are:

a. assist and support MID States to develop and implement SSP and SMS for Service Providers
b. assist and support States to complete the SSP Gap Analysis and Implementation Plans
c. provide SSP workshops and trainings including risk management, safety assurance, safety culture, as required

4.2 The Team will be composed of SMEs from the MID Office, States and other Stakeholders, as needed.

4.3 States are encouraged to provide support for the implementation of the Roadmap.

4.4 The ICAO MID Office will coordinate and monitor the Roadmap's implementation in coordination with the Safety Enhancement Implementation Group (SEIG), and provide technical assistance on this matter.

5. Activities

5.1 The activities comprise direct actions to assist MID States to complete the implementation of every element required for the SSP implementation, including,

a) meet with State high level decision makers to establish and empower the SSP implementation team;
b) conduct an initial assistance mission to determine the State main achievements and identify opportunities for enhancement which will be culminated with the development of an SSP implementation action plan in coordination with the State;
c) assist and support States to complete the SSP Gap Analysis and Implementation Plans;
d) monitor and assess the maturity of the State SSP Implementation;

e) provide SSP workshops and trainings including risk management, safety assurance, safety culture, as required;
f) assist and support State in the development of the SSP documentation including processes/procedures, etc.;
g) prepare States for the USOAP –SSP Implementation Assessment (SSPIA); and
h) follow-up implementation missions, as required.

6. Monitoring the progress of the SSP implementation

6.1 ICAO MID Office will monitor the progress of the MID Region SSP implementation Roadmap 2020-2025 in line with the GASP and MID Region Safety Strategy.

7. Benefits

7.1 The main benefits are to:

a) improve the level of implementation of SSP for States and SMS for Service Providers; and
b) achieve the objectives and targets of the GASP and MID Region Safety Strategy.

8. Beneficiaries

8.1 The main beneficiaries are MID States and their associated civil aviation systems including service providers.

Appendix A: MID Regional Status

a. The implementation of SSP requires certain maturity level of implementation of Critical Elements (CEs) and areas to support an effective safety oversight system that integrates the prescriptive and the performance base concept.

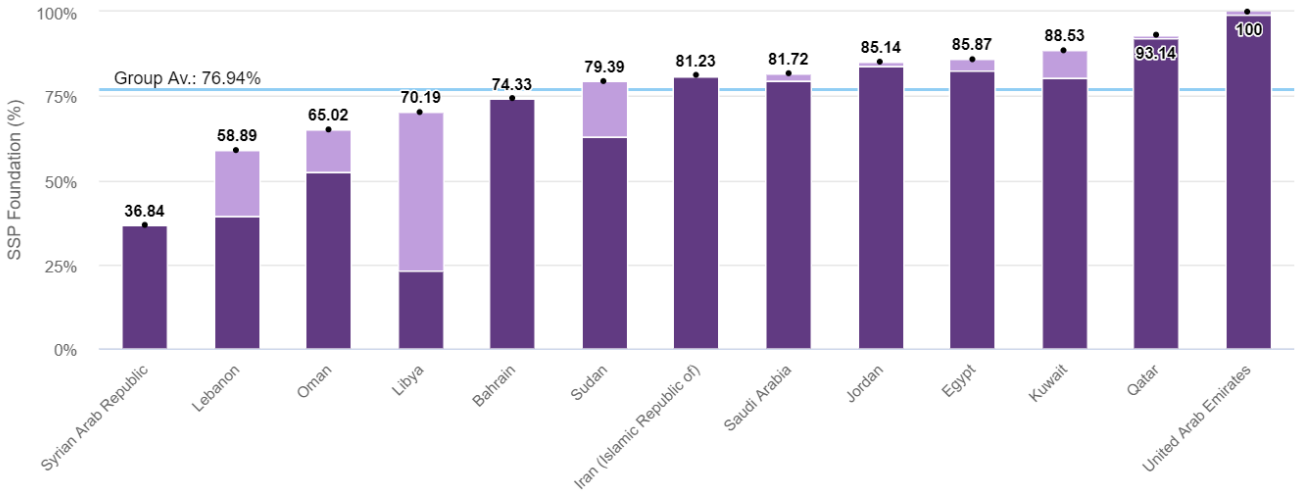
b. ICAO also developed the SSP Foundation PQ tool, which is available on SPACE/iSTARS 3.0. This application displays a sub-set of 299 PQs out of the 1,047 PQs used to calculate the USOAP EI level. This sub-set of PQs is considered as the foundation for an effective SSP implementation. The SSP Foundation Indicator is calculated, as the percentage of PQs which are either validated by USOAP or submitted as completed through the Corrective Action Plans (CAP) on the USOAP CMA Online Framework (OLF). This sub-set of PQs aims to assist the States to build a solid safety oversight foundation for the implementation of SSP and identify the real gap.

c. The analysis of the SSP implementation in this report is based solely on States' responses (self-assessment) using the ICAO Integrated Safety Trend Analysis and Reporting System (iSTARS) portal.

MID Region States overall SSP foundation status

The Graph 1 shows that the overall SSP Foundation Protocol Questions (PQs) results by State as follows:

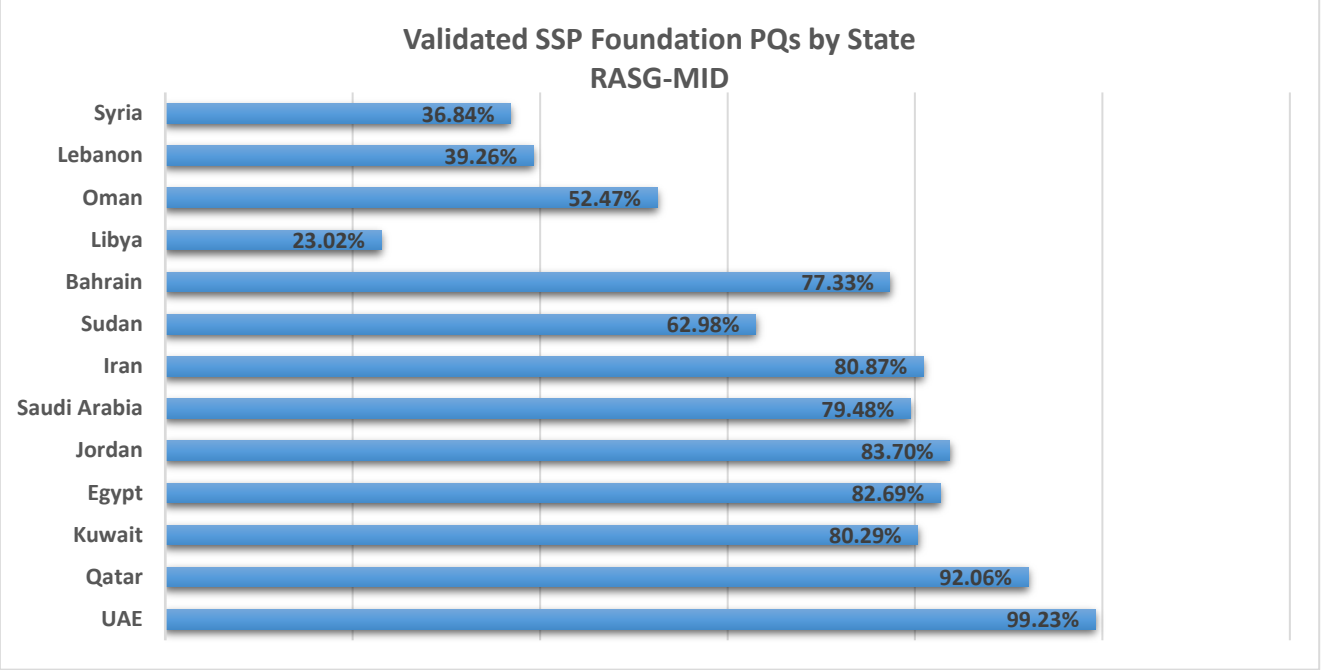
a. Above 95% (1 States): United Arab Emirates
b. Between 80-91 (6 States): Qatar, Kuwait, Saudi Arabia, Jordan, Egypt, Iran;
c. Between 74-80% (3 States): Bahrain, Sudan, Libya; and
d. Below 74% (3 States): Syria, Lebanon, Oman.



Graph 1: Over all SSP Foundation (RAG-MID) Source: iSATRS on 28 Nov 2019

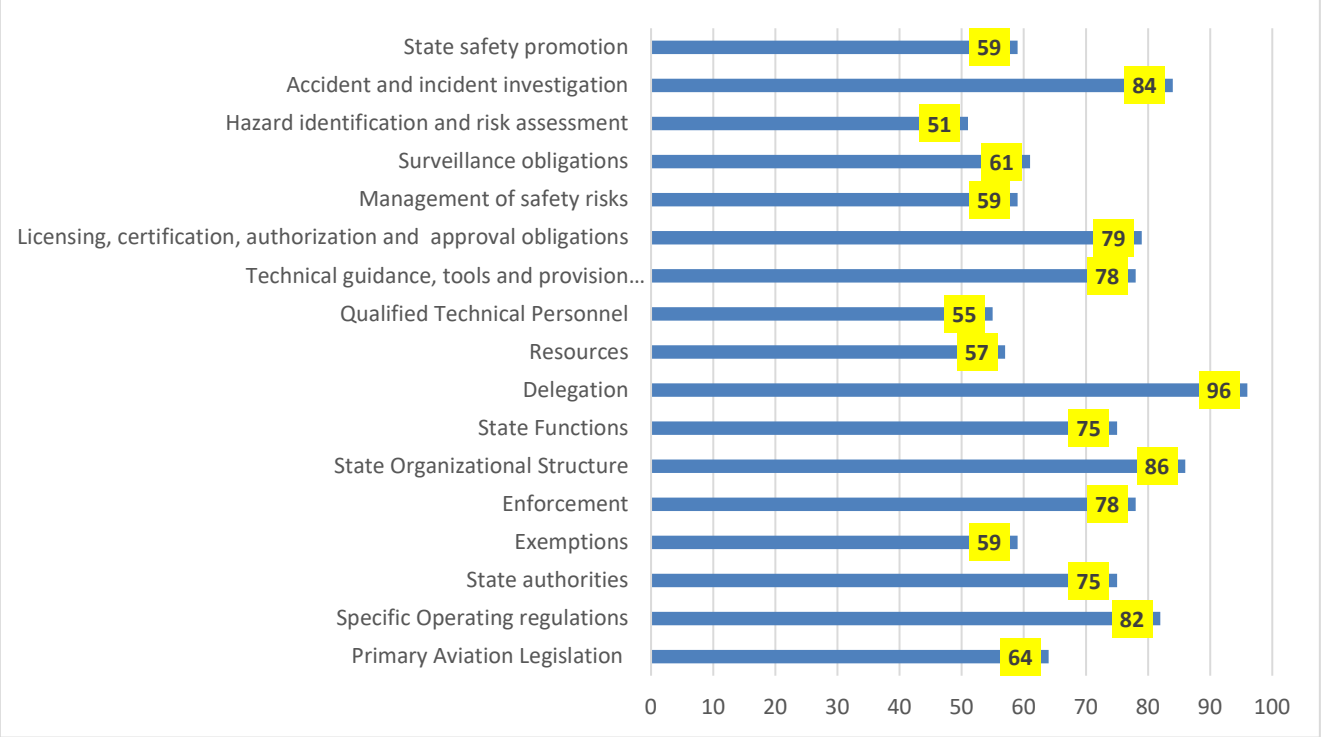
The Graph 2 shows that the validated SSP Foundation Protocol Questions (PQs) results by State:

a. Above 85% (2 States): United Arab Emirates and Qatar
b. Between 75%-=85% (6 States): Kuwait, Saudi Arabia, Jordan, Bahrain, Egypt, Iran; and
c. Below 75% (3 States): Sudan, Libya, Syria, Lebanon, Oman.



Graph 2: Validated SSP Foundation by State- (RASG-MID) Source: iSATRS on 28 Nov 2019

The Graph 3 includes the sub-set of PQs are grouped by 17 subjects based on the Annex 19 amendment 1 and the 4th edition of the Safety Management Manual (forthcoming). States with EI above 60% may still have PQs to address which are fundamental for their SSP. These PQs can be prioritized and addressed when conducting the SSP Gap Analysis or while defining the SSP implementation/action plan Hazard identification and risk assessment is the lowest one with 51%, followed by qualified technical personnel with 55%, resources with 57%, and management of safety risks with 59%.

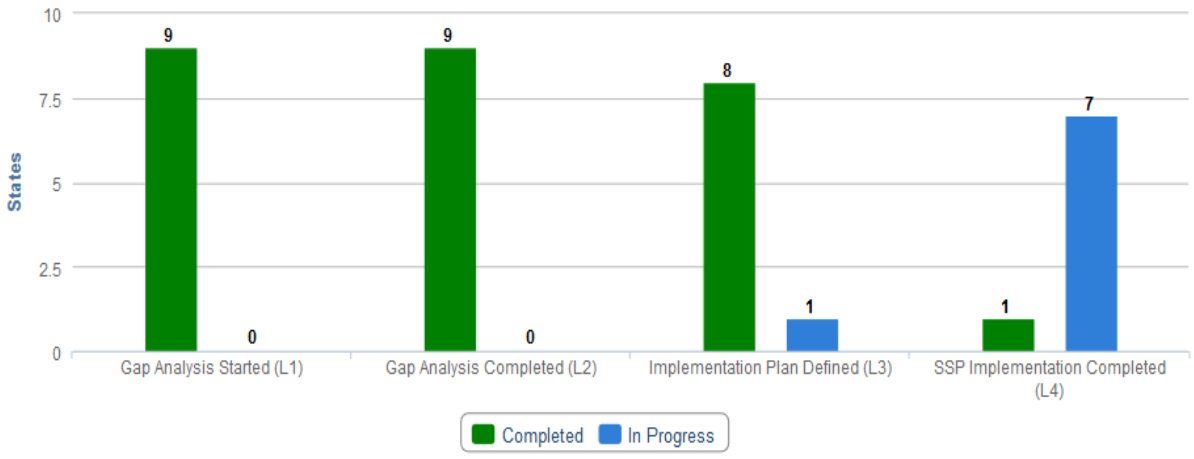


Graph 3: Average EI by Safety Management subjects for States in MID Region (Source: iSTARS as of 30 Oct 2019)

MID Region States SSP implementation progress (Gap Analysis)

The SSP statistics shown in the graph 4 are high-level information about each Gap analysis project performed by States themselves (Self-reported by the State and not validated by ICAO). SSP implementation progress has been measured for each State using simple milestones as per the entered data.

The estimated SSP maturity/implementation levels are shown in the graph 2. It shows that the majority of MID Region Member States have still not closed all actions and fully implemented their SSP.



Graph 4: Source: iSATRS on 28 Nov 2019

Code	State Name	Progress	Level (Up %)	
BHR	Bahrain	SSP Implementation Completed	**L4 / 100% L4**	●●●●
EGY	Egypt	Implementation Plan Defined	**L3 / 33.3% L4**	●●●○
IRN	Iran (Islamic Republic of)	Gap Analysis Completed	**L2 / 33.3% L3**	●●○○
JOR	Jordan	-		○○○○
KWT	Kuwait	Implementation Plan Defined	**L3 / 16.7% L4**	●●●○
OMN	Oman	Implementation Plan Defined	**L3 / 35.7% L4**	●●●○
QAT	Qatar	Implementation Plan Defined	**L3 / 88.1% L4**	●●●●
SAU	Saudi Arabia	Implementation Plan Defined	**L3 / 97.6% L4**	●●●●
SDN	Sudan	Implementation Plan Defined	**L3 / 92.9% L4**	●●●●
ARE	United Arab Emirates	Implementation Plan Defined	**L3 / 76.2% L4**	●●●●

APPENDIX 3J

ENGLISH LANGUAGE PROFICIENCY QUESTIONNAIRE

DATA ANALYSIS

QUESTIONS	STATES														
	Bahrain	**Egypt**	**Iran**	**Iraq**	**Jordan**	**Kuwait**	**Lebanon**	**Libya**	**Oman**	**Qatar**	**S.A.**	**Sudan**	**Syria**	**UAE**	**Yemen**
	Yes/No	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*	*Yes/No*
1. Has your State promulgated English Language Proficiency regulations taking into account the required level of proficiency in accordance with Annex 1-*Personnel Licensing*?		Yes		Yes					Yes	Yes				Yes	
If yes:									2008					2007	
(a) *since when? Year:*		2008		2008						2007					
(b) *did you refer to ICAO Doc 9835 in your regulation?*		Yes		Yes					Yes	Yes				Yes	
(c) *List which of the following aviation discipline your Language Proficiency (local, national, regional, or English language) regulation covers.*		English language only for Pilots, ATCs, and free balloons pilots		English language only for Pilots and ATCs					English language only for Pilots and ATCs	English language only for Pilots and ATCs				English language only for Pilots, ATCs, and free balloons pilots	

2. Has the State implemented a system for the endorsement of language proficiency on the licence issued?		Yes		Yes					Yes	Yes				Yes	
3. Has your State promulgated regulation for language testing standards?		Yes		Yes					Yes	Yes				Yes	
4. Has your State promulgated regulations requiring formal demonstration of proficiency for individuals qualified below the Expert Level (Level 6)? - *Are these individuals to be evaluated at intervals at least once every three years for those demonstrating language proficiency at the Operational Level (Level 4), and at least once every six years for those demonstrating language proficiency at the Extended Level (Level 5)?*		Yes Yes		Yes Yes					Yes Yes	Yes Yes				Yes Yes	
5. Has your State promulgated regulation for implementation of English Level Proficiency Assessment bodies?		Yes		No					Yes	Yes				Yes	
6. Does your State certify or approve English Level Proficiency assessment bodies?		Yes		Yes					Yes	Yes				Yes	

7. Does your State aviation authority have an oversight system of English Level Proficiency assessment bodies?		Yes		No					Yes	Yes				Yes	
8. Has your State promulgated regulation for assessors' qualifications?		Yes		No					No	Yes				Yes	
9. Does your State monitor the test results and use the results for quality enhancement?		Yes		Yes					Yes	Yes				Yes	
10. Does your State have process or mechanism to deal with foreign licence holders (ELP assessed in foreign territory) at time of conversion?		Yes		Yes. For pilots only					Yes						

APPENDIX 3K

Aerodrome Operations SEIs Progress Report

	Completed
	In Progress
	Delayed

RASG-MID SEI/1 : Development of guidance material and training programmes to support the creation of action Plans by the Runway Safety Team (RST)		
Deliverables	**Champion**	**Progress/Remarks**
Develop and issue Stop Bar guidance documentation for consideration of LRSTs	UAE	*Completed*
Organise a Workshop for Regional RST Go-Teams	UAE	*Completed*
Develop and issue regulatory framework supporting establishment of LRSTs	UAE	*Completed*
Develop and issue a model checklist for LRSTs	UAE	*Completed*

RASG-MID SIE/2: Development of guidance material and training programmes to support Aerodrome Infrastructure and Maintenance Management		
Deliverables	**Champion**	**Progress/Remarks**
Conduct a MID-Regional Runway Safety Seminar	UAE	*Completed*
Organise a Regional Aerodrome Certification Workshop	UAE	*Completed*
Develop a MID-Region Aerodrome Certification toolkit for States.	UAE	*Completed*
Develop and issue guidance material on periodic surveillance audits of Aerodrome Infrastructure and Maintenance	UAE	*Completed*
Develop and issue guidance material as RSA on proactive oversight of Aerodrome Infrastructure Development	UAE	*In Progress* : To be concluded by 2018.

RASG-MID SEI/3 : Aerodrome Safeguarding		
Deliverables	**Champion**	**Progress/Remarks**
Safeguarding Guidance Toolkit	Egypt	*Completed*
Regional Safeguarding Workshop	Egypt	*Completed*

RASG-MID SEI/4: Wildlife Hazard Management and Controls		
Deliverables	**Champion**	**Progress/Remarks**
RSA for Regulatory Framework & Guidance Materials	Sudan	*Completed*
Wildlife Hazard Management Plan Template	Sudan	*Completed*
Wildlife Management Control Workshop	Sudan	*Completed*

RASG-MID SEI/5: Laser Attacks		
Deliverables	**Champion**	**Progress/Remarks**
RSA for Guidance Material	Egypt	*Completed*
Amended RSA-12	Egypt	*Completed*
ICAO to issue State Letter to promulgate regulations on Laser Attacks	Egypt	*Completed*
RSA with Case Studies	Egypt	*Completed*

RASG-MID SEI/6: Ground Handing Operations and Safety		
Deliverables	**Champion**	**Progress/Remarks**
RSA for Aerodrome Apron Management	UAE	*In Progress* : Advisory Circular on Apron Management Safety provided by UAE to be reviewed by the States.
Seminar on Ground Handling (Safety)	ICAO MID	*In Progress* : Ground Handling Seminar will be held back to back with the RGS WG/6.

RASG-MID SEI/7: ARFF and Emergency Planning		
Deliverables	**Champion**	**Progress/Remarks**
Develop a survey on ARFF/AEP level of implementation	Egypt	*In Progress*
Present Survey Results to RGS WG for consideration of other required actions	Egypt	*In Progress*

RASG-MID SEI/8: Safety Management		
Deliverables	**Champion**	**Progress/Remarks**
Organize SMS Training/Workshop	ICAO	*Completed*
Develop Aerodrome SMS Compliance and Effectiveness Toolkit	UAE	*Completed*
Present Toolkit at the Aerodrome SMS Workshop	UAE	*Completed*

RASG-MID SEI/9: Runway Excursions		
Deliverables	**Champion**	**Progress/Remarks**
RSA for Monitoring and Reporting Runway Surface Conditions	FAA	*Delayed: follow-up actions will be taken based of the outcome of the GRF2019.*
State Letter urging States to report the incidents on Annual Basis to the ICAO MID Office in conjunction with MID-ASRT.	ICAO	*Delayed: follow-up actions will be taken based of the outcome of the GRF2019.*

APPENDIX 3L

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

1- Background

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

Whereas Assembly Resolution A36-10, inter-alia:

- urges Contracting States to undertake every effort to enhance accident prevention measures, particularly in the areas of personnel training, information feedback and analysis and to implement voluntary and non-punitive reporting systems, so as to meet the new challenges in managing flight safety, posed by the anticipated growth and complexity of civil aviation;

- urges Contracting States to cooperate with ICAO and other States in a position to do so, in the development and implementation of accident prevention measures designed to integrate skills and resources to achieve a consistently high level of safety throughout civil aviation;

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

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

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

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

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

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

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

Recognizing that combined with the expected increase in air transport operations, the relatively unchanged trend in the accident rate over the past several years might lead to an increase in the number of accidents per year;
Recognizing that there are many challenges to effective accident prevention, and that more effective identification and correction of aviation hazards and system deficiencies are required in order to complement regulatory efforts in further reducing the number of worldwide accidents and to improve the accident rate;

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

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

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

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

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

Considering the challenges related to the establishment of a RAIO;

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

2- Objective

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

3- Methodology

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

Level 1:

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

Level 2:

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

Level 3:

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

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

4- Strategic Plan

(a) States are urged to develop and further strengthen regional/sub-regional cooperation for accidents and incidents investigation.

(b) MENA States should take necessary measures to reach at least level 2.

(c) An implementation Roadmap for MENA States should be developed, under the framework of RASG-MID, to provide the details and timelines related to the implementation of the different levels.

(d) Key Performance Indicators (KPIs) should be developed for the monitoring of the implementation of the Roadmap to ensure that the agreed goals are achieved.

(e) The decision on whether to continue towards the establishment of a full MENA RAIO, or to be satisfied with level 2 cooperation, will be taken in due course, depending on the achievement of the expected KPIs/goals.

ATTACHMENT 1

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

	Level 1 (Bilateral Agreements)	**Level 2 (Regional Cooperation Mechanism)**	**Level 3 (RAIO)**
Investigation regulations	Individual, but a State can benchmark the other State	Harmonized and coordinated by a voluntary State	RAIO-centralized
Oversight of the State investigation authority	Individual, but a State may conduct a peer-review upon the other State request	Pooled peer-review group maintained by a voluntary State	RAIO oversight (either by a RAIO group or by outsourced organization)
Funding of conducting investigations	The State responsible for initiating the investigation holds the cost	The State responsible for initiating the investigation holds the cost	Investigations into certain category of accidents are conducted by RAIO based on published criteria. Cost share is determined by RAIO
Funding of regional investigation organization	-	-	Centralized fund by States' contributions

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APPENDIX 3M

ROADMAP FOR AIG REGIONAL COOPERATION

Level of Cooperation	Action		Target date	Deliverable	Champion	KPI
	No.	**Description**				
Level 1 Cooperation among MENA States under the framework of Annex 13 and/ or a standard bilateral MoU to share, on ad-hoc basis, resources, training, information, documentation and capabilities; and strengthen conformity with Annex 13	**1**	Develop a questionnaire and disseminate to States through a State Letter for surveying the current status of the MENA States in bilateral cooperation, and their willingness to move to Level 2	30 Sep. 2018	Survey	AIG Core Team ICAO States	Number of States' responses
	2	Analyze the received responses including the assessment of the effective implementation of the cooperation elements as listed in the Strategy (Level 1)	31 Oct. 2018		AIG Core Team	• Number of bilateral agreements per State • Level of effective implementation of Level 1 elements • Number of States willing to move to Level 2
Level 2 Cooperation among MENA States under the framework of a regional cooperation mechanism (well-defined scope and set of coordinated, organized and harmonized procedures and mechanisms) for the conduct of accidents and serious incidents investigation	**3**	Develop a Draft Questionnaire to survey States AIG capabilities	31 Dec. 2018	Draft Questionnaire	AIG Core Team	
	4	Develop a Draft AIG RCM	31 Dec. 2018	Draft AIG RCM	AIG Core Team	
	5	Endorsement of the Questionnaire by the RASG-MID/7 Meeting	Apr. 2019	RASG-MID/7 Report	ICAO/RASG-MID	Questionnaire endorsed
	6	Endorse the Draft AIG RCM by the DGCA-MID/5 Meeting and ACAO EC	Nov. 2019	DGCA-MID/5 Report and ACAO EC Report	ICAO/DGCA-MID/5 ACAO EC	AIG RCM endorsed
Remaining level 2 actions will be detailed in due course						

APPENDIX 3N

AIG Regional Cooperation Mechanism (ARCM)

Middle East and North Africa (MENA)

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1. VISION AND MISSION OF THE ARCM

1.1 The MENA AIG Regional Cooperation Mechanism (ARCM) is a mechanism, which will foster the cooperation among MENA member States for the provision of AIG functions. The ARCM will create a platform to support States requesting assistance for fulfilling their investigation obligations. This will make investigation capabilities and outcomes of the investigation within the Region more effective.

1.2 The ARCM is NOT an entity with legal status, and its work will be with no financial implications. Any expenses for applying this ARCM provisions will be covered by the Member State requesting such services or as agreed by both parties (requestor and provider(s)).

2. PARTICIPANTS

2.1 Participation in the ARCM is open to all MENA member States interested to join the ARCM.

3. ARCM OBJECTIVES

3.1 The main objectives of the ARCM are to:

a) increase and facilitate cooperation and collaboration among ARCM member States with respect to aircraft accident and incident investigation;

b) make utmost use of AIG resources available in the MENA member States, including expertise, training capabilities, equipment, investigation know-how and information, standards and guidance, etc.;

c) facilitate actions aiming at increasing the qualifications and experience of accident investigators in MENA member States;

d) encourage the development of investigation common standards, rules and regulations consistent with the ICAO provisions. The MENA member States will also be encouraged to use a standard Template of investigation regulations for the development of their National Regulations; and

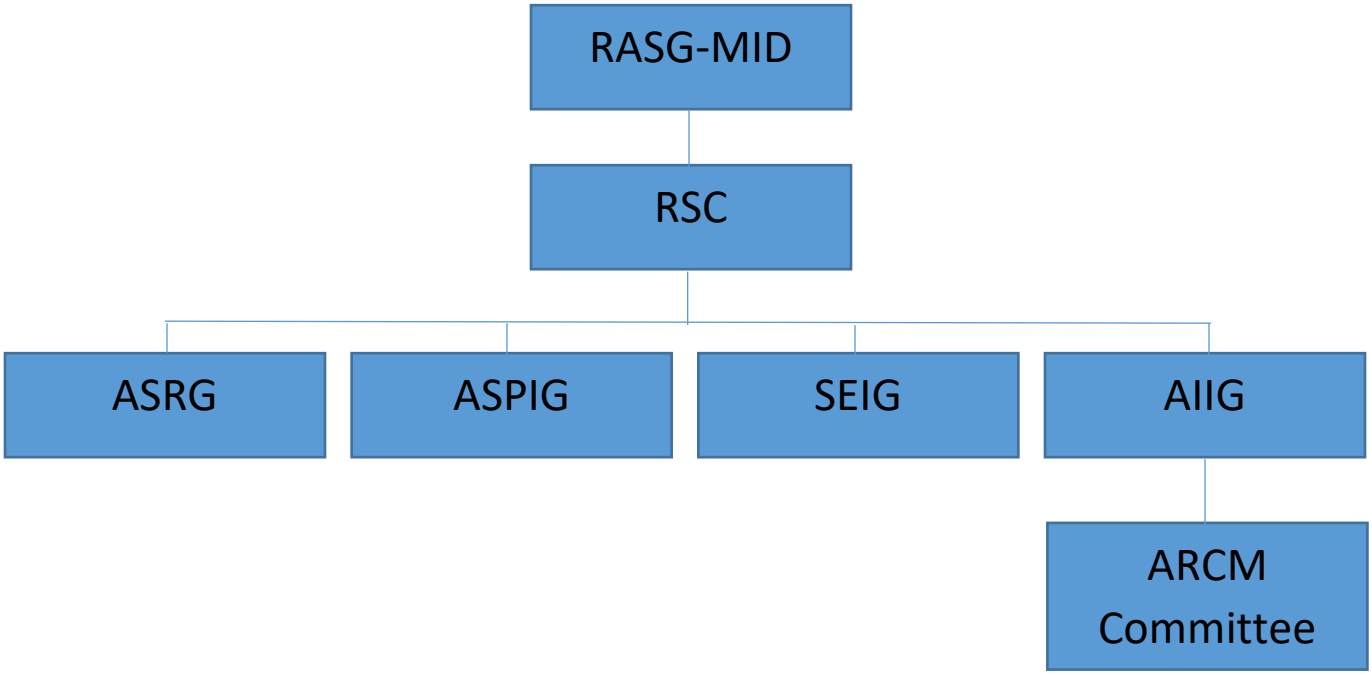
e) encourage the development of a common accident and incident database for the MENA member States, and utilize this database for identifying operational safety risks and their corresponding controls.

4. ARCM ORGANIZATIONAL STRUCTURE

4.1 The ARCM Committee shall consist of focal points nominated by each Member State.

4.2 The ARCM Committee is responsible for the overall supervision, direction, and management of the ARCM.

4.3 The ARCM Committee will be reporting to the RASG-MID through the Accident and Incident Investigation Group (AIIG), as shown in the following Organization Structure:



APPENDIX 3O

DRAFT MENA ARCM IMPLEMENTATION ACTION PLAN

Objectives	Action		Timeframe	Deliverable	Champion
	No.	Description			
Development and signature of the MOU among the ARCM States	**1**	ARCM focal points meeting to develop an initial Draft MENA ARCM MOU	1-4 June 20	Initial Draft of the MENA ARCM MOU	ARCM States ICAO ACAO
	2	Circulate the Draft MENA ARCM MOU to focal points for review and comments /inputs indicating, inter-alia, their willingness to sign the MOU	7 June 20	Draft MENA ARCM MOU	ARCM States ICAO ACAO
	3	Presentation of the Draft MENA ARCM MOU for review and approval by the AIIG	21 June 20	Approval of the MENA ARCM MOU	ARCM States ICAO ACAO
	4	Circulate to the States the MENA ARCM MOU for Signature	1 July 20	Signed MENA ARCM MOU	ARCM States
	5	Progress report on MENA ARCM MOU to RASG-MID and ACAO EC	Mar 2021	Progress Report	ACAO/ICAO
Development of ARCM organization and functions manual	**6**	Draft proposal on ARCM organization and functions manual	1-4 June 20	Initial Draft	ARCM ICAO ACAO
	7	Review and Approval of the Initial Draft by AIIG	22 June 20	Approval of the manual	ARCM ICAO ACAO
	8	Progress report on ARCM organization and functions manual to RASG-MID and ACAO EC	Mar 2021	Progress Report	ACAO/ICAO
Establishment/launch of the ARCM	**9**	Establishment of the ARCM database (Investigators, Trainings, tools, equipment, etc)	Jun 2021	ARCM database	ARCM ICAO ACAO
	10	Sharing of Human Resources, training, tools, equipment, etc	TBD	Cooperation/ Sharing of resources	ARCM
	11	Development of ARCM Accidents & incidents investigation procedures Manual	TBD	Procedures Manual	ARCM
	12	Harmonization of MENA ARCM AIG Training Programmes	TBD	Harmonized AIG Training Programmes	ARCM

	13	Development of a common accident and serious incident database for identifying operational safety risks	TBD	Common accident and serious incident database	ARCM ICAO ACAO
Update the DGCA-MID and ACAO GA/EC on MENA AIG ARCM	**14**	Progress report to the DGCA-MID/6 and ACAO GA/EC	Nov 2021	TBD	ICAO ACAO

APPENDIX 4A

Coordination between MIDANPIRG and RASG-MID

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

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

APPENDIX 5A

GENERIC TERMS OF REFERENCE OF REGIONAL AVIATION SAFETY GROUPS (RASGs)

1. MEMBERSHIP

1.1 All ICAO Contracting States, and Territories recognized by ICAO, within the area of accreditation of the ICAO Regional Office(s) concerned shall be members of the regional aviation safety group (RASG) established for that (these) region(s).

2. PARTICIPATION

2.1 In addition to States, the importance of a collaborative and proactive role by airspace users, international and regional organizations, and industry should be recognized due to their involvement in the rapid pace of technological development, expertise and other opportunities for sharing of resources.

2.2 RASG meetings are open to all members. Each State/Territory member should be represented by a senior-level delegate nominated by the State/Territory, preferably from the civil aviation authority (CAA) in order to support related policy-making within the State. A delegate may be supported by an alternate delegate and/or advisers with the requisite technical knowledge in the subject matters under consideration.

2.3 The CAAs should be supported by representatives from service providers and industry.

2.4 States located outside the area of accreditation of the ICAO Regional Offices concerned can be invited on a case-by-case basis and in accordance with the *Regional Office Manual* to attend as observers.

2.5 International organizations recognized by the ICAO Council to participate in ICAO meetings should participate, as observers, in the RASG meetings, and be encouraged to do so. Other stakeholders may be invited as observers, when required, to contribute to the work of the RASG.

2.6 The participation of industry stakeholders should take into account relevant capabilities such as an involvement in the rapid pace of technological development, specific knowledge and expertise, and other opportunities including sharing of resources.

2.7 Civil aviation commissions/conferences in particular the Arab Civil Aviation Organization, African Civil Aviation Commission, European Civil Aviation Conference and Latin American Civil Aviation Commission, may be invited to participate in the work of the RASGs.

2.8 The members and observers will serve as partners in RASGs, and their joint commitment is fundamental for success in improving safety worldwide.

2.9 RASG meetings should be live-streamed, to the extent possible, to enable additional State participants to follow the proceedings.

3. WORKING ARRANGEMENTS

3.1 Structure

3.1.1 RASGs have the obligation to apply the most effective and efficient organizational structure and meeting modalities that best suit the characteristics of each region's implementation work programme while maintaining to the extent possible, alignment with these Terms of Reference, the regional work programme and the Global Aviation Safety Plan (GASP).

3.1.2 The ICAO Regional Director(s) will serve as the Secretary of the RASG. Wherever two Regional Directors are involved, they will periodically rotate between serving as Secretary of the RASG and planning and implementation regional group (PIRG) to balance the Secretariat responsibilities between these two regional groups. The Secretary of the RASG, in coordination with the Secretary of the PIRG, will establish the date, methodology and the procedure to be applied for the rotation.

3.1.3 The organization of the RASG should address global and region-specific safety-related matters, and meetings should be closely coordinated between the RASG and PIRG chairpersons and the Secretariat. RASG and PIRG meetings should be held back-to-back or combined to facilitate coordination and to ensure the efficient use of resources.

3.1.4 The RASGs shall be administered by a chairperson and one or two vice-chairpersons elected from the State-nominated delegates present. The RASGs will establish the cycle of elections. Exceptionally, at the discretion of each RASG, vice-chairpersons or a co-chairperson may be elected from the international and regional organizations, and/or industry present.

3.1.5 The RASG will build on the work already done by States, ICAO Regional Offices and existing regional and sub-regional organizations (such as the cooperative development of operational safety and continuing airworthiness programmes, regional safety oversight organizations (RSOOs), regional accident and incident investigation organizations (RAIOs) and industry) to support the establishment and operation of safety management processes for the region(s).

3.1.6 RASGs contributory bodies may be created by the RASG to discharge the RASG work programme by working on defined subjects requiring detailed technical expertise. A contributory body shall only be formed when it has been clearly established that it is able to make a substantial contribution to the required work. A contributory body will be dissolved by the RASG when it has completed its assigned tasks or if the tasks cannot be usefully continued.

3.1.7 Invitations to RASG meetings must be issued at least three months in advance of the meeting to assist States to plan participation.

3.1.8 The Secretariat will review and update the RASG Handbook periodically, and as required, to ensure a result-oriented approach.

3.1.9 Where the meeting is held in more than one ICAO working language, interpretation services shall be made available to facilitate participation in the deliberations and adoption of the report by all participants.

3.1.10 States, international organizations and industry are invited to submit working papers, research works, etc. in order to enhance the work of the RASG and its contributory bodies. To ensure proper

time for consideration and good decision-making, the Secretary should ensure that all working papers are available at least fourteen days prior to the start of the meeting for consideration.

3.2 **Venue**

3.2.1 RASG meetings will be convened in the Regional Offices, to the extent possible, to facilitate proper access by States. Approval to host RASG meetings outside of the Regional Office must be obtained from the President of the Council.

3.2.2 The Secretary General will ensure the allocation of the necessary financial resources to host RASG meetings.

3.2.3 RASG contributory bodies may be convened at a different location, if required, to be determined by the Secretary and Chairpersons of the RASG, and contributory body. Venues shall be chosen with the primary aim of facilitating maximum State attendance.

3.3 **State Role**

3.3.1 State CAAs, supported by service providers as necessary, should participate in the work of the RASG and its contributory bodies to:

a) ensure the continuous and coherent development and implementation of regional safety plans and report back on the key performance indicators (KPIs);

b) support the regional work programme with participation from the decision-making authority with the technical expertise necessary for the planning and implementation mechanism, thus supporting policy decisions at the State level;

c) support the implementation of effective safety management and collaborative decision-making processes to mitigate aviation safety risks, thus supporting policy decisions at the State level;

d) contribute information on safety risk, including State safety programme (SSP) safety performance indicators (SPIs, in accordance with the GASP as part of their safety risk management activities;

e) ensure coordination, at the national level, between the CAA, service providers and all other concerned stakeholders, and harmonization of the national plans with the regional and global plans;

f) facilitate the development and establishment of Letters of Agreement and bilateral or multilateral agreements;

g) ensure the implementation of the GASP goals and targets; and

h) embrace a performance-based approach for implementation as highlighted in the Global Plans.

3.4 International Organization and Industry Role

3.4.1 Industry stakeholders/partners should participate in the work of the RASG and its contributory bodies in order to support the implementation of safety oversight activities, safety management and collaborative decision-making processes, as well as to identify regional requirements, mitigate aviation safety risks, provide technical expertise, as required, and ensure adequate resources.

3.4.2 Their focus should be on identifying regional requirements and ensuring that their available resources are adequately allocated.

3.5 Reporting

3.5.1 The RASG reports outcomes to the ICAO Council through the Air Navigation Commission (ANC) as facilitated by the ICAO Secretariat.

3.5.2 RASG meeting reports should reflect the structure of the GASP (organizational challenges, operational safety risks, infrastructure and safety performance measurement) and RASG deliverables should map the expected GASP goals and targets.

3.5.3 RASG meeting reports should be provided in a standardized format to the governing bodies of ICAO to identify regional and emerging challenges, and shall include as a minimum:

a) a brief history of the meeting (duration and agenda);

b) a list of meeting participants, affiliation and number of attendees;

c) a list of conclusions and decisions with a description of their rationale (what, when, why and how);

d) a list of safety enhancement initiatives (SEIs) linked to the associated GASP targets and indicators, and the appropriate mechanism used to measure their effectiveness;

e) common implementation challenges identified amongst RASG members and possible solutions, assistance required and estimated timelines to resolve, if applicable, by sub-region;

f) identification of and recommendations on particular actions or enhancements that would require consideration by the ANC and Council to address particular challenges;

g) a list of issues cross-referenced to actions to be taken by ICAO Headquarters and/or Regional Offices;

h) based on the GASP, and associated SPIs and tools, report to the extent possible on the status of implementation of safety goals, targets and indicators, including the priorities set by the region in their regional safety plans exploring the use of regional dashboards to facilitate monitoring regional progress being made;

i) a list of items for coordination with the PIRG and a concise summary of the outcome of related discussions;

j) feedback on implementation issues and actionable recommendations to the ICAO Council to continually improve future editions of the GASP that identify regional safety objectives and priorities to ensure proper focus on emerging safety concerns; and

k) the work programme and future actions to be taken by the RASG.

3.5.4 A technical officer from Headquarters (Air Navigation Bureau) will participate and provide support to the meeting and subsequently arrange for the presentation of reports, in coordination with the Regional Office(s) and chairpersons of the RASG, to the ANC and Council for review and harmonization.

3.5.5 The final RASG report will be approved at the end of the meeting. Where the report requires translation, it will be made available within fifteen working days of the meeting closure.

3.5.6 Headquarters will provide feedback to the RASGs highlighting the actions taken by the ANC and Council related to their previous meeting outcomes.

3.5.7 When a RASG does not meet during the annual reporting cycle of the consolidated report on PIRGs and RASGs to the Council, the Secretary of the regional group must, nevertheless, report implementation progress, as well as difficulties experienced, for inclusion in the report.

4. GLOBAL PLANS

4.1 In regard to Global Plans, the RASG shall:

a) support implementation by States of the *Global Aviation Safety Plan* (GASP, Doc 10004) taking into account aspects of the *Global Air Navigation Plan* (GANP, Doc 9750) and Global Aviation Security Plan (GASeP) by ensuring effective coordination and cooperation between all States and stakeholders;

b) monitor and report the progress on the implementation by States of the GASP and the regional objectives and priorities;

c) provide feedback on the GASP implementation and propose amendments to the Global Plans as necessary to keep pace with the latest developments and ensure harmonization with regional and national plans;

d) in line with the GASP and regional priorities, identify specific aviation safety risks and propose mitigating actions using the mechanisms defined by Annex 19 — *Safety Management* and the *Safety Management Manual* (Doc 9859), with timelines to resolve deficiencies; and

e) verify the provision of services in accordance with global and regional requirements.

5. REGIONAL ACTIVITIES

5.1 In regard to regional activities, the RASG shall:

a) serve as a regional cooperative forum that determines regional priorities, develops and maintains the regional aviation safety plan and associated work programme based on the GASP and relevant ICAO Provisions, integrating global, regional, sub-regional, national and industry efforts in continuing to enhance aviation safety worldwide;

b) facilitate the development and implementation of safety risk mitigation action plans by States, taking into consideration States' level of effective implementation of the critical elements of safety oversight systems and progress being made to improve the level;

c) monitor and report, using a data driven approach, the region's main aviation safety risks, and determine regional priorities and associated work programme based on the GASP;

d) 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;

e) identify and report on regional and emerging safety challenges experienced that affect implementation of ICAO global provisions by States and measures undertaken or recommended to effectively address them; and

f) facilitate the development and implementation of regional and national aviation safety plans by States.

6. RASG COORDINATION

6.1 In regard to coordination, the RASG shall:

a) coordinate safety issues with the respective PIRG;

b) foster cooperation, information exchange, sharing of experiences and best practices among States and stakeholders;

c) provide a platform for regional coordination and cooperation amongst States and stakeholders for the continuous improvement of safety in the region with due consideration to harmonization of developments and deployments, and intra- and interregional coordination;

d) ensure that all safety activities at the regional and sub-regional level are properly coordinated amongst role players to avoid duplication of efforts;

e) identify security, environmental and economic issues that may affect aviation safety, and inform ICAO Secretariat accordingly for action;

f) identify practical examples and tools to support effective safety management implementation; and

g) through the RASG Secretary, inform the Directors General of Civil Aviation and related civil aviation commission/conferences of RASG meeting results.

7. INTERREGIONAL COORDINATION

7.1 The RASG shall:

a) ensure interregional coordination through formal and informal mechanisms, including the participation in meetings established for the purpose of coordinating RASG and PIRG activities, the GASP and regional aviation safety plans; and

b) identify stakeholders that could be impacted by RASG SEIs within and outside the region, and develop an effective communication and coordination strategy with stakeholders.

7.2 ICAO Headquarters shall arrange a global coordination meeting between all RASG and PIRG chairpersons and secretaries on a biennial basis.

8. EXPANSION OF TERMS OF REFERENCE

8.1 The Terms of Reference above serve as a global basis for RASG operations and may be further expanded by each RASG, as required, to maintain the flexibility and efficiency of their work. Additional terms of reference adopted by a RASG must be approved by the President of the Council and be included in the relevant RASG Handbooks as a RASG specific supplement.

APPENDIX 5B

REGIONAL AVIATION SAFETY GROUP–MIDDLE EAST (RASG-MID) TERMS OF REFERENCE (TOR)

1. MEMBERSHIP

1.1 All ICAO Contracting States, and Territories recognized by ICAO, within the area of accreditation of the ICAO MID Regional Office (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen) are members of the RASG-MID.

2. PARTICIPATION

2.1 In addition to States, the importance of a collaborative and proactive role by airspace users, international and regional organizations, and industry should be recognized due to their involvement in the rapid pace of technological development, expertise and other opportunities for sharing of resources.

2.2 The RASG-MID meetings are open to all members. Each member State should be represented by a senior-level delegate nominated by the State, preferably from the Civil Aviation Authority (CAA) in order to support related policy-making within the State. A delegate may be supported by an alternate delegate and/or advisors with the requisite technical knowledge in the subject matters under consideration.

2.3 The CAAs should be supported by representatives from service providers and industry.

2.4 States located outside the area of accreditation of the ICAO MID Regional Office can be invited on a case-by-case basis to attend as observers.

2.5 International organizations recognized by the ICAO Council to participate in ICAO meetings should participate, as observers, in the RASG-MID meetings, and be encouraged to do so. Other stakeholders may be invited as observers, when required, to contribute to the work of the RASG-MID.

2.6 The participation of industry stakeholders should take into account relevant capabilities such as an involvement in the rapid pace of technological development, specific knowledge and expertise, and other opportunities including sharing of resources.

2.7 Civil aviation commissions/conferences in particular the Arab Civil Aviation Organization (ACAO), may be invited to participate in the work of the RASG-MID.

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

2.9 RASG-MID meetings should be live-streamed, to the extent possible, to enable additional State participants to follow the proceedings.

3. WORKING ARRANGEMENTS

3.1 Structure

3.1.1 RASG-MID have the obligation to apply the most effective and efficient organizational structure and meeting modalities that best suit the characteristics of the MID Region's implementation work programme while maintaining to the extent possible, alignment with these Terms of Reference, the regional work programme, Global Aviation Safety Plan (GASP), MID Region Safety Strategy and MID Region NCLB Strategy.

3.1.2 The ICAO MID Regional Director will serve as the Secretary of the RASG-MID.

3.1.3 The organization of the RASG-MID should address global and region-specific safety-related matters, and meetings should be closely coordinated between the RASG-MID and MIDANPIRG chairpersons and the Secretariat. The RASG-MID and MIDANPIRG meetings should be held back-to-back or combined to facilitate coordination and to ensure the efficient use of resources.

3.1.4 The RASG-MID shall be administered by a chairperson and one or two vice-chairpersons elected from the State-nominated delegates present. The RASG-MID will establish the cycle of elections. Exceptionally, at the discretion of each RASG-MID, vice-chairpersons or a co-chairperson may be elected from the international and regional organizations, and/or industry present.

3.1.5 The RASG-MID will build on the work already done by States, ICAO Regional Offices and existing regional and sub-regional organizations (such as the cooperative development of operational safety and continuing airworthiness programmes, regional safety oversight organizations (RSOOs), regional accident and incident investigation organizations (RAIOs) and industry) to support the establishment and operation of safety management processes for the MID Region.

3.1.6 RASG-MID contributory bodies may be created by the RASG-MID to discharge the RASG-MID work programme by working on defined subjects requiring detailed technical expertise. A contributory body shall only be formed when it has been clearly established that it is able to make a substantial contribution to the required work. A contributory body will be dissolved by the RASG-MID when it has completed its assigned tasks or if the tasks cannot be usefully continued.

3.1.7 Invitations to RASG-MID meetings must be issued at least three months in advance of the meeting to assist States to plan participation.

3.1.8 The Secretariat will review and update the RASG-MID Procedural Handbook periodically, and as required, to ensure a result-oriented approach.

3.1.9 States, international organizations and industry are invited to submit working papers, research works, etc. in order to enhance the work of the RASG-MID and its contributory bodies. To ensure proper time for consideration and good decision-making, the Secretary should ensure that all working papers are available at least fourteen days prior to the start of the meeting for consideration.

3.2 **State Role**

3.2.1 State CAAs, supported by service providers as necessary, should participate in the work of the RASG-MID and its contributory bodies to:

a) ensure the continuous and coherent development and implementation of regional safety plans and report back on the key performance indicators (KPIs);

b) support the regional work programme with participation from the decision-making authority with the technical expertise necessary for the planning and implementation mechanism, thus supporting policy decisions at the State level;

c) support the implementation of effective safety management and collaborative decision-making processes to mitigate aviation safety risks, thus supporting policy decisions at the State level;

d) contribute information on safety risk, including State safety programme (SSP) safety performance indicators (SPIs, in accordance with the GASP and MID Region Safety Strategy as part of their safety risk management activities;

e) ensure coordination, at the national level, between the CAA, service providers and all other concerned stakeholders, and harmonization of the national plans with the regional and global plans;

f) facilitate the development and establishment of Letters of Agreement and bilateral or multilateral agreements;

g) ensure the implementation of the GASP goals and targets; and

h) embrace a performance-based approach for implementation as highlighted in the Global Plans.

3.3 **International Organization and Industry Role**

3.3.1 Industry stakeholders/partners should participate in the work of the RASG-MID and its contributory bodies in order to support the implementation of safety oversight activities, safety management and collaborative decision-making processes, as well as to identify regional requirements, mitigate aviation safety risks, provide technical expertise, as required, and ensure adequate resources.

3.3.2 Their focus should be on identifying regional requirements and ensuring that their available resources are adequately allocated.

3.4 **Reporting**

3.4.1 The RASG-MID reports outcomes to the ICAO Council through the Air Navigation Commission (ANC) as facilitated by the ICAO Secretariat.

3.4.2 RASG-MID meeting reports should reflect the structure of the GASP (organizational challenges, operational safety risks, infrastructure and safety performance measurement) and RASG-MID deliverables should map the expected GASP goals and targets in line with the MID Region Safety Strategy.

3.4.3 RASG-MID meeting reports should be provided in a standardized format to the governing bodies of ICAO to identify regional and emerging challenges, and shall include as a minimum:

a) a brief history of the meeting (duration and agenda);

b) a list of meeting participants, affiliation and number of attendees;

c) a list of conclusions and decisions with a description of their rationale (what, when, why and how);

d) a list of safety enhancement initiatives (SEIs) linked to the associated GASP targets and indicators;

e) common implementation challenges identified amongst RASG-MID members and possible solutions, assistance required and estimated timelines to resolve, if applicable, by sub-region;

f) identification of and recommendations on particular actions or enhancements that would require consideration by the ANC and Council to address particular challenges;

g) a list of issues cross-referenced to actions to be taken by ICAO Headquarters and/or Regional Offices;

h) based on the GASP, and associated SPIs and tools, report to the extent possible on the status of implementation of safety goals, targets and indicators, including the priorities set in the MID Region Safety Strategy, exploring the use of regional dashboards to facilitate monitoring regional progress being made;

i) a list of items for coordination with the MIDANPIRG and a concise summary of the outcome of related discussions;

j) feedback on implementation issues and actionable recommendations to the ICAO Council to continually improve future editions of the GASP that identify regional safety objectives and priorities to ensure proper focus on emerging safety concerns; and

k) the work programme and future actions to be taken by the RASG-MID.

3.4.4 A technical officer from Headquarters (Air Navigation Bureau) will participate and provide support to the meeting and subsequently arrange for the presentation of reports, in coordination with the MID Regional Office and chairpersons of the RASG-MID, to the ANC and Council for review and harmonization.

3.4.5 The final RASG-MID report will be approved at the end of the meeting.

3.4.6 Headquarters will provide feedback to the RASG-MID highlighting the actions taken by the ANC and Council related to their previous meeting outcomes.

3.4.7 When RASG-MID does not meet during the annual reporting cycle of the consolidated report on MIDANPIRG and RASG-MID to the Council, the Secretary of the Group must, nevertheless, report implementation progress, as well as difficulties experienced, for inclusion in the report, considering the outcome of the latest RASG-MID Steering Committee meeting.

4. GLOBAL PLANS

4.1 In regard to Global Plans, the RASG-MID shall:

a) support implementation by States of the *Global Aviation Safety Plan* (GASP, Doc 10004) taking into account aspects of the *Global Air Navigation Plan* (GANP, Doc 9750) and Global Aviation Security Plan (GASeP) by ensuring effective coordination and cooperation between all States and stakeholders;

b) monitor and report the progress on the implementation by States of the GASP and the regional objectives and priorities;

c) provide feedback on the GASP implementation and propose amendments to the Global Plans as necessary to keep pace with the latest developments and ensure harmonization with regional and national plans;

d) in line with the GASP and regional priorities, identify specific aviation safety risks and propose mitigating actions using the mechanisms defined by Annex 19 — *Safety Management* and the *Safety Management Manual* (Doc 9859), with timelines to resolve deficiencies; and

e) verify the provision of services in accordance with global and regional requirements.

5. REGIONAL ACTIVITIES

5.1 In regard to regional activities, the RASG-MID shall:

a) serve as a regional cooperative forum that determines regional priorities, develops and maintains the regional aviation safety plan and associated work programme based on the GASP and relevant ICAO Provisions, integrating global, regional, sub-regional, national and industry efforts in continuing to enhance aviation safety worldwide;

b) facilitate the development and implementation of safety risk mitigation action plans by States, taking into consideration States' level of effective implementation of the critical elements of safety oversight systems and progress being made to improve the level;

c) monitor and report, using a data driven approach, the region's main aviation safety risks, and determine regional priorities and associated work programme based on the GASP;

d) analyze safety information and hazards to civil aviation at the regional level and review the action plans developed within the MID Region to address identified hazards;

e) identify and report on regional and emerging safety challenges experienced that affect implementation of ICAO global provisions by States and measures undertaken or recommended to effectively address them; and

f) facilitate the development and implementation of regional and national aviation safety plans by States.

6. RASG-MID COORDINATION

6.1 In regard to coordination, the RASG-MID shall:

a) coordinate safety issues with the MIDANPIRG;

b) foster cooperation, information exchange, sharing of experiences and best practices among States and stakeholders;

c) provide a platform for regional coordination and cooperation amongst States and stakeholders for the continuous improvement of safety in the region with due consideration to harmonization of developments and deployments, and intra- and interregional coordination;

d) ensure that all safety activities at the regional and sub-regional level are properly coordinated amongst role players to avoid duplication of efforts;

e) identify security, environmental and economic issues that may affect aviation safety, and inform ICAO Secretariat accordingly for action;

f) identify practical examples and tools to support effective safety management implementation; and

g) through the RASG-MID Secretary, inform the Directors General of Civil Aviation and related civil aviation commission/conferences of RASG-MID meeting results.

7. INTERREGIONAL COORDINATION

7.1 The RASG-MID shall:

a) ensure interregional coordination through formal and informal mechanisms, including the participation in meetings established for the purpose of coordinating RASG-MID and MIDANPIRG activities, the GASP and regional aviation safety plans; and

b) identify stakeholders that could be impacted by RASG-MID SEIs within and outside the MID Region, and develop an effective communication and coordination strategy with stakeholders.

7.2 ICAO Headquarters shall arrange a global coordination meeting between all RASG and PIRG chairpersons and secretaries on a biennial basis.

APPENDIX 5C

RASG-MID STEERING COMMITTEE (RSC)

TERMS OF REFERENCE (TOR)

A) Purpose of the RSC:

The RASG-MID Steering Committee (RSC) is established to act on behalf of the RASG-MID, execute a pivotal function as a coordinating and steering organ with highest possible efficiency, lead and monitor the technical work, in particular:

a) follow-up on the RASG-MID/7 Conclusions and Decisions and take necessary actions;

b) review and endorse the outcomes of subsidiary bodies, including:

- Safety Enhancement Initiatives (SEIs)
- MID Annual Safety Reports;
- RASG-MID Safety Advisories;
- Conclusions/Decisions emanating from the subsidiary bodies;
- Roadmaps to foster implementation of RASG-MID Programme and achievement of regional objectives and targets; and
- Terms of Reference (TOR) of subsidiary bodies.

c) ensure that Safety Enhancement Initiatives (SEIs) are accomplished in a timely, effective and efficient manner.

d) establish contributory bodies in coordination with the RASG-MID Chairperson and Secretary, as needed to discharge the RASG-MID work programme by working on defined subjects requiring detailed technical expertise;

e) monitor the progress of the technical work and provide guidance to the established contributory bodies;

f) monitor the the achievement progress of the MID Region Safety Strategy, including priorities, targets and associated action plans; and

g) address special issues of strategic and/or financial nature for which no agreement has been reached by the appropriate RASG-MID subsidiary body, with a view to facilitate their presentation to the RASG-MID.

B) Composition:

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

a) MID Member States (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen);

b) international/regional organizations and industry (as observer);

c) the RSC Chairperson and Vice-Chairperson;

d) RASG-MID Chairperson and Vice-Chairpersons; and

e) Secretariat (ICAO).

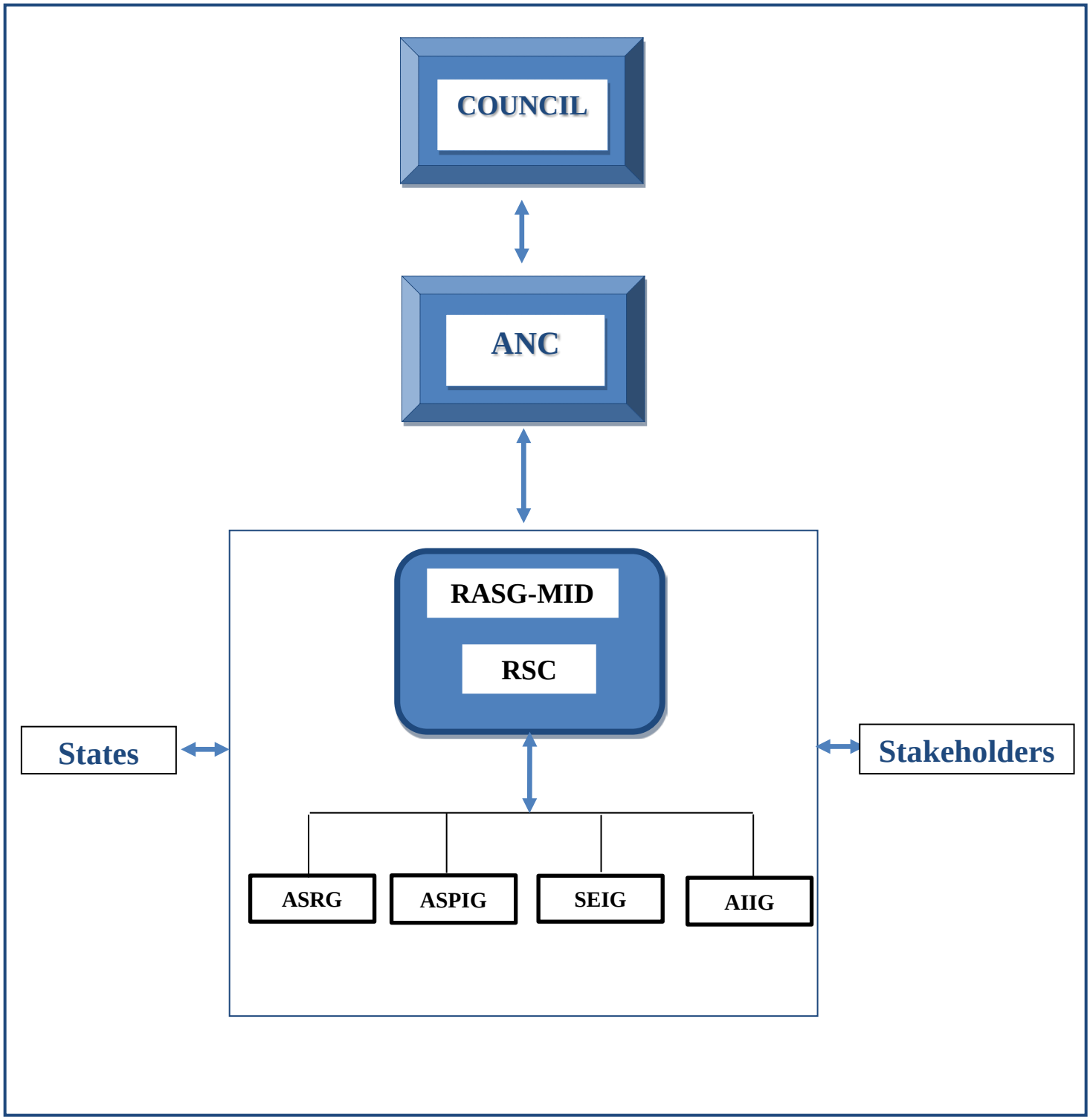
C) RSC Meetings:

- The RSC meetings should be convened on biennial basis during the even years (2020, 2022, 2024, 2026, etc).

- RSC meetings will be convened in the MID Regional Office, to the extent possible, to facilitate proper access by States. Approval to host RSC meetings outside of the Regional Office must be obtained from the Chairperson of the RASG-MID and Regional Director of MID Office.

APPENDIX 5D

RASG-MID
ORGANIZATIONAL STRUCTURE



APPENDIX 5E

MID ANNUAL SAFETY REPORT GROUP (MID-ASRG)

TERMS OF REFERENCE

A) Purpose of the MID-ASRG:

The MID-ASRG is established to:

1) gather safety information from different available sources to identify and determine the main aviation safety risks in the in the Middle East Region; and

2) develop the MID Region Safety Report on annual basis, for review and endorsement by the RASG-MID; ensuring the confidentiality/de-identification of data.

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

1) gather information from different available sources on the accidents and serious incidents that:
   a) occurred in the MID Region (State of Occurrence);
   b) involved aircraft registered in the MID Region (State of Registry); or
   c) involved aircraft owned and/or operated by an Air Operator from the MID Region (State of the Operator).
2) review and analyse the accidents and serious incidents;
3) coordinate with MID States' focal points to get additional information on the accidents and serious incidents, as appropriate;
4) identify the risk category focus areas and emerging risks;
5) analyse the preliminary and final investigations reports of accidents and serious incidents conducted by States, including relevant safety recommendations; and safety analyses of incidents, and share the outcomes with the MID-ASRG;
6) identify root causes and contributing factors, in order to support the MID-SEIG in the development of mitigation measures;
7) develop an agreed and harmonized MID Regional dataset of accidents and incidents and provide feedback to the ICAO Safety Indicators Study Group (SISG); and
8) share the outcome of its meetings with the concerned MIDANPIRG subsidiary bodies, as appropriate.

B) Composition:

The MID-ASRG is composed of Members designated by the following RASG MID Member States and Partners:

States: All MID States

Partners: AACO, AIRBUS, Boeing, IATA, IFALPA and IFATCA

C) Roles and Responsibilities:

- MID-RASG Chairperson – Coordinate MID-ASRG 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-ASRG Chairperson.

APPENDIX 5F

AERODROME SAFETY, PLANNING AND IMPLEMENTATION GROUP (ASPIG)

TERMS OF REFERENCE

A) PURPOSE OF THE ASPIG:

1) As a Subsidiary body of the Regional Aviation Safety Group-Middle East (RASG-MID), the ASPIG is established to develop and implement Safety, Capacity and Efficiency Enhancement Initiatives related mainly to AGA issues including:

   - Aerodrome Planning and Design;
   - Heliports;
   - Aerodrome System Capacity Enhancement;
   - Aerodrome Certification;
   - Aerodrome Safety Management System;
   - Runway Safety;
   - Aerodrome Visual Aids for Navigation;
   - Aerodrome Operations and Services;
   - Ground Handling Operations
   - Aerodrome Emergency Response Planning;
   - Coordination between AGA and ANS: ATM/AIM/CNS;
   - AN Deficiencies in the field of Aerodrome Operations; and
   - MID Region priorities and implementation of Safety and Air Navigation objectives set on the MID Region Safety and Air Navigation Strategies, in line with the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP).

2) In addition, the ASPIG should coordinate with other entities managing an extended scope including:
   - Air traffic management;
   - Aircraft operations; and
   - Aeronautical information management.

<u>In order to meet its Terms of Reference, the ASPIG shall</u>:

1) Monitor developments and continuously update the MID Region Implementation Plans in the field of Aerodrome Planning and Operations, including the implementation of ICAO provisions.

2) Follow-up and analyse achievements and progress in the implementation of certification of all aerodromes open for international aircraft operations, according to the Table AOP I-1 included in the Middle East Regional Air Navigation Plan (MID ANP), and promote safety management of aerodrome operations in the Region.

3) Ensure that the planning and implementation of Aerodrome design and operational requirements in the MID Region is consistent with ICAO SARPs and Global Air Navigation Plan and reflecting global requirements for adequate aerodromes and safety of aircraft operations with particular attention payed to the anticipated increase of traffic alleviating aerodrome congestion.

4) Ensure the continuous and coherent development of the Aerodrome Design and Operations parts of the MID ANP in a manner that is consistent with ICAO SARPs, the Global Air Navigation Plan (GANP) and the Global Aviation Safety Plan (GASP).

5) Facilitate the implementation of Aerodrome Design and Operations Services identified in the MID ANP Basic Building Block (BBB) and the Aviation System Block Upgrade (ASBU) Frameworks.

6) Monitor the MID Region operational safety and efficiency of Aerodromes Operations and identify the associated Air Navigation Deficiencies that impede the implementation or provision of efficient Aerodrome Design and Operation services, analyse, review and monitor steps and corrective action plans made by concerned States for resolution of such deficiencies.

ASPIG Deliverables:

1) Aerodrome Operations (AOP) parts of the MID ANP reviewed and, as necessary, amendment proposals prepared to update the MID ANP to reflect changes in the operational and global requirements.

2) Level of implementation of Aerodrome Design and Operations services monitored and, as necessary, facilitated to support the effective implementation of the BBB and ASBU priority modules

3) Air navigation deficiencies in the field of AOP (as listed in the MANDD database) reviewed and, as necessary, updated to reflect the current situation.

4) Draft Conclusions and Decisions formulated relating to matters in the field of Aerodrome design and Operations that come within the scope of the RASG/MIDANPIRG work programmes.

5) Progress report submitted to RASG and MIDANPIRG addressing the ASPIG deliverables respectively in coordination with the RSC and MSG.

B) COMPOSITION:

The ASPIG is composed of:

Permanent Members

The AGA focal points of the MID States (i.e.: Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen), officially assigned and communicated to the ICAO Middle East Regional Office by MID States, are the permanent members of the ASPIG.

Observers

The following Partners are the permanent Observers to the ASPIG:

• AACO	Arab Air Carrier Organization
• ACAO	Arab Civil Aviation Organization
• ACI	Airports Council International
• AIRBUS	Airbus Aircraft Manufacturer
• BOEING	Boeing Commercial Airplane Company
• CANSO	Civil Air Navigation Services Organization
• EUROCONTROL	European Organisation for the Safety of Air Navigation
• COSCAP-GS	Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States
• EASA	European Aviation Safety Agency
• Embraer	Embraer Aviation International
• FAA	United States Federal Aviation Administration
• 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
• IAOPA	International Council of Aircraft Owner and Pilot Associations
• ICCAIA	International Coordinating Council of Aerospace Industries Associations
• 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)

International Organizations, Airport Operators, Aircraft Operators, Maintenance and Repair Organizations, Regional Organizations, Training organizations, Aircraft manufactures, and Air Navigation Service Providers and any other allied organizations/representatives can be invited by ICAO/States to attend the ASPIG meetings in the capacity of observers.

C) WORKING ARRANGEMENTS:

Roles and Responsibilities:

- **Member State**s: provide technical expertise and collaborate in the development and implementation of the ASPIG deliverables.

- **Partners**: provide technical expertise and collaborate in the development and implementation of the ASPIG deliverables.

- **ICAO:** acts as Secretariat and provides necessary support to the ASPIG.

Chairmanship:

The Chairperson will:

1) call for ASPIG meetings;
2) chair the ASPIG 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 ASPIG activities closely with the Secretariat; and
8) promote ASPIG and lobby for contributors.

In order to ensure the necessary continuity in the work of the ASPIG the Chairperson, the Vice-Chairperson are held by each Member State (i.e.: Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen) for a period of three (03) years. The Chairperson chairs the ASPIG meeting in collaboration with the Secretariat.

Convening of meetings:

The ASPIG Meeting will be convened every 12 to 18 months. At each of its meetings the Group should endeavour to agree on the dates and venue of its next meeting.

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.

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.

APPENDIX 5G

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REGIONAL AVIATION SAFETY GROUP – MIDDLE EAST

(RASG-MID)

PROCEDURAL HANDBOOK

FOURTH EDITION – XX 2021

RECORD OF AMENDMENTS

Edition Date	Description	Pages Affected
July 2017	Amendments approved by the RASG-MID/5 meeting related to the RSC TORs and RASG-MID Frequency of meetings.	5 & 7
	Revised Organizational Structure based on dissolution of the AIA WG	13
April 2019	Amendments approved by the RSC/6 meeting related to the RASG-MID Teams Terms of Reference (MID-ASRT, MID-RAST, and MID-SST), as well as the fast track/approval procedures.	12-15
XX 2021	Amendments approved by the RASG-MID/7 meeting, reflecting the revised Organizational Structure and Terms of Reference (TORs) of the RASG-MID and RSC in line with new TORs of the RASGs and PIRGs endorsed by ICAO Council. As well as, inclusion of TORs for newly established Groups.	….

RASG-MID PROCEDURAL HANDBOOK

Page

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 RASG-MID, Steering Committee (RSC) and Contributory Bodies, 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.

REGIONAL AVIAITON SAFETY GROUPS-MIDDLE EAST (RASG-MID)

PROCEDURAL HANDBOOK

PART I

TERMS OF REFERENCE, COMPOSITION OF THE RASG-MID

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;

c) agreed that the report of RASG meetings, similar to reports of planning and implementation regional groups (PIRGs), would be reviewed by the ANC on a regular basis and by the Council as deemed necessary;

d) approved the inclusion of the sentence "coordinate with respective RASG on safety issues" in the terms of reference of all PIRGs, viz APANPIRG, APIRG, EANPG, GREPECAS, MIDANPIRG and NAT SPG; and

e) requested the ANC to report to the Council any duplication in the activities of the PIRGs and the RASGs.

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

2. RASG-MID TERMS OF REFERENCE

2.1 Membership

2.1.1 All ICAO Contracting States, and Territories recognized by ICAO, within the area of accreditation of the ICAO MID Regional Office (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen) are members of the RASG-MID.

2.2 Participation

2.2.1 In addition to States, the importance of a collaborative and proactive role by airspace users, international and regional organizations, and industry should be recognized due to their involvement in the rapid pace of technological development, expertise and other opportunities for sharing of resources.

2.2.2 The RASG-MID meetings are open to all members. Each member State should be represented by a senior-level delegate nominated by the State, preferably from the civil aviation authority (CAA) in order to support related policy-making within the State. A delegate may be supported by an alternate delegate and/or advisors with the requisite technical knowledge in the subject matters under consideration.

2.2.3 The CAAs should be supported by representatives from service providers and industry.

2.2.4 States located outside the area of accreditation of the ICAO MID Regional Office can be invited on a case-by-case basis to attend as observers.

2.2.5 International organizations recognized by the ICAO Council to participate in ICAO meetings should participate, as observers, in the RASG-MID meetings, and be encouraged to do so. Other stakeholders may be invited as observers, when required, to contribute to the work of the RASG-MID.

2.2.6 The participation of industry stakeholders should take into account relevant capabilities such as an involvement in the rapid pace of technological development, specific knowledge and expertise, and other opportunities including sharing of resources.

2.2.7 Civil aviation commissions/conferences in particular the Arab Civil Aviation Organization (ACAO), may be invited to participate in the work of the RASG-MID.

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

2.2.9 RASG-MID meetings should be live-streamed, to the extent possible, to enable additional State participants to follow the proceedings.

2.3 Working Arrangements

2.3.1 Structure

2.3.1.1 RASG-MID have the obligation to apply the most effective and efficient organizational structure and meeting modalities that best suit the characteristics of the MID Region’s implementation work programme while maintaining to the extent possible, alignment with these Terms of Reference, the regional work programme, Global Aviation Safety Plan (GASP), MID Region Safety Strategy and MID Region NCLB Strategy.

2.3.1.2 The ICAO MID Regional Director will serve as the Secretary of the RASG-MID.

2.3.1.3 The organization of the RASG-MID should address global and region-specific safety-related matters, and meetings should be closely coordinated between the RASG-MID and MIDANPIRG chairpersons and the Secretariat. The RASG-MID and MIDANPIRG meetings should be held back-to-back or combined to facilitate coordination and to ensure the efficient use of resources.

2.3.1.4 The RASG-MID shall be administered by a chairperson and one or two vice-chairpersons elected from the State-nominated delegates present. The RASG-MID will establish the cycle of elections. Exceptionally, at the discretion of each RASG-MID, vice-chairpersons or a co-chairperson may be elected from the international and regional organizations, and/or industry present.

2.3.1.5 The RASG-MID will build on the work already done by States, ICAO Regional Offices and existing regional and sub-regional organizations (such as the cooperative development of operational safety and continuing airworthiness programmes, regional safety oversight organizations (RSOOs), regional accident and incident investigation organizations (RAIOs) and industry) to support the establishment and operation of safety management processes for the MID Region.

2.3.1.6 RASG-MID contributory bodies may be created by the RASG-MID to discharge the RASG-MID work programme by working on defined subjects requiring detailed technical expertise. A contributory body shall only be formed when it has been clearly established that it is able to make a substantial contribution to the required work. A contributory body will be dissolved by the RASG-MID when it has completed its assigned tasks or if the tasks cannot be usefully continued.

2.3.1.7 Invitations to RASG-MID meetings must be issued at least three months in advance of the meeting to assist States to plan participation.

2.3.1.8 The Secretariat will review and update the RASG-MID Procedural Handbook periodically, and as required, to ensure a result-oriented approach.

2.3.1.9 States, international organizations and industry are invited to submit working papers, research works, etc. in order to enhance the work of the RASG-MID and its contributory bodies. To ensure proper time for consideration and good decision-making, the Secretary should ensure that all working papers are available at least fourteen days prior to the start of the meeting for consideration.

2.3.2 **State Role**

2.3.2.1 State CAAs, supported by service providers as necessary, should participate in the work of the RASG-MID and its contributory bodies to:

a) ensure the continuous and coherent development and implementation of regional safety plans and report back on the key performance indicators (KPIs);

b) support the regional work programme with participation from the decision-making authority with the technical expertise necessary for the planning and implementation mechanism, thus supporting policy decisions at the State level;

c) support the implementation of effective safety management and collaborative decision-making processes to mitigate aviation safety risks, thus supporting policy decisions at the State level;

d) contribute information on safety risk, including State safety programme (SSP) safety performance indicators (SPIs, in accordance with the GASP and MID Region Safety Strategy as part of their safety risk management activities;

e) ensure coordination, at the national level, between the CAA, service providers and all other concerned stakeholders, and harmonization of the national plans with the regional and global plans;

f) facilitate the development and establishment of Letters of Agreement and bilateral or multilateral agreements;

g) ensure the implementation of the GASP goals and targets; and

h) embrace a performance-based approach for implementation as highlighted in the Global Plans.

2.3.3 **International Organization and Industry Role**

2.3.3.1 Industry stakeholders/partners should participate in the work of the RASG-MID and its contributory bodies in order to support the implementation of safety oversight activities, safety management and collaborative decision-making processes, as well as to identify regional requirements, mitigate aviation safety risks, provide technical expertise, as required, and ensure adequate resources.

2.3.3.2 Their focus should be on identifying regional requirements and ensuring that their available resources are adequately allocated.

2.3.4 **Reporting**

2.3.4.1 The RASG-MID reports outcomes to the ICAO Council through the Air Navigation Commission (ANC) as facilitated by the ICAO Secretariat.

2.3.4.2 RASG-MID meeting reports should reflect the structure of the GASP (organizational challenges, operational safety risks, infrastructure and safety performance measurement) and RASG-MID deliverables should map the expected GASP goals and targets in line with the MID Region Safety Strategy

2.3.4.3 RASG-MID meeting reports should be provided in a standardized format to the governing bodies of ICAO to identify regional and emerging challenges, and shall include as a minimum:

a) a brief history of the meeting (duration and agenda);

b) a list of meeting participants, affiliation and number of attendees;

c) a list of conclusions and decisions with a description of their rationale (what, when, why and how);

d) a list of safety enhancement initiatives (SEIs) linked to the associated GASP targets and indicators;

e) common implementation challenges identified amongst RASG-MID members and possible solutions, assistance required and estimated timelines to resolve, if applicable, by sub-region;

f) identification of and recommendations on particular actions or enhancements that would require consideration by the ANC and Council to address particular challenges;

g) a list of issues cross-referenced to actions to be taken by ICAO Headquarters and/or Regional Offices;

h) based on the GASP, and associated SPIs and tools, report to the extent possible on the status of implementation of safety goals, targets and indicators, including the priorities set in the MID Region Safety Strategy, exploring the use of regional dashboards to facilitate monitoring regional progress being made;

i) a list of items for coordination with the MIDANPIRG and a concise summary of the outcome of related discussions;

j) feedback on implementation issues and actionable recommendations to the ICAO Council to continually improve future editions of the GASP that identify regional safety objectives and priorities to ensure proper focus on emerging safety concerns; and

k) the work programme and future actions to be taken by the RASG-MID.

2.3.4.4 A technical officer from Headquarters (Air Navigation Bureau) will participate and provide support to the meeting and subsequently arrange for the presentation of reports, in coordination with the MID Regional Office and chairpersons of the RASG-MID, to the ANC and Council for review and harmonization.

2.3.4.5 The final RASG-MID report will be approved at the end of the meeting.

2.3.4.6 Headquarters will provide feedback to the RASG-MID highlighting the actions taken by the ANC and Council related to their previous meeting outcomes.

2.3.4.7 When RASG-MID does not meet during the annual reporting cycle of the consolidated report on MIDANPIRG and RASG-MID to the Council, the Secretary of the Group must, nevertheless, report implementation progress, as well as difficulties experienced, for inclusion in the report, considering the outcome of the latest RASG-MID Steering Committee meeting.

2.4 Global Plans

2.4.1 In regard to Global Plans, the RASG-MID shall:

a) support implementation by States of the *Global Aviation Safety Plan* (GASP, Doc 10004) taking into account aspects of the *Global Air Navigation Plan* (GANP, Doc 9750) and Global Aviation Security Plan (GASeP) by ensuring effective coordination and cooperation between all States and stakeholders;

b) monitor and report the progress on the implementation by States of the GASP and the regional objectives and priorities;

c) provide feedback on the GASP implementation and propose amendments to the Global Plans as necessary to keep pace with the latest developments and ensure harmonization with regional and national plans;

d) in line with the GASP and regional priorities, identify specific aviation safety risks and propose mitigating actions using the mechanisms defined by Annex 19 — *Safety Management* and the *Safety Management Manual* (Doc 9859), with timelines to resolve deficiencies; and

e) verify the provision of services in accordance with global and regional requirements.

2.5 Regional Activities

2.5.1 In regard to regional activities, the RASG-MID shall:

a) serve as a regional cooperative forum that determines regional priorities, develops and maintains the regional aviation safety plan and associated work programme based on the GASP and relevant ICAO Provisions, integrating global, regional, sub-regional, national and industry efforts in continuing to enhance aviation safety worldwide;

b) facilitate the development and implementation of safety risk mitigation action plans by States, taking into consideration States' level of effective implementation of the critical elements of safety oversight systems and progress being made to improve the level;

c) monitor and report, using a data driven approach, the region's main aviation safety risks, and determine regional priorities and associated work programme based on the GASP;

d) analyze safety information and hazards to civil aviation at the regional level and review the action plans developed within the MID Region to address identified hazards;

e) identify and report on regional and emerging safety challenges experienced that affect implementation of ICAO global provisions by States and measures undertaken or recommended to effectively address them; and

f) facilitate the development and implementation of regional and national aviation safety plans by States.

2.6 RASG-MID Coordination

2.6.1 In regard to coordination, the RASG-MID shall:

a) coordinate safety issues with the MIDANPIRG;

b) foster cooperation, information exchange, sharing of experiences and best practices among States and stakeholders;

c) provide a platform for regional coordination and cooperation amongst States and stakeholders for the continuous improvement of safety in the region with due consideration to harmonization of developments and deployments, and intra- and interregional coordination;

d) ensure that all safety activities at the regional and sub-regional level are properly coordinated amongst role players to avoid duplication of efforts;

e) identify security, environmental and economic issues that may affect aviation safety, and inform ICAO Secretariat accordingly for action;

f) identify practical examples and tools to support effective safety management implementation; and

g) through the RASG-MID Secretary, inform the Directors General of Civil Aviation and related civil aviation commission/conferences of RASG-MID meeting results.

2.7 Interregional Coordination

2.7.1 The RASG-MID shall:

a) ensure interregional coordination through formal and informal mechanisms, including the participation in meetings established for the purpose of coordinating RASG-MID and MIDANPIRG activities, the GASP and regional aviation safety plans; and

b) identify stakeholders that could be impacted by RASG-MID SEIs within and outside the MID Region, and develop an effective communication and coordination strategy with stakeholders.

2.7.2 ICAO Headquarters shall arrange a global coordination meeting between all RASG and PIRG chairpersons and secretaries on a biennial basis.

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3. RASG-MID STEERING COMMITTEE (RSC) TERMS OF REFERENCE

3.1 The RASG-MID Steering Committee (RSC) is established to act on behalf of the RASG-MID, execute a pivotal function as a coordinating and steering organ with highest possible efficiency, lead and monitor the technical work, in particular:

a) follow-up on the RASG-MID/7 Conclusions and Decisions and take necessary actions;

b) review and endorse the outcomes of subsidiary bodies, including:

- Safety Enhancement Initiatives (SEIs)
- MID Annual Safety Reports;
- RASG-MID Safety Advisories;
- Conclusions/Decisions emanating from the subsidiary bodies;
- Roadmaps to foster implementation of RASG-MID Programme and achieveminet of regional objectives and targets; and
- Terms of Reference (TOR) of subsidiary bodies.

c) ensure that Safety Enhancement Initiatives (SEIs) are accomplished in a timely, effective and efficient manner.

d) establish contributory bodies in coordination with the RASG-MID Chairperson and Secretary, as needed to discharge the RASG-MID work programme by working on defined subjects requiring detailed technical expertise;

e) monitor the progress of the technical work and provide guidance to the established contributory bodies;

f) monitor the the achievement progress of the MID Region Safety Strategy, including priorities, targets and associated action plans; and

g) address special issues of strategic and/or financial nature for which no agreement has been reached by the appropriate RASG-MID subsidiary body, with a view to facilitate their presentation to the RASG-MID.

3.2 **RASG-MID Steering Committee (RSC) Membership**

3.2.1 The RASG-MID Steering Committee (RSC) is composed of representatives from:

a) MIS Member States (Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen);

b) international/regional organizations and industry (as observer);

c) the RSC Chairperson and Vice-Chairperson;

d) RASG-MID Chairperson and Vice-Chairpersons; and

e) Secretariat (ICAO).

3.3 **Chairmanship of the RASG-MID Steering Committee (RSC)**

3.3.1 The RASG-MID Steering Committee (RSC) Chairperson and Vice-Chairperson will be elected as follows:

– Chairperson from member States; and
– Vice-Chairperson from International Organization/Industry (Partners).

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

3.4 **RSC Meetings**

3.4.1 The RSC meetings should be convened on biennial basis during the even years (2020, 2022, 2024, 2026, etc)..

3.4.2 RSC meetings will be convened in the MID Regional Office, to the extent possible, to facilitate proper access by States. Approval to host RSC meetings outside of the Regional Office must be obtained from the Chairperson of the RASG-MID and Regional Director of MID Office.

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.

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.

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

4.6.5 RASG-MID members/partners will:

a) come to the RASG-MID meetings prepared, and provide active support by deliberating and identifying issues;

b) support goals and objectives by maintaining timely and active communication between administration/organization represented and RASG-MID; and

c) share safety improvements with RASG-MID members.

Non-Member Participant and Guest Observers:

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

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

4.7 Supporting documentation

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

4.7.2 Supporting documentation shall be presented in the form of:

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

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

c) Working Papers: constitute the main basis of the discussions on the various items on the agenda.

d) PowerPoint Presentations: may be delivered to support the above in a, b and c; also to add additional information and knowledge of certain important issue(s).

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

4.8 Conclusions and Decisions of the Meetings

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

a) Conclusions; and

b) Decisions.

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

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

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

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

4.9 Conduct of business

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

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

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

4.10 Reports

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

a) a brief history of the meeting (duration, attendance, agenda and list of Conclusions and Decisions);

b) a summary of the discussions by the Group on the different items of the agenda including, for each of them, the relevant Conclusions and/or Decisions; and

c) the work programme and future action by the Group.

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

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

5. 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/Leading Group	
	RASG-MID	MIDANPIRG
Aerodrome Operational Planning (AOP)		X
Runway and Ground Safety	X	
AIM, CNS and MET safety issues		X
CFIT	X	
SSP Implementation	X	
SMS implementation for ANS and Aerodromes	X	
Accidents and Incidents Analysis and Investigation	X	
English Language Proficiency	X	
RVSM safety monitoring		X
SAR and Flight Tracking		X
PBN		X
Civil/Military Coordination		X
Airspace management		X
Call Sign Similarity and Confusion		X
~~Conflict Zones~~		~~X~~
Contingency Planning		X
USOAP-CMA	X	
COSCAP, RSOO and RAIO	X	
Air Navigation Deficiencies		X
Training for ANS personnel		X
Training other civil aviation personnel	X	
Laser attack	X	
Fatigue Risk Management	X	
RPAS		X
~~GPS Jamming~~ (GNSS vulnerability)		X
~~Aeromedical~~	~~X~~	
Airborne Collision Avoidance System (ACAS)		X

REGIONAL AVIAITON SAFETY GROUPS-MIDDLE EAST (RASG-MID)

PROCEDURAL HANDBOOK

PART II

GROUPS OF RASG-MID
TERMS OF REFERENCE/WORK PROGRAMME/COMPOSITION/ ORGANIZATIONAL STRUCTURE

MID ANNUAL SAFETY REPORT GROUP (MID-ASRG)

1. Purpose of the MID-ASRG:

The MID-ASRG is established to:

1. gather safety information from different available sources to identify and determine the main aviation safety risks in the in the Middle East Region; and

2. develop the MID Region Safety Report on annual basis, for review and endorsement by the RASG-MID; ensuring the confidentiality/de-identification of data.

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

1. gather information from different available sources on the accidents and serious incidents that:
   a) occurred in the MID Region (State of Occurrence);
   b) involved aircraft registered in the MID Region (State of Registry); or
   c) involved aircraft owned and/or operated by an Air Operator from the MID Region (State of the Operator).
2. review and analyse the accidents and serious incidents;
3. coordinate with MID States' focal points to get additional information on the accidents and serious incidents, as appropriate;
4. identify the risk category focus areas and emerging risks;
5. analyse the preliminary and final investigations reports of accidents and serious incidents conducted by States, including relevant safety recommendations; and safety analyses of incidents, and share the outcomes with the MID-ASRG;
6. identify root causes and contributing factors, in order to support the MID-SEIG in the development of mitigation measures;
7. develop an agreed and harmonized MID Regional dataset of accidents and incidents and provide feedback to the ICAO Safety Indicators Study Group (SISG); and
8. share the outcome of its meetings with the concerned MIDANPIRG subsidiary bodies, as appropriate.

2. Composition:

The MID-ASRG is composed of Members designated by the following RASG MID Member States and Partners:

States: All MID States

Partners: AACO, AIRBUS, Boeing, IATA, IFALPA and IFATCA

3. Roles and Responsibilities:

- MID-RASG Chairperson – Coordinate MID-ASRG 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-ASRG Chairperson.

AERODROME SAFETY, PLANNING AND IMPLEMENTATION GROUP (ASPIG)

1. PURPOSE OF THE ASPIG:

a) As a Subsidiary body of the Regional Aviation Safety Group-Middle East (RASG-MID), the ASPIG is established to develop and implement Safety, Capacity and Efficiency Enhancement Initiatives related mainly to AGA issues including:

- Aerodrome Planning and Design;
- Heliports;
- Aerodrome System Capacity Enhancement;
- Aerodrome Certification;
- Aerodrome Safety Management System;
- Runway Safety;
- Aerodrome Visual Aids for Navigation;
- Aerodrome Operations and Services;
- Ground Handling Operations
- Aerodrome Emergency Response Planning;
- Coordination between AGA and ANS: ATM/AIM/CNS;
- AN Deficiencies in the field of Aerodrome Operations; and
- MID Region priorities and implementation of Safety and Air Navigation objectives set on the MID Region Safety and Air Navigation Strategies, in line with the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP).

b) In addition, the ASPIG should coordinate with other entities managing an extended scope including:
- Air traffic management;
- Aircraft operations; and
- Aeronautical information management.

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

a) Monitor developments and continuously update the MID Region Implementation Plans in the field of Aerodrome Planning and Operations, including the implementation of ICAO provisions.

b) Follow-up and analyse achievements and progress in the implementation of certification of all aerodromes open for international aircraft operations, according to the Table AOP I-1 included in the Middle East Regional Air Navigation Plan (MID ANP), and promote safety management of aerodrome operations in the Region.

c) Ensure that the planning and implementation of Aerodrome design and operational requirements in the MID Region is consistent with ICAO SARPs and Global Air Navigation Plan and reflecting global requirements for adequate aerodromes and safety of aircraft operations with particular attention payed to the anticipated increase of traffic alleviating aerodrome congestion.

d) Ensure the continuous and coherent development of the Aerodrome Design and Operations parts of the MID ANP in a manner that is consistent with ICAO SARPs, the Global Air Navigation Plan (GANP) and the Global Aviation Safety Plan (GASP).

e) Facilitate the implementation of Aerodrome Design and Operations Services identified in the MID ANP Basic Building Block (BBB) and the Aviation System Block Upgrade (ASBU) Frameworks.

f) Monitor the MID Region operational safety and efficiency of Aerodromes Operations and identify the associated Air Navigation Deficiencies that impede the implementation or provision of efficient Aerodrome Design and Operation services, analyse, review and monitor steps and corrective action plans made by concerned States for resolution of such deficiencies.

ASPIG Deliverables:

a) Aerodrome Operations (AOP) parts of the MID ANP reviewed and, as necessary, amendment proposals prepared to update the MID ANP to reflect changes in the operational and global requirements.

b) Level of implementation of Aerodrome Design and Operations services monitored and, as necessary, facilitated to support the effective implementation of the BBB and ASBU priority modules

c) Air navigation deficiencies in the field of AOP (as listed in the MANDD database) reviewed and, as necessary, updated to reflect the current situation.

d) Draft Conclusions and Decisions formulated relating to matters in the field of Aerodrome design and Operations that come within the scope of the RASG/MIDANPIRG work programmes.

e) Progress report submitted to RASG and MIDANPIRG addressing the ASPIG deliverables respectively in coordination with the RSC and MSG.

2. COMPOSITION:

The ASPIG is composed of:

Permanent Members

The AGA focal points of the MID States (i.e.: Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen), officially assigned and communicated to the ICAO Middle East Regional Office by MID States, are the permanent members of the ASPIG.

Observers

The following Partners are the permanent Observers to the ASPIG:

• AACO	Arab Air Carrier Organization
• ACAO	Arab Civil Aviation Organization
• ACI	Airports Council International
• AIRBUS	Airbus Aircraft Manufacturer
• BOEING	Boeing Commercial Airplane Company
• CANSO	Civil Air Navigation Services Organization
• EUROCONTROL	European Organisation for the Safety of Air Navigation
• COSCAP-GS	Cooperative Development of Operational Safety and Continuing Airworthiness Programme-Gulf States
• EASA	European Aviation Safety Agency
• Embraer	Embraer Aviation International
• FAA	United States Federal Aviation Administration
• 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
• IAOPA	International Council of Aircraft Owner and Pilot Associations
• ICCAIA	International Coordinating Council of Aerospace Industries Associations
• 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)

International Organizations, Airport Operators, Aircraft Operators, Maintenance and Repair Organizations, Regional Organizations, Training organizations, Aircraft manufactures, and Air Navigation Service Providers and any other allied organizations/representatives can be invited by ICAO/States to attend the ASPIG meetings in the capacity of observers.

3. WORKING ARRANGEMENTS:

Roles and Responsibilities:

- **Member State**s: provide technical expertise and collaborate in the development and implementation of the ASPIG deliverables.

- **Partners**: provide technical expertise and collaborate in the development and implementation of the ASPIG deliverables.

- **ICAO:** acts as Secretariat and provides necessary support to the ASPIG.

Chairmanship:

The Chairperson will:

a) call for ASPIG meetings;
b) chair the ASPIG meetings;
c) keep focus on high priority items;
d) ensure agendas meet objectives to improve safety;
e) provide leadership for ongoing projects and accomplishments;
f) promote consensus among the group members;
g) coordinate ASPIG activities closely with the Secretariat; and
h) promote ASPIG and lobby for contributors.

In order to ensure the necessary continuity in the work of the ASPIG the Chairperson, the Vice-Chairperson are held by each Member State (i.e.: Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Sudan, Syria, UAE and Yemen) for a period of three (03) years. The Chairperson chairs the ASPIG meeting in collaboration with the Secretariat.

Convening of meetings:

The ASPIG Meeting will be convened every 12 to 18 months. At each of its meetings the Group should endeavour to agree on the dates and venue of its next meeting.

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.

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.

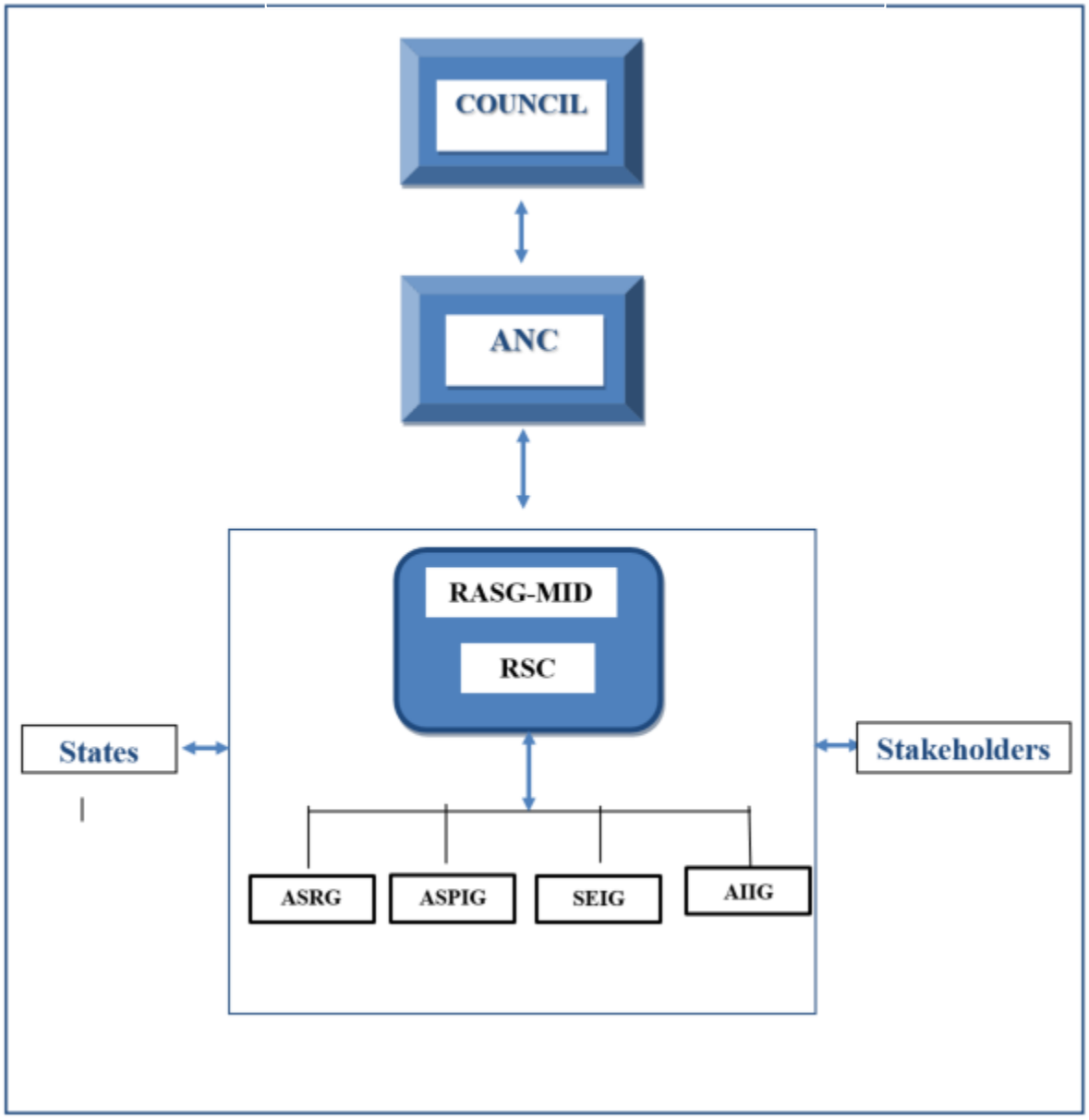
MID SAFETY ENHANCEMENT INTIATIVE GROUP (MID-SEIG)

TBD

ACCIDENT AND INCIDENT INVESTIGATION GROUP (AIIG)

TBD

RASG-MID
ORGANIZATIONAL STRUCTURE



ATTACHMENT A

LIST OF PARTICIPANTS

STATES **EGYPT** Mr. Amr Mohamed Nabil	 Director Egypt/Aircraft Accident Investigation Directorate Cairo - EGYPT
Mr. Ahmed Eslam Mosleh	Safety Inspector Egyptian Civil Aviation Authority Cairo - EGYPT
Dr. Eng. Mohamed Abdelhakim Galal	Head of Compliance and Safety Sector Egyptian Airports Company Cairo - EGYPT
Mr. Shehab Hassan Mohamed	Deputy Director Aircraft Accident Investigation Ministry of Civil Aviation Complex Cairo-EGYPT
Dr. Nermin A. Mohammad	Aircraft Accident Investigator & Simultaneous Interpreter Aircraft Accident Investigation Directorate Cairo - Egypt
Mr. Mohamed Ibrahim Abou El Kasem	Investigator Egypt/Aircraft Accident Investigation Directorate Cairo - EGYPT
IRAQ Mr. Diaconu Alin George	 Safety Investigator General Company for Air Navigation Services SERCO Baghdad - IRAQ
OMAN Eng. Abdullah Omar AlOjaili	 Assistant Director General for Safety Public Authority for Civil Aviation Muscat – SULTANATE OF OMAN
Capt. Majid Saif Al Barhi	Director of Transport Safety Department Ministry of Transport Muscat, SULTANATE OF OMAN
QATAR Capt. Abdulrahman Al Hammadi	 Director of Air Safety Department Civil Aviation Authority Doha – QATAR
Mr. Dhiraj Ramdoyal	Head of ANS Civil Aviation Authority Doha – QATAR

Mr. Khalid Al Mutawah	ASD Advisor Civil Aviation Authority Doha – QATAR
SAUDI ARABIA Mr. Hussam Abdulaziz Abumansoor	Manager, Risk Management General Authority of Civil Aviation Jeddah 21421 - KINGDOM OF SAUDI ARABIA
Eng. Mutasim Aljawharji	Safety Specialist General Authority of Civil Aviation Jeddah 21421 - KINGDOM OF SAUDI ARABIA
Mr. Theeb A. Alotaibi	Director of Safety Analysis Aviation Investigation Bureau KINGDOM OF SAUDI ARABIA
Eng. Ziyad Mohammed Aljohani	Accident and Incident Aviation Specialist and Acting Safety Programme Manager General Authority of Civil Aviation Jeddah 21421 - KINGDOM OF SAUDI ARABIA
UNITED ARAB EMIRATES Mr. Mohammad Faisal Al Dossari	Assistant Director General – Air Accident Investigation General Civil Aviation Authority Dubai – UNITED ARAB EMIRATES
Mr. Ismaeil Mohammed Al Blooshi	Assistant Director General, Aviation Safety Affairs Sector General Civil Aviation Authority Dubai, UNITED ARAB EMIRATES
Mr. Waleed Al-Riyami	Senior Air Traffic Services Inspector Specialist/Acting Safety Programme General Civil Aviation Authority Dubai – UNITED ARAB EMIRATES
UNITED STATES Mr. Robert Roxbrough	Senior Representative - Abu Dhabi Office of International Affairs Federal Aviation Administration Abu Dhabi 09825 UNITED ARAB EMIRATES
ORGANIZATIONS **ACAO** Mr. Mohamed REJEB	ACAO Air Navigation & Air Safety Expert Arab Civil Aviation Organization Rabat Souissi, MOROCCO
BOEING Mr. Don Hallock	Chief Engineer, Global System Safety Boeing UNITED STATES

CANSO Mr. Shayne Campbell	CANSO Safety Programme Manager Netherlands/CANSO The NETHERLANDS
IATA Capt. Mohamed Aly Amin	Fuel Efficiency Manager Egyptair Holding Company Cairo - EGYPT
IFATCA Mr. Raouf Helmy Nashed Abdalla	IFATCA Representative, Middle East IFATCA Cairo - EGYPT
Mr. Mohamed Yehia Gad	Air Traffic Controller IFATCA Cairo - EGYPT Mobile: +201021799901 Email: mohamed_atc@hotmail.com

- END -