



**INTERNATIONAL CIVIL AVIATION ORGANIZATION**

**REPORT OF THE FIRST MEETING  
OF THE AERODROME SAFETY, PLANNING  
AND IMPLEMENTATION GROUP**

**(ASPIG/1)**

*(Cairo, Egypt, 19 – 21 November 2019)*

The views expressed in this Report should be taken as those of the MID Aerodrome Safety, Planning and Implementation Group (ASPIG/1) 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

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of ICAO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontier or boundaries.

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## **PART I – HISTORY OF THE MEETING**

### **1. PLACE AND DURATION**

1.1 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.

### **2. OPENING**

2.1 The meeting was opened by Mr. Mohamed Smaoui, the Deputy Regional Director of the ICAO Middle East (MID) Office. Mr. Smaoui welcomed all the participants to Cairo to attend the ASPIG/1 meeting. He recalled that the Seventh meeting of the Regional Aviation Safety Group-Middle East (RASG-MID/7) held in Cairo, Egypt from 15 to 18 April 2019 endorsed the revised RASG-MID Organizational Structure.

2.2 Mr. Smaoui commended the achievements made by the RGS WG over the past years and highlighted that, the ASPIG will continue the work achieved by the RGS WG; and in accordance with the new RASG-MID Organizational Structure, the ASPIG/1 meeting is expected to propose draft Terms of Reference for the ASPIG, for review and approval by the RSC/7 meeting.

2.3 Mr. Smaoui highlighted the main subjects to be addressed by the ASPIG/1 meeting; and in closing, he thanked the participants for their attendance and wished the meeting every success in its deliberations.

### **3. ATTENDANCE**

3.1 The meeting was attended by a total of thirty-five (35) participants from eight (8) States (Egypt, Kuwait, Libya, Qatar, Saudi Arabia, Sudan, UAE and USA) and two (2) International Organizations (IATA and IFATCA). The list of participants is at **Attachment A**.

### **4. OFFICERS AND SECRETARIAT**

4.1 The meeting was chaired by Mr. Mohammed Yousif Mohamed, Acting Manager Aerodromes Section, General Civil Aviation Authority (GCAA), UAE.

4.2 Mr. Mohamed Iheb Hamdi, the Regional Officer for Aerodromes and Ground Aids (RO/AGA) was the Secretary of the meeting.

### **5. LANGUAGE**

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

### **6. AGENDA**

6.1 The following Agenda was adopted:

**Agenda Item 1:** Election of Chairperson and Vice-Chairperson

**Agenda Item 2:** Adoption of the Provisional Agenda

**Agenda Item 3:** ASPIG Terms of Reference

**Agenda Item 4:** AGA Global and Regional Developments

- Global Reporting Format (GRF) for runway surface condition assessment and reporting
- Ground Handling

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- Agenda Item 5:** Implementation of Aerodrome Safety priorities and objectives
- Agenda Item 6:** Coordination between RASG-MID and MIDANPIRG in the area of Aerodromes
- 6.1 GANP: Basic Building Block Implementation
- 6.2 GANP: ASBUs Implementation for AOP & AGA/ANS Coordination matters
- 6.3 Airport Planning Challenges (State/Airports)
- 6.4 Air Navigation Deficiencies in the Field of AOP
- Agenda Item 7:** Future Work Programme
- Agenda Item 8:** Any other business

## 7. CONCLUSIONS AND DECISIONS – DEFINITION

7.1 All RASG-MID Sub-Groups and Task Forces record their actions in the form of Conclusions and Decisions with the following significance:

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

## 8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

<i>DRAFT DECISION 1/1:</i>	<i>ENDORSEMENT OF ASPIG TORS</i>
<i>DRAFT CONCLUSION 1/2:</i>	<i>REGIONAL SEMINAR ON GLOBAL REPORTING FORMAT (GRF)</i>
<i>DRAFT CONCLUSION 1/3:</i>	<i>SURVEY ON BASIC REGULATORY FRAMEWORK FOR AERODROME CERTIFICATION</i>
<i>DRAFT CONCLUSION 1/4:</i>	<i>AERODROME CERTIFICATION IMPLEMENTATION PROGRESS</i>
<i>DRAFT CONCLUSION 1/5:</i>	<i>RUNWAY SAFETY TEAM IMPLEMENTATION PLAN</i>
<i>DRAFT CONCLUSION 1/6:</i>	<i>STATES NEEDS FOR THE BBB-AOP IMPLEMENTATION</i>
<i>DRAFT CONCLUSION 1/7:</i>	<i>A-SMGCS IMPLEMENTATION SEMINAR</i>
<i>DRAFT CONCLUSION 1/8:</i>	<i>AIRPORT PLANNING SEMINAR</i>

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**PART II: REPORT ON AGENDA ITEMS****REPORT ON AGENDA ITEM 1: ELECTION OF CHAIRPERSON AND VICE-CHAIRPERSON**

1.1. The subject was addressed in WP/1 presented by the Secretariat.

1.2. Mr. Mohammed Yousif Mohamed, Acting Manager Aerodromes Section, General Civil Aviation Authority (GCAA), United Arab of Emirates, and Mr. Fakhreldin Osman Ahmed Mehadi, Aerodromes Safety and Standards Directorate Director, Sudan Civil Aviation Authority (SCAA), were unanimously elected as the Chairperson and Vice-Chairperson of the Aerodrome Safety, Planning and Implementation Group (ASPIG), respectively.

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**REPORT ON AGENDA ITEM 2: ADOPTION OF THE PROVISIONAL AGENDA**

2.1           The subject was addressed in WP/2 presented by the Secretariat. The meeting reviewed and adopted the Agenda as at Para.6 of the History of the Meeting.

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**REPORT ON AGENDA ITEM 3: ASPIG TERMS OF REFERENCE**

3.1 The subject was addressed in WP/3 presented by the Secretariat.

3.2 The meeting reviewed and updated the ASPIG Terms of References (TORs) as at **Appendix 3A**, and agreed to their presentation to the RSC/7 meeting for endorsement. Accordingly, the meeting agreed to the following Draft Decision:

***DRAFT DECISION 1/1: ENDORSEMENT OF ASPIG TORs***

*That, the Terms of References (TORs) of the ASPIG, are endorsed as at **Appendix 3A**.*

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**AGENDA ITEM 4: AGA GLOBAL AND REGIONAL DEVELOPMENTS*****Global Reporting Format (GRF)***

4.1 This subject was addressed in WP/4 and PPT/1 presented by the Secretariat. 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 by water, snow, ice or slush, with potentially negative impact on an aircraft's breaking, acceleration or controllability.

4.2 The meeting was apprised of 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.

4.3 The meeting was informed that Qatar started the implementation of the GRF by establishing the GRF regulation, guidance material, and coordination with the aerodrome operator.

4.4 The meeting was apprised of the FAA's effort to assist in globalizing the Takeoff And Landing Performance Assessment (TALPA) initiative through the GRF2020 efforts and recognized the abundant amount of TALPA and GRF2020 training and awareness information and tools already available to ICAO to achieve the 05 November 2020 GRF implementation objective. The meeting thanked FAA for sharing their experience.

4.5 The meeting highlighted that the GRF methodology will have an impact on the State's Regulations, Guidance Material, and Aerodrome Manuals of Air Traffic Management at Aerodromes including AIS reporting formats. It is therefore paramount that States train the aviation industry to ensure universal implementation leading to a harmonized assessment and reporting of runway surface conditions and improved flight crew assessment of take-off and landing performances.

4.6 Based on the above, the meeting agreed to the following Draft Conclusion:

***DRAFT CONCLUSION I/2: 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;*
- b) *International Organizations be requested to actively participate in the conduct of Regional Seminar;*
- c) *States be urged to ensure appropriate participation of the concerned stakeholders (CAAs, Airports Operators, ANSPs, Airlines, etc.) to the upcoming Regional GRF Seminar;*
- d) *States be requested to report on the implementation of the GRF to the ICAO MID Regional Office; and*
- e) *States be encouraged to organize National Fora (Seminar, Workshop, training etc.) to ensure full deployment of GRF at their airports.*

***Ground Handling***

4.7 The subject was addressed in WP/5 and PPT/2 presented by Saudi Arabia. The meeting noted with appreciation Saudi Arabia's approaches for Ground Handler Certification, including the Regulatory Framework that has been established to oversight Ground Handling Operators using a performance-based surveillance programme.

4.8 The meeting was apprised of Kuwait's experience related to Ground Handler Certification. The meeting thanked Kuwait for sharing their experience, which was highly appreciated by the participants.

4.9 The meeting was informed that an unedited version of Doc 10121 "Ground Handling Manual" is available on the ICAO-NET.

4.10 With respect to Ground Handling Safety, it was highlighted that a joint IATA-ICAO Ground Handling Seminar will be organized in 2020-2021 by the ICAO MID Office and IATA with the support of the Arab Civil Aviation Organization (ACAO). The meeting encouraged States to participate actively in this Seminar.

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**Agenda Item 5: Implementation of Aerodrome Safety Priorities and Objectives*****2020 – 2022 Global Safety Plan & MID Region Safety Strategy Overview***

5.1 This subject was addressed in WP/6 presented by the Secretariat providing an update on the Global Aviation Safety Plan (GASP 2020-2022).

5.2 The meeting noted that the revised MID Region Safety Strategy 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.

5.3 The meeting supported the proposed goals and safety indicators and targets and urged States and Stakeholders to be aware of the weight of their individual progress on the regional targets, assume their own responsibility and commit to Implementation Plans to achieve regional goals and objectives set in the MID Region Safety Strategy, as at **Appendix 5A**.

***ACI'S Training Initiatives to Support ICAO MID Safety Strategy***

5.4 This subject was addressed in WP/7 presented by the Secretariat on behalf of the Airport Council International (ACI). The meeting was apprised of the ACI's safety training initiatives to enhance aerodrome safety in support of ICAO MID Office safety strategy.

5.5 The meeting was informed that a joint ACI-ICAO Implementing Annex 14: Advanced Aerodrome Design and Operations Training Course will be held in Cairo, Egypt from 28 June to 2 July 2020. The meeting acknowledged ACI's continuing efforts to engage regional cooperation and collaboration with the ICAO MID Office towards aerodrome safety encouraged States to participate actively in this Training Course.

5.6 With respect to Aerodrome Design and Operations compliance, the meeting noted with appreciation that Saudi Arabia confirmed to sponsor/support a Training Course on Aerodrome Inspector and highlighted the need for the Government Safety Inspector for Aerodrome (GSI-Aerodromes) to be developed by ICAO (MIDANPIRG/17 & RASG-MID/7-Report Paragraph 5.1.15 Refers). The FAA reiterated that they will coordinate with the ICAO MID Office to conduct technical inspection training for the MID Region.

***Progress on Aerodrome Certification***

5.7 This subject was addressed in WP/8 presented by the Secretariat. The meeting highlighted that each State shall 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).

5.8 The meeting noted that the monitoring of the progress of the Aerodrome Certification relies on up-to-date and relevant information regarding Aerodrome Certification. Therefore, the meeting agreed that States should not only provide the certification status for each of their International Aerodromes to the ICAO MID Office, but also an Aerodrome Certification Plan should be submitted to the ICAO MID Office to be processed.

5.9 The meeting invited States to review and update, as necessary, the Questionnaire on Basic Regulatory Framework for Aerodrome Certification presented at **Appendix 5B**. The meeting reviewed and adopted the Aerodrome Certification Implementation Progress/Plan Table as at **Appendix 5C**. Finally, in order to better support and assist States/Aerodromes in the MID Region on the Aerodrome Certification process. The meeting agreed that States should provide the ICAO MID Office with:

- status of implementation of the Basic Regulatory Framework for aerodrome certification using the **Table 1 of Appendix 5B**.
- their progress/plan for Aerodrome Certification Implementation using the Template at **Appendix 5C**.

5.10 Based on the above, the meeting agreed to the following Draft Conclusions:

**DRAFT CONCLUSION 1/3: SURVEY ON BASIC REGULATORY FRAMEWORK FOR AERODROME CERTIFICATION**

*That, by February 2020, a Survey on Basic Regulatory Framework for Aerodrome Certification in the MID Region be carried out using the Questionnaire at **Appendix 5B**.*

**DRAFT CONCLUSION 1/4: AERODROME CERTIFICATION IMPLEMENTATION PROGRESS**

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

- a) the status of implementation of the Basic Regulatory Framework for aerodrome certification using the **Table 1 of Appendix 5B**; and*
- b) their progress/plan for Aerodrome Certification Implementation using the Template at **Appendix 5C**.*

### ***Progress on Runway Safety Implementation***

5.11 This subject was addressed in WP/9 presented by the Secretariat. 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.

5.12 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 highlighted 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.

5.13 The meeting recognized the importance of establishing Runway Safety Teams at International airports to improve safety and urged States to submit a Runway Safety Implementation Plan as at **Appendix 5D**.

5.14 Based on the above, the meeting agreed to the following Draft Conclusion:

***DRAFT CONCLUSION 1/5:        RUNWAY SAFETY TEAM IMPLEMENTATION  
PLAN***

*That, States provide the ICAO MID Office by February 2020 with a Runway Safety Team Implementation Plan, using the Template at **Appendix 5D**.*

***Aerodrome Safety Assessment***

5.15 This subject was addressed in WP/10 presented by Sudan. The meeting was apprised of Sudan's experience related to Aerodrome Safety Assessment. The meeting thanked Sudan for sharing their experience.

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**Agenda Item 6: Coordination between RASG-MID and MIDANPIRG in the area of Aerodromes**

***GANP: Basic Building Block Implementation***

6.1 This subject was addressed in WP/11 presented by the Secretariat. The meeting was apprised of the Basic Building Block (BBB) framework for Airport Operations, which outlines the foundation of any robust air navigation system. The meeting highlighted that the BBB framework for airport operations identifies the essential services to be provided by airports for International Civil Aviation in accordance with ICAO Standards.

6.2 The meeting recognized that a BBB Verification process should be established to verify the implementation of the essential air navigation services outlined in the BBB framework for Airport Operations as the capability of States to oversight these services is covered by the ICAO USOAP PQs in the AGA Area.

6.3 The meeting noted that intra-collaboration within the MID Region is essential for the foundation of a robust air navigation system for each State. Therefore, the meeting encouraged States excelling in a particular Airport Design and Operations sub-areas to provide required assistance for other State(s), seeking for the support to implement the essential air navigation services that shall be provided for International Civil Aviation, as indicated in the BBB framework and presented at **Appendix 6A**.

6.4 Based on the above, the meeting agreed to the following Draft Conclusion:

***DRAFT CONCLUSION 1/6: STATES NEEDS FOR THE BBB-AOP IMPLEMENTATION***

*That, in order to support the implementation of the BBB for Airport Operations and prioritize the necessary technical assistance in line with the MID Region NCLB Strategy, States:*

- a) provide the ICAO MID Office, by February 2020 with their Needs for the BBB-AOP Implementation using the Table at **Appendix 6A**.; and*
- b) are encouraged to volunteer to provide the necessary technical assistance.*

***GANP: ASBUs Implementation for AOP & AGA/ANS Coordination matters***

6.5 This subject was addressed in WP/12 presented by the Secretariat. The meeting was apprised of the new Structure of the GANP 6th Edition endorsed by the 40<sup>th</sup> session of the ICAO Assembly.

6.6 The meeting noted that the 6<sup>th</sup> Edition of the GANP brought relevant changes to the Airport Operations Performance Improvement Area. 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 to actively participate in the ASBU Symposium.

**Operational thread: A-CDM (Airport Collaborative Decision Making)**

6.7 The meeting was apprised of the ASBU Operational Thread A-CDM and the outcomes of the A-CDM Implementation Workshop that has been successfully held in Cairo, Egypt, 20-22 October 2019.

6.8 The meeting raised concern about the slow progress of implementation of the Block 0 and recalled that the MIDANPIRG Steering Group meeting agreed to the following MSG Conclusion:

*MSG CONCLUSION 6/6: SURVEY ON ACDM IMPLEMENTATION*

*That,*

- a) concerned States (according to the B0-ACDM applicability area included in the MID Air Navigation Strategy) be urged to provide the ICAO MID Office with the contact details of their designated ACDM Focal Points; and*
- b) a Survey on ACDM implementation be carried out for the monitoring of ACDM implementation, using the template at Appendix 5.3A.*

6.9 The meeting urged States to populate the Questionnaire on A-CDM Implementation at **Appendix 6B** in order to update the current Table B0-ACDM 3-1 included in the MID ANP Vol III, as at **Appendix 6C**.

Operational thread: SURF (Surface Operations)

6.10 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.

6.11 The meeting noted that the Table B0-SURF 3-1 included in the MID ANP Vol III needs to be updated to match the significant changes brought by the 6<sup>th</sup> Edition of the GANP to the SURF ASBU operational Thread.

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

6.13 Based on the above, the meeting agreed to the following Draft Conclusion:

*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.*

***Airport Planning Challenges (States/Airports)***

6.14 This subject was addressed in WP/13 presented by the Secretariat. The meeting underlined that the Airport Master Plan is a document that presents the short-term (1-5 years), intermediate-term (6-10 years) and long-term (10-20 year) development/goals of an airport and is typically evaluated and updated every 5 to 10 years. It was recalled that new ICAO provisions on airport planning have been proposed to be included in Annex 14, Volume I and PANS Aerodromes, to support the provision of airport capacity enhancements.

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6.15 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 requirements and intrinsic needs for the future.

6.16 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.

6.17 The meeting was informed that the Airport Master Plan Task Force (AMPTF) had been established by the Aerodrome Design and Operations Panel (ADOP) and tasked with a complete rewrite of the guidance contained in Doc 9184, Airport Planning Manual, Part 1 - Master Planning.

6.18 Based on the above, the meeting agreed to the following Draft Conclusion:

***DRAFT CONCLUSION I/8: AIRPORT PLANNING SEMINAR***

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

***AN Deficiencies in the Field of AOP***

6.19 This subject was addressed in WP/14 presented by the Secretariat. The meeting urged States to use the MID Air Navigation Deficiency Database (MANDD) for the submission of requests for addition, update, and elimination of Air Navigation Deficiencies, including the submission of a specific Corrective Action Plan (CAP) for each deficiency. The meeting reiterated that a deficiency would be eliminated only when a State submit a formal Letter to the ICAO MID Office containing the evidence(s) that mitigation measures have been implemented for the elimination of this deficiency.

6.20 The meeting reviewed and updated the Air Navigation Deficiencies in the AOP field, as at **Appendix 6D**. It was noted that the total number of AOP deficiencies priority "A" is nine (9). Seven (7) deficiencies are related to aerodrome certification; one (1) deficiency is related to runway physical characteristics; and one (1) deficiency is related to apron lighting. The lack of implementation of aerodromes' certification represents 80% of these deficiencies.

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**REPORT ON AGENDA ITEM 7: FUTURE WORK PROGRAMME**

7.1 The subject was addressed in WP/15 presented by the Secretariat.

7.2 The meeting agreed that Saudi Arabia to develop a Guidance Material on Ground Handling Certification. Kuwait will share their experience on Ground Handling Certification during the next GH seminar and ASPIG/2 meeting.

7.3 The meeting agreed that the UAE and Egypt will submit to the ICAO MID Office the final Guidance Material on Apron Management for its publication.

7.4 The meeting agreed that the ASPIG/2 be tentatively scheduled for Q4-2020. The venue will be the ICAO MID Regional Office in Cairo, unless a State is willing to host the meeting.

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**REPORT ON AGENDA ITEM 8: ANY OTHER BUSINESS**

8.1 Nothing has been discussed under this Agenda Item.

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# **APPENDICES**

## APPENDIX 3A

### AERODROME SAFETY, PLANNING AND IMPLEMENTATION GROUP (ASPIG/1)

#### 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.

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

- 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 paid 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 States:** 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.

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APPENDIX 5A



ICAO

SAFETY

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

**MID REGION  
SAFETY STRATEGY**

**EDITION 6, APRIL 2019**





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# MID Region Safety Strategy

## 1. Strategic Safety Objective

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

## 2. Safety Objectives

2.1 States and Regions must focus on their safety priorities as they continue to foster expansion of their air transport sectors.

2.2 The ICAO Global Aviation Safety Plan (GASP) establishes targeted safety objectives and initiatives while ensuring the efficient and effective coordination of complementary safety activities between all stakeholders.

2.3 The 2017-2019 GASP introduced a global aviation safety roadmap to ensure that safety initiatives deliver the intended benefits of the GASP objectives through enhanced coordination, thus reducing inconsistencies and duplication of efforts.

2.4 The GASP roadmap outlines specific safety initiatives supported by a set of actions associated with each of the four safety performance enablers (standardization, resources, collaboration and safety information exchange) which, when implemented by stakeholders, will address the GASP objectives and global safety priorities. These specific safety initiatives targeted to the different streams of stakeholders (States, regions and industry) at different levels of maturity.

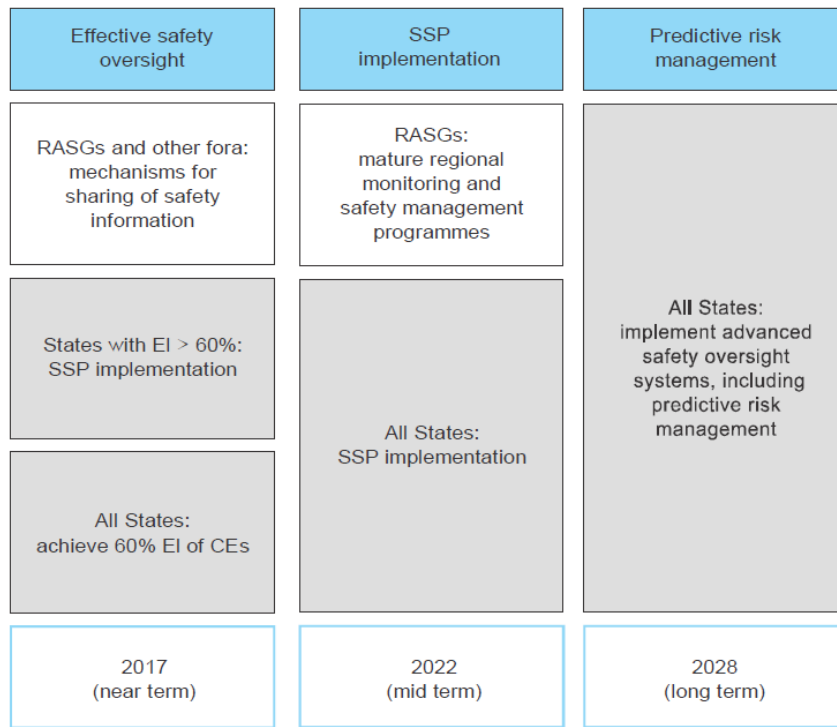
2.5 States, Regions (supported primarily by the RASGs) and industry are expected to use the roadmap individually and collectively as the basis to develop action plans that define the specific activities which should take place in order to improve safety at the regional or sub-regional and national levels.

2.6 The Draft 2020-2022 Edition of the GASP would set forth ICAO's Safety Strategy in support of the prioritization and continuous improvement of aviation. The plan guides the implementation of regional and national aviation safety plans.

2.7 The 2020-2022 Edition of the GASP includes a new set of goals, targets and indicators, in line with the United Nations' 2030 Agenda for Sustainable Development.

2.8 The global aviation safety roadmap, presented in the Draft 2020-2022 Edition of the GASP, would serve as an action plan to assist the aviation community in achieving the GASP goals.

2.9 The MID Region safety objectives are in line with the GASP objectives and address specific safety risks identified within the framework of the Regional Aviation Safety Group-Middle East (RASG-MID), based on the analysis of available safety data.



### 2017-2019 GASP Objectives

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

## 3. Measuring and monitoring Safety Performance:

3.1 The first version of the MID Region Safety Strategy was developed by the First MID Region Safety Summit (Bahrain, 28-29 April 2013) and endorsed by the DGCA-MID/2 meeting (Jeddah, Saudi Arabia, 20 -22 May 2013).

3.2 The monitoring of safety performance and its enhancement is achieved through identification of relevant Goals and Safety Indicators, taking into consideration the Draft GASP 2020-2022 and regional specific objectives and priorities, as well as the adoption and attainment of Safety Targets with a specific timeframe.

3.3 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 MID Region Safety Goals, Indicators and Targets are detailed in the Table below:

## MID Region Safety Targets

**Aspirational Goal: Zero Fatality by 2030**

**Goal 1: Achieve a Continuous Reduction of Operational Safety Risks**

Safety Indicator	Safety Target	Timeline
Number of accidents per million departures	Regional average rate of accidents to be in line with the global average rate	2016
Number of fatal accidents per million departures	Regional average rate of fatal accidents to be in line with the global average rate	2016
Number of fatalities per million departures	Number of fatalities per billion passengers carried (fatality rate) to be in line with the global average rate	2018
Number of Runway Excursion accidents per million departures	Regional average rate of Runway Excursion accidents to be below the global average rate	2016
Number of Runway Incursion accidents per million departures	Regional average rate of Runway Incursion accidents to be below the global average rate	2018
Number of LOC-I related accidents per million departures	Regional average rate of LOC-I related accidents to be below the global rate	2016
Number of CFIT related accidents per million departures	Regional average rate of CFIT related accidents to be below the global rate	2016
Number of Mid Air Collision (accidents)	Zero Mid Air Collision accident	2018
Number of Near Mid Air Collision (serious incidents)	Regional average rate of Near Mid Air Collision (serious incidents per million departures) to be less than <b>0.1</b>  All States to reduce the rate of Near Mid Air Collision (AIRPROX) within their airspace	2020

**Goal 2: Strengthen States' Safety Oversight Capabilities/Progressively Increase the USOAP-CMA EI Scores/Results:**

Safety Indicator	Safety Target	Timeline
USOAP-CMA Effective Implementation (EI) results: a. Regional average EI b. Number of States with an overall EI over 60% c. Regional average EI by area d. Regional average EI by CE	a. Regional average EI to be above 70% b. 11 MID States to have at least 60% EI c. Regional average EI for each area to be above 70% d. Regional average EI for each CE to be above 70%	a. 2020 b. 2020 c. 2020 d. 2020
Number of Significant Safety Concerns (SSC)	a. No Significant Safety Concern (SSC) b. SSC, if identified, to be resolved as a matter of urgency, and in any case within 12 months from its identification	2016

**Goal 3: Improve Aerodrome Safety:**

Safety Indicator	Safety Target	Timeline
Number of certified International Aerodrome as a percentage of all International Aerodromes in the MID Region	a. 50% of the International Aerodromes certified b. 75% of the International Aerodromes certified	a. 2015 b. 2017
Number of established Runway Safety Team (RST) at MID International Aerodromes.	50% of the International Aerodromes having established a RST	2020

**Goal 4: Expand the use of Industry Programmes:**

Safety Indicator	Safety Target	Timeline
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	a. N/A b. 2018
Use of the IATA Safety Audit for Ground Operations (ISAGO) certification, as a percentage of all Ground Handling service providers	The IATA Ground Handling Manual (IGOM) endorsed as a reference for ground handling safety standards by all MID States. Pursue at least 50% increase in ISAGO registration (baseline 2017)	2020
Use of the ACI Airport Excellence (APEX) in Safety programme	At least 1 ACI APEX in Safety conducted in 1 Airport of the Region per year	N/A

**Goal 5: Implementation of Effective SSPs and SMSs:**

Safety Indicator	Safety Target	Timeline
Number of MID States that use ECCAIRS for the reporting of accidents and serious incidents.	a. 9 States b. 12 States	a. 2019 b. 2020
Number of States that have completed the SSP Gap Analysis on iSTARS	13 States	2020
Number of States that have developed an SSP implementation plan	13 States	2020
Regional Average SSP Foundation (in %)	70%	2022
Number of States that have fully implemented the SSP Foundation	10 States	2022
Number of States that have established an ALoSP	10 States	2025
Number of States that have implemented an effective SSP	7 States	2025
Number of States that have established a process for acceptance of individual service providers' SMS	2 States	2020
Number of States providing information on safety risks, including SSP SPIs, to the RASG-MID	7 States	2020
Establishment of a Regional mechanism for regional data collection, sharing and analysis	Regional Mechanism established	2018

**Goal 6: Increase Collaboration at the Regional Level to Enhance Safety:**

Safety Indicator	Safety Target	Timeline
Number of States attending the RASG-MID meetings	At least 12 States from the MID Region	2019
Number of States providing required data related to accidents, serious incidents and incidents to the MID-ASRT	All States from the MID Region	2020
<p>Number of States requiring and actively seeking assistance/support</p> <p>Number of States that received assistance/support through the RASG-MID, MENA RSOO and/or other NCLB mechanisms</p>	<p>All States having an EI below 60% to be member of the MENA RSOO</p> <p>All States having an EI below 60% to have an approved NCLB Plan of Actions for safety (agreed upon with the ICAO MID Office)</p> <p>SEI or Technical Assistance Mission/Project implemented for each assistance need identified by the RASG-MID</p>	<p>2019</p> <p>2019</p>
Number of States, having an EI below 60% in some areas, delegating certain safety oversight functions to the MENA RSOO or other State(s)	Percentage of States, having an EI below 60% in some areas, delegating certain safety oversight functions to the MENA RSOO or other State(s), to be at least <b>50%</b>	2022
Number of States that contribute to the implementation of SEIs and Technical Assistance Missions/Projects	7 States	2020
Percentage of SEIs implemented in accordance with the agreed timeframe	80% of the SEIs	N/A

**Goal 7: Ensure the Appropriate Infrastructure is available to Support Safe Operations:**



Safety Indicator	Safety Target	Timeline
Number of Air Navigation Deficiency Priority “U” identified by MIDANPIRG	No Air Navigation Deficiency Priority “U”	2022

**Goal 8: Monitor the Fleet Age:**

Safety Indicator	Safety Target
*Average Fleet Age.	States are required to monitor their fleet age.  No regional Safety Targets are defined.
*Percentage of fleet above 20 years of age.	

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## 4. Governance

4.1 The MID Region Safety Strategy will guide the work of RASG-MID and all its member States and partners.

4.2 The RASG-MID will be the governing body responsible for the review and update of the Strategy, as deemed necessary.

4.3 Progress on the implementation of the MID Region Safety Strategy and the achievement of the agreed Safety Targets will be reported to the ICAO Air Navigation Commission (ANC), through the review of the RASG-MID reports; and to the stakeholders in the Region during the MID Region Safety Summits.

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**APPENDIX 5B**

**AERODROME CERTIFICATION BASIC REGULATORY FRAMEWORK**

**FOR THE STATE**

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

*Table 1: Basic Aerodrome Certification Regulatory Framework*

**PROMULGATED REFERENCES**

**ON AERODROME CERTIFICATION BASIC REGULATORY FRAMEWORK FOR THE STATE**

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

*Table 2: Promulgated References related to Table 1*

**AERODROMES CERTIFICATION PROCEDURES**

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

*Table 3: Aerodromes Certification Procedures*

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**APPENDIX 5C**

**PROGRESS 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  (Yes/No)	SMS implemented at airport  (Yes/No)	Date of Initial Certification  (Month, Year)	Date of Most Recent Re-Certification or Audit  (Month, Year)	Date of Most Recent ARFF Compliance Verification  (Month, Year)
	Aerodrome ICAO Reference Code	Aerodrome Name / (IATA CODE)						

*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					Remarks
			Certified	On-final phase	Planned to be Certified	Planned Starting Date	Planned End Date	

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.*

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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](#).

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APPENDIX 6A

MID REGION CAPACITY BUILDING NEEDS ON AGA AREA REGIONAL TECHNICAL ASSISTANCE ON AIRPORTS DESIGN AND OPERATIONS					
AGA Sub-Areas		State seeks for assistance at the CAA Level (oversight)	State seeks for assistance at the Airport Operators Level	State is volunteering to offer assistance through SMEs and key tools	
Airport Design	Airport Capacity and Master Plan				
	Airside Design				
	Visual Aids				
	Radio Navigation Aids				
	Electrical Systems				
	Terminals				
	Fencing				
Aerodrome Operations	Aerodrome Emergency Plan				
	Rescue and Firefighting				
	Disable Aircraft Removal				
	Wildlife Strike Hazard Reduction				
	Operational Area Management				
	Airside Adverse Condition Operations				
	Ground Servicing of Aircraft				
	Control of Obstacles				
	Aerodrome Maintenance	Airside Electrical			
		Pavement Management			
		Drainage Management			
		Airside Markings			
		Civil Engineering			
	Safety Management	SMS Implementation			
		Phased Approach Implementation Plan			
Gap Analysis					

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**APPENDIX 6B**

MID Region Airport Collaborative Decision Making  
(MID A-CDM) Survey Questionnaire

Name of the State/Administration:

Approach to implementation

1. Is the A-CDM implementation a national program/project or a local airport by airport project?  
*(Please select the applicable box)*

It is a national program where A-CDM is being implemented at several airports with one entity managing the overall program to facilitate common procedures and approach to the implementations	
It is an "airport-by-airport" approach where each project is managed at "local" level	
It is a combination of a national program and separate airport projects manager at "local" level	
There is not yet an implementation plan for A-CDM	

*Please add free text comments if needed:*

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2. If A-CDM has been/is going to be implemented, please indicate at which airports and by what year:

Airport	Year

*Add additional lines as needed*

**For EACH airport mentioned above, please provide separate responses to QUESTIONS 3 to 22:**

Status of A-CDM implementation

3. In which of the following phases is the A-CDM implementation?  
*(Please select the box that is the most suitable option)*

No planning, i.e. nothing in relation to A-CDM has started yet	
Initial planning, i.e. collecting information about guidance material etc. to set the scope of the projects	
Planning well underway, i.e. scope set, engaged with stakeholders etc.	
Ready to launch A-CDM implementation project	
A-CDM implemented, i.e. procedures are in place and used in the "day-to-day" operations (Please indicate number of years for A-CDM used in day-to-day operations.	

### A-CDM Project Scope

4. Which one of the A-CDM conceptual elements are being implemented as part of the A-CDM project? *(Please select the applicable box(es))*

Information sharing	
Milestone Management	
Variable Taxi Times	
Collaborative Management of Flight Updates	
Pre Departure Sequencing	
A-CDM in adverse conditions	
Integration with Air Traffic Flow Management (ATFM)	

*Please add free text comments if needed:*

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5. How is Information sharing implemented as par to the solution/planned A-CDM solution? *(Please select the applicable box(es))*

Via Information Sharing platform collecting data in real-time from various systems.	
Via manual interaction and information exchange	
A combination of the two alternatives above	

*Please add free text comments if needed:*

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6. What Milestones (based on the Eurocontrol model) are captured/planned to be captured for the Milestone Management? *(Please select the applicable box(es) and please indicate if the implementation/planned implementation uses any other names for the milestones)*

Eurocontrol Milestones	Applied	Alternative name
Milestone 1 - ATC Flight Plan Activated		
Milestone 2 - CTOT Allocation/EOBT – 2 Hrs		
Milestone 3 - Take off from Outstation		
Milestone 4 - Local Radar Update/FIR Entry		
Milestone 5 - Final Approach		
Milestone 6 - Landed		
Milestone 7 - In Block		
Milestone 8 - Aircraft at Gate		
Milestone 9 - TOBT Entered		
Milestone 10 - TSAT Issued		
Milestone 11 - Boarding Starts		
Milestone 12 - Aircraft Ready		
Milestone 13 - Start-up Request		
Milestone 14 - Start-up Approved		
Milestone 15 - Off Block		
Milestone 16 - Take Off		

*Please add free text comments if needed:*

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6B-3

7. Are you planning to apply the concept of Target Off Block Times? *(Please select the applicable box)*

No	
Yes, and this will be the responsibility of the Airlines and/or appointed Ground Handlers to manage and update the Target Off Block Times (TOBT) in order to ensure that TOBT is accurate and reliable.	

a. If yes, will the project provide a solution that facilitates predictive TOBT calculations? *(Please select the applicable box)*

No	
Yes	

8. What methodology is applied/going to be applied for calculating Variable Taxi Time? *(Please select the applicable box)*

“Table look up” utilizing fixed taxi time from gates to runways.	
Dynamic Variable Taxi Time using self-learning algorithms based on real-time and statistical surveillance data	

9. How is Target Start-Up Approval Time (TSAT) being calculated as part of Pre-Departure Sequencing? *(Please select the applicable box)*

Manual TSAT calculations	
Automatic TSAT calculations utilizing a Pre Departure Sequence or full Departure Management system/capability	

a. If TSAT is calculated automatically, at what key milestones are the TSAT calculated/re-calculated? *(Please select the applicable box(es))*

Milestone 1 - ATC Flight Plan Activated	
Milestone 2 - CTOT Allocation/EOBT – 2 Hrs	
Milestone 3 - Take off from Outstation	
Milestone 4 - Local Radar Update/FIR Entry	
Milestone 5 - Final Approach	
Milestone 6 - Landed	
Milestone 7 - In Block	
Milestone 8 - Aircraft at Gate	
Milestone 9 - TOBT Entered	
Milestone 10 - TSAT Issued	
Milestone 11 - Boarding Starts	

10. How TSAT information is shared to Airlines operators/Ground Handling Agencies? *(Please select the applicable box(es))*

Via A-CDM portal/web interface/application	
Via mobile application	
Via Automatic Parking Aid displays at gate	
Data link	
Radio communication	

11. What are the key parameters for data exchange between ACDM and ATFM? *(Please specify in free text in the text box)*

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12. To establish the A-CDM project, has any guidance material been used to facilitate the scope and objectives? *(Please select the applicable box)*

Yes	
No	

a. If yes, please indicate what guidance material has been used. *(Please select the applicable box(es))*

ICAO Doc 9971	
Eurocontrol A-CDM Manual	
CANSO A-CDM Guidance Material	
FAA Surface CDM material	
IATA Guidance material	
Specific airport “operational guidelines” materials	
Other material like Eurocae or ETSI standards for A-CDM <i>(Please specify)</i>	

*Please add free text comments if needed:*

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### Local Concept of Operations

13. Has a “Local Concept of Operations” document for the A-CDM implementation been established? *(Please select the applicable box)*

Yes	
No	

a. If yes, please indicate the scope of the document. *(Please select the applicable box(es))*

It sets out the objectives that A-CDM is aiming to achieve	
It provides a common vocabulary with all definitions for A-CDM	
It provides information about information sharing and the sources for the information collected	
It provides information about the milestones used in the A-CDM process	
It defines each participating stakeholder’s role and responsibilities as part of the A-CDM process	
It provides how A-CDM shall operate during irregular operations	
It provides descriptions of the process steps for various regular and irregular operations	
It includes how to measure the success of A-CDM once implemented, i.e. Key Performance Indicators (KPIs)	

*Please add free text comments if needed:*

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## Stakeholder Engagement

14. Which stakeholders are involved in the A-CDM implementation? *(Please select the applicable box(es))*

Airport operator	
Airline operators	
Ground handlers	
Air Navigation Service Provider	
Network Operations/ATFM unit	
Others <i>(Please specify)</i>	

15. Has a Memorandum of Understanding (MOU) been established between the stakeholders? *(Please select the applicable box)*

Yes	
No	

*Please add free text comments if needed:*

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## Project Implementation

16. Has a project group been established with all stakeholders involved? *(Please select the applicable box)*

Yes	
No	

*Please add free text comments if needed:*

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17. Is there a shared leadership or is the project management led by one organization? *(Please select the applicable box)*

Shared leadership	
Leadership is appointed from one organization	

a. Please explain why one of the options is applied:

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18. Is the project group meeting held on a regular basis or ad-hoc? *(Please select the applicable box)*

Regular	
Ad-hoc	

a. Please explain why one of the options is applied:

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19. What are the objectives identified in the project that A-CDM is aiming to achieve?  
*(Please select the applicable box(es))*

Increase predictability	
Increase on-time performance	
Improve resource utilization	
Reduce taxi times	
Increase airport efficiency	
Reduce environmental nuisance	
Optimise the use of available capacity	
Improved safety	
Other <i>(please indicate what other objectives are identified in box below)</i>	

*Please add free text comments if needed:*

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20. Has the project identified a more detailed Key Performance Framework with Key Performance Indicators to facilitate the measurements of the A-CDM implementation? *(Please select the applicable box)*

Yes	
No	

a. If yes, would the project team be willing to share this work with the ICAO Regional officer for Aerodromes and Ground Aids (AGA) to aid in its future work such as the establishment of more detailed A-CDM guidelines? *(Please select the applicable box)*

Yes	
No	

*Please add free text comments if needed:*

--

## Training

21. Has the project established training in any of the following areas for the implementation of A-CDM? *(Please select the applicable box(es))*

Initial training for stakeholders to “what is A-CDM”	
Advanced training for stakeholders to “what is A-CDM”	
Training on how to operate under A-CDM procedures for all stakeholders	
Specialized/tailored training for each user in relation to “what do I need to do when A-CDM is operational at the airport”?	

*Please add free text comments if needed:*

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## Challenges

22. Please rank what hold most true in relation to your A-CDM implementation. (Please use 1-5 where 1 indicates “no, do not agree at all” and 5 is “yes, agree completely”).

A-CDM as a concept is too complicated and vague	
Developed guidelines are not enough to understand how A-CDM shall be implemented successfully	
It is challenging to understand what an A-CDM implementation is, i.e. what has to be achieved to say “yes, we have A-CDM at our airport”	
The challenge is to understand what system(s) is(are) and information are needed to implement A-CDM	
It is challenging to get all stakeholders engaged and committed to the A-CDM project	
It is challenging to manage the A-CDM project	
It is challenging to understand what value A-CDM will bring	
It is very complicated to establish how to measure the success of A-CDM	

*Please add free text comments if needed:*

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**APPENDIX 6C**

Page II-1

***B0 – ACDM: Improved Airport Operations through Airport-CDM***

**Description and purpose**

To implement collaborative applications that will allow the sharing of surface operations data among the different stakeholders on the airport. This will improve surface traffic management reducing delays on movement and manoeuvring areas and enhance safety, efficiency and situational awareness.

**Main performance impact:**

KPA- 01 – Access and Equity	KPA-02 – Capacity	KPA-04 – Efficiency	KPA-05 – Environment	KPA-10 – Safety
N	Y	Y	Y	N

***Applicability consideration:***

Local for equipped/capable fleets and already established airport surface infrastructure.

<b><i>B0 – ACDM: Improved Airport Operations through Airport-CDM</i></b>				
<b>Elements</b>	<b>Applicability</b>	<b>Performance Indicators/Supporting Metrics</b>	<b>Targets</b>	<b>Timelines</b>
A-CDM	OBBI, HECA, OIII, OKBK, OOMS, OTBD, OTHH, OEJN, OERK, OMDB, OMAA	Indicator: % of applicable international aerodromes having implemented improved airport operations through airport-CDM  Supporting metric: Number of applicable international aerodromes having implemented improved airport operations through airport-CDM	50%	Dec. 2018

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**TABLE B0-ACDM 3-1**


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**EXPLANATION OF THE TABLE**

## Column

1- Name of the State

2- Aerodrome and Location Indicator

3 & 4 Fundamental ACDM Elements

3-Information Sharing:

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 1- Information Sharing is essential since it forms the foundation for all the other subsequent elements.*

4-The Milestones Approach (Turn- Round Process)

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 2- The Milestones Approach (Turn- Round Process) aims to achieve common situational awareness by tracking the progress of a flight from the initial planning to the take off.*

5 – 8 Other ACDM Elements

5- Variable Taxi Time

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 3- Variable Taxi Time is the key to predictability of accurate take-off in block times especially at complex airports.*

6-Collaborative Management of Flight Updates

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 4- Collaborative Management of Flight Updates enhances the quality of arrival and departure information exchanges between the Network Operations and the CDM airports.*

7-Collaborative Pre-departure Sequence

FI – Fully Implemented

PI – Partially Implemented

NI – Not Implemented

*Note 5- (Collaborative) Pre-departure Sequence establishes an off-block sequence taking into account operators preferences and operational constraints.*

8-ACDM in Adverse Conditions

FI – Fully Implemented  
PI – Partially Implemented  
NI – Not Implemented

*Note 6- ACDM in Adverse Conditions achieves collaborative management of a ACDM during periods of predicted or unpredicted reductions of capacity.*

9- Action Plan — short description of the State’s Action Plan with regard to ACDM Implementation, especially for items with a “PI” or “NI” status, including planned date(s) of full compliance, as appropriate.

10- Remarks — additional information, including detail of “PI” or “N”, as appropriate.

State	Aerodrome Location Indicator	ACDM IMPLEMENTATION ELEMENTS								
		Fundamental ACDM Elements		Other ACDM Elements				Action Plan	Remarks	
		Information Sharing	Milestones Approach	Variable Taxi Time	Collaborative Management of Flight Updates	Collaborative Pre-departure Sequence	ACDM in Adverse Conditions			
1	2	3	4	5	6	7	8	9	10	
<b>Bahrain</b>	OBBI									
<b>Egypt</b>	HECA									
<b>Iran</b>	OIII									
<b>Kuwait</b>	OKBK									
<b>Oman</b>	OOMS									
<b>Qatar</b>	OTBD									
	OTHH									
<b>Saudi Arabia</b>	OEJN									
	OERK									
<b>UAE</b>	OMDB									
	OMAA									

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**APPENDIX 6D**

**Deficiencies in the AOP Field**

**BAHRAIN**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action
No Deficiencies Reported									

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**EGYPT**

Item No	Identification		Deficiencies			Corrective Action				
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action	
+	ANNEX 14 VOL I: Para. 1.4	Luxor and Borg El Arab Intl. Airports	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	<p>–Certification of:</p> <p>–LUXER/Luxor Intl Airport (HELX) will be in Dec 2017</p> <p>–ALEXANDRIA/Borg El Arab Intl Airport (HEBA) will be in the first half of 2018</p>	F H	State submitted a letter dated 22/07/2015 stating that all primary international aerodromes will be certified by the end of November 2018.	Egypt	Jan, 2018	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes



**Deficiencies in the AOP Field**

**IRAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	- MASHHAD/Shahid Hashemi Nejad Intl (OIMM), SHIRAZ/Shiraz Intl (OISS ), TABRIZ/Tabriz Intl (OITT), TEHRAN/Imam Khomeini Intl (OIIE), BANDAR ABBAS/Bandar Abbas Intl (OIKB)	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	Certification Status for:  - TEHRAN/ IKIA Intl (OIIE)  - BANDAR Abbas /Bandar Abbas Intl (OIKB)  are waiting final action for certification very soon	F H	Corrective Action Plan has not been formally provided by the State	Iran	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**IRAQ**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	Al Najaf/Al Najaf Intl (ORNI), BASRAH/Basrah Intl (ORMM), MOUSL/Mousl Intl (ORBM), SULYMANIYA H/Sulaymaniyah Intl (ORSU )	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H O	Corrective Action Plan has not been formally provided by the State	Iraq	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**JORDAN**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**KUWAIT**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**LEBANON**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	BEIRUT/ Rafic Hariri Intl (OLBA)	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Corrective Action Plan has not been formally provided by the State	Lebanon	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**LIBYA**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	BENGAZI/Be nina (HLLB), SEBHA/Sebha (HLLS), TRIPOLI/Tripol i Intl (HLLT)	Implementation of Certification of Aerodromes used for international operations	May, 2015	-	F H S	Corrective Action Plan has not been formally provided by the State	Libya	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**OMAN**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action
No Deficiencies Reported									

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**QATAR**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes



**Deficiencies in the AOP Field**

**SAUDI ARABIA**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**SUDAN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	- Nyala/Nyala Airports	Implementation of Certification of Aerodromes used for international operations	May, 2015	-Certification of NYALA/Nyala (HSNN) Will be in January 2018	F H	-	Sudan	<del>Jan, 2018</del> Jan, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Deficiencies in the AOP Field**

**SYRIA**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	MID eANP VOL II Table AOP II-1	Damascus int'l Airport	Apron lighting inadequate	Sep, 2003	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	<del>Dec, 2018</del> Dec, 2020	A
2	MID eANP VOL II Table AOP II-1	Damascus int'l Airport	Runway surface rough and damaged. Runway markings unsatisfactory	Sep, 2003	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	<del>Dec, 2018</del> Dec, 2020	A
3	ANNEX 14 VOL I: Para. 1.4	ALEPPO/Aleppo Intl (OSAP), DAMASCUS/ Damascus Intl (OSDI), LATTAKIA /Bassel AL-Assad Intl (OSLK)	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Corrective Action Plan has not been formally provided by the State	Syria	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**UAE**

Item No	Identification		Deficiencies			Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination	Description	Executing Body	Date of Completion	Priority for Action

No Deficiencies Reported

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

**Deficiencies in the AOP Field**

**YEMEN**

Item No	Identification		Deficiencies				Corrective Action			
	Requirement	Facilities/ Services	Description	Date First Reported	Remarks/ Rationale for Non-elimination		Description	Executing Body	Date of Completion	Priority for Action
1	ANNEX 14 VOL I: Para. 1.4	ADEN/Aden Intl (OYAA), HODEIDAH/ Hodeidah Intl (OYHD), MUKALLA/Riy an Intl (OYRN), SANA`A/Sana`a Intl (OYSN), TAIZ/ Taiz Intl (OYTZ)	Implementation of Certification of Aerodromes used for international operations	Nov, 2006	-	F H	Corrective Action Plan has not been formally provided by the State	Yemen	<del>Dec, 2018</del> Dec, 2020	A

<sup>(1)</sup> Rationale for non-elimination: “F”= Financial

“H”= Human Resources

“S”= State (Military/political)

“O”= Other unknown causes

**Note:**\* Priority for action to remedy a deficiency is based on the following safety assessments:

**'U' priority = Urgent requirements having a direct impact on safety and requiring immediate corrective actions.**

**Urgent requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is urgently required for air navigation safety.**

**'A' priority = Top priority requirements necessary for air navigation safety.**

**Top priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation safety.**

**'B' priority = Intermediate requirements necessary for air navigation regularity and efficiency.**

**Intermediate priority requirement consisting of any physical, configuration, material, performance, personnel or procedures specification, the application of which is considered necessary for air navigation regularity and efficiency.**

**Definition:**

**A deficiency is a situation where a facility, service or procedure does not comply with a regional air navigation plan approved by the Council, or with related ICAO Standards and Recommended Practices, and which situation has a negative impact on the safety, regularity and/or efficiency of international civil aviation.**

- END -

<sup>(1)</sup> Rationale for non-elimination: "F"= Financial

"H"= Human Resources

"S"= State (Military/political)

"O"= Other unknown causes

***ATTACHMENT A***

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