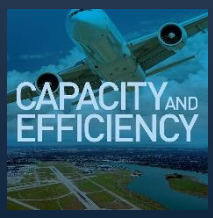
The Sixth Meeting of the Aerodromes Safety, Planning and Implementation Group (ASPIG/6)



2024

Hosted by the Sultanate of Oman

Held in Muscat, from 27 to 29 May 2024

MID
ICAO Middle East Regional Office

ASPIG/6 Final Report

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE SIXTH AERODROME SAFETY & PLANNING IMPLEMENTATION GROUP (ASPIG/6) MEETING

(Muscat, Oman, 27-29 May 2024)

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

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

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PART I – HISTORY OF THE MEETING

1. PLACE AND DURATION

1.1 The Sixth meeting of the Aerodrome Safety & Planning Implementation Group (ASPIG/6) was gracefully hosted by Oman in Muscat from 27 to 29 May 2024.

2. OPENING

1.2 The meeting was opened by Mr. Mubarak Saleh Al-Ghelani the Acting Director General of Cicil Aviation Regulation of Oman. Mr. Al-Ghelani welcomed all the participants and wished them fruitful deliberations.

3. ATTENDANCE

1.3 The meeting was attended in person by a total of 43 participants from 10 MID States (Bahrain, Egypt, Iran, Jordan, Libya, Oman, Qatar, Saudi Arabia, Sudan and UAE) and 3 International Organizations (ACI, IATA, and IFALPA).

1.4 The list of participants is at **Attachment A**.

4. OFFICERS AND SECRETARIAT

1.5 The meeting welcomed Mrs. Angie Ahmed Abdalla Mostafa, Counsellor to the Egyptian Civil Aviation, Egypt, who announced her retirement and proposed to go ahead with the new election of the Chairpersons. The meeting thanked, with deepest appreciation, Mrs. Angie for her outstanding support and leadership all over the years she was involved with ICAO MID framework and notably the Aerodromes Safety, Planning and Implementation Group.

1.6 The meeting agreed to revise the Agenda Item I and proceed with the election.

1.7 Mrs. Leena Ahmed Al-Kooheji, Chief, Airport & Air Navigation Audit at Bahrain Aviation Safety & Security Directorate was unanimously elected as the Chairperson of the ASPIG.

1.8 Mr. Khalid Abdullah A. Al Yusufi, the Acting

1.9 Director of Aerodrome Safety at Oman CAA, was unanimously elected as the Vice-Chairperson of the ASPIG.

1.10 Consequently, the meeting was chaired by Mrs. Leena and Co-chaired by Mr. Khalid.

1.11 Mr. Mohamed Iheb Hamdi, the ICAO MID 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 Revised Agenda was adopted:

Agenda Item 1: Election of Chairpersons and adoption of the Revised Agenda

Agenda Item 2: Regional Performance Framework for Aerodrome Safety

Agenda Item 3: Regional Performance Framework for Aerodrome Capacity and Efficiency

Agenda Item 4: Future Work Programme

Agenda Item 5: Any other Business

7. CONCLUSIONS AND DECISIONS – DEFINITION

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

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

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

8. LIST OF DRAFT CONCLUSIONS AND DRAFT DECISIONS

8.1 In line with the approved Agenda Items, the current report includes the following Conclusions/Decisions:

DRAFT CONCLUSION 6/1:	*AERODROMES CERTIFICATION IMPLEMENTATION PLAN IN THE MID REGION*
DRAFT CONCLUSION 6/2:	*RUNWAY SAFETY TEAMS IMPLEMENTATION IN THE MID REGION*
DRAFT CONCLUSION 6/3:	*RUNWAY SAFETY GO-TEAM PERFORMANCE REVIEW*
DRAFT CONCLUSION 6/4:	*GRF IMPLEMENTATION IN THE MID REGION*
DRAFT CONCLUSION 6/5:	*ACR-PCR IMPLEMENTATION IN THE MID REGION*
DRAFT CONCLUSION 6/6:	*MID REGION WILDLIFE STRIKES REPORTING TO ICAO*
DRAFT CONCLUSION 6/7:	*MID AERODROMES SAFETY PORTFOLIOS*
DRAFT CONCLUSION 6/8:	*MID AGA CAPACITY BUILDING NEEDS FOR THE AOP BBB IMPLEMENTATION*
DRAFT CONCLUSION 6/9:	*MID ACDM IMPLEMENTATION PROGRESS*
DRAFT CONCLUSION 6/10:	*A-SMGCS IMPLEMENTATION IN THE MID REGION*

PART II – REPORT ON AGENDA ITEMS

REPORT ON AGENDA ITEM 1: ADOPTION OF THE REVISED AGENDA

1.1 The subject was addressed in WP/1 presented by the Chairperson. The meeting reviewed and adopted the Revised Agenda as at paragraph 6 of the History of the Meeting.

REPORT ON AGENDA ITEM 2: REGIONAL PERFORMANCE FRAMEWORK FOR AERODROME SAFETY

Follow-up on the endorsed Conclusions related to Aerodrome Safety

2.1 The subject was addressed in WP/2 presented by the Secretariat. The meeting reviewed the progress made for the implementation of the endorsed Conclusions/Decisions, as at **Appendix 2A**.

Follow-up of the Aerodromes SEIs included in the MID Regional Aviation Safety Plan (MID RASP) 2023-2025 Edition.

The subject was addressed in WP/3 presented by the Secretariat. The meeting was informed of the implementation progress AGA related to Safety Enhancement Initiatives (SEIs) as at **Appendix 2B.**

Aerodromes Safety Dashboard Updates

2.2 The subject was addressed in WP/4 presented by the Secretariat. The meeting reviewed. and updated the Aerodromes Safety Dashboard as at the **Appendix 2C.**

2.3 The meeting agreed that the list of International Airport to be monitored should be updated as per the individual AIP of each State. IATA raised the need for the coordination with all MID States to identify all international Airports listed in their AIPs and consequently reflect them on the Dashboard.

Aerodromes Certification Implementation in the MID Region

2.4 The subject was addressed in WP/5 presented by the Secretariat. The meeting noted the current level of Aerodromes Certification in the MID Region.

2.5 The meeting noted that, the International Civil Aviation Organization (ICAO) requires the certification of aerodromes to ensure that national regulatory mechanisms are established for effective enforcement of National Regulation that are transposed in line with ICAO Annex 14 Volume I specifications.

2.6 The meeting recalled that, when an aerodrome is granted a certificate, it signifies that it meets the specified facility and operational requirements and has the capability to maintain these standards.

2.7 The meeting reiterated that each State shall certify aerodromes used for international operations in accordance with the specifications as specified by ICAO Annex 14. In addition, States should certify/license aerodromes open to public use in accordance with the same specifications as well as other relevant ICAO specifications through a National regulatory framework.

2.8 The meeting noted that, at one hand, the certification process serves as a baseline for monitoring compliance. On the other, the Universal Safety Oversight Audit Programme (USOAP) evaluates the establishment and implementation of aerodrome certification processes through specific protocol questions that check the effective implementation of the mechanisms ensuring that purpose of aerodrome certification is met.

2.9 In this regard, data on effective implementation and certification progress are continuously collected by ICAO MID office to support regional goals and safety priorities. Therefore, states are required to promptly provide to the ICAO MID Office with any change of their Implementation Plans related to Aerodromes Certification.

2.10 In connection with the above, States reviewed and agreed about the new Template, at **Appendix 2D**, to be used for the monitoring of the Aerodrome Certification Implementation progress in the MID Region.

2.11 The meeting agreed to the following Draft Conclusion, to be presented to the RASG MID/12 for endorsement to replace, and supersede the previous related RSC Conclusions 7/5, and 7/6:

DRAFT CONCLUSION 6/1: AERODROMES CERTIFICATION IMPLEMENTATION PLAN IN THE MID REGION

*That, in order to efficiently monitor the Implementation of the Aerodromes Certification in the MID Region, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office with the progress of their Aerodromes Certification Plans, using the new Template at **Appendix 2D**.*

Runway Safety Teams Implementation in the MID Region

2.12 The subject was addressed in WP/6 presented by the Secretariat.

Local RWY Safety Team Implementation

2.13 The meeting noted that the Runway safety-related accidents are a significant concern in aviation, accounting for a considerable amount of all reported aviation accidents over the past ten years. The meeting highlighted that, among those accidents, a substantial number of accidents were caused by runway excursions.

2.14 The meeting evoked the fact that landing and take-off phases are particularly critical, as they expose aircraft to risks such as runway incursions and excursions with other aircraft, ground vehicles, and personnel.

2.15 The meeting recalled that to address these risks, the Global Runway Safety Action Plan (GRSAP) was developed to provide recommended actions for stakeholders involved in runway safety, aiming to reduce global runway excursions and incursions. In addition, it guides the collaborative efforts of states, airports, airlines, air navigation service providers, and manufacturers to implement measures that improve runway safety and reduce accidents and fatalities.

2.16 The meeting highlighted that, the GRSAP aligns with ICAO's Global Aviation Safety Plan (GASP) and supports its established runway safety targets. In order to hit these targets, the meeting reiterated the importance of establishing local runway safety teams (LRST) at Aerodromes.

2.17 In this regard, the meeting reviewed the new Template, at **Appendix 2E**, to be used for the monitoring of the progress of local Runway Safety Teams Implementation in the MID Region.

2.18 The meeting agreed to the following Draft Conclusion, to be presented to the RASG MID/12 for endorsement to replace, and supersede the previous related RSC Conclusions 7/9:

DRAFT CONCLUSION 6/2: RUNWAY SAFETY TEAMS IMPLEMENTATION IN THE MID REGION

*That, in order to monitor the Implementation of local RWY Safety Teams in the MID Region, States be urged to provide, by **Q3 of the current Year,** to the ICAO MID Office with the progress of their Aerodromes RWY RST Implementation Plans, using the new Template at **Appendix 2E**.*

RWY Safety Team Efficiency: Performance Monitoring

2.19 The meeting noted that Aerodromes are responsible for maintain a high level of safety by establishing local runway safety teams (LRSTs) and other aerodrome safety mechanisms led and managed by the aerodrome operator. Such mechanisms should be able to ensure change management during work in progress, suspension of runway operations, and/or runway closure.

2.20 In addition, the meeting recalled that Aerodromes safety mechanisms should be able to identify and designate "hot spots" based on incidents/accidents history or potential risk of collision or runway incursions on the movement area.

2.21 Adding to that, the meeting indicated that a prior approval from the competent authority for the use of an aerodrome by an aircraft exceeding the certified design characteristics of the pavement is subject to technical assessment proving the capability of the platform the accommodate such aircraft.

2.22 The meeting reiterated that the local Runway Safety Teams performance level should be monitored and assessed in order to the ensure that this safety mechanism is ensuring the safety target set by the Aerodrome and the enhancement of the regularity of operations during normal and adverse conditions.

2.23 In addition, the meeting highlighted that the ICAO Universal Safety Oversight Audit Programme (USOAP) emphasis on the implementation of an efficient local Runway Safety Teams at Aerodromes.

2.24 The meeting agreed to the following Draft Conclusion, to be presented to the RASG MID/12 for endorsement:

DRAFT CONCLUSION 6/3: RUNWAY SAFETY GO-TEAM PERFORMANCE REVIEW

*That, in order to monitor the actual efficiency and performance the Local RWY Safey Teams at Aerodromes and for planning purposes, concerned States be urged to confirm, by **Q3 of the current Year** and upon reception of ICAO MID Office notification of the selected Aerodromes concerned by the ICAO Safety Go-Team Performance Review, the acceptance of the ICAO RWY Safety Go-Team Missions and facilitate these visits, **in collaboration with the Selected Aerodromes**.*

National Runway Safety Programme

2.25 The subject was addressed in WP/7 presented by Oman.

2.26 The meeting was appraised of the National Runway Safety Programme (NRSP) of Sultanate of Oman. The meeting noted that the Programme is a strategic initiative by Sultanate of Oman's Civil Aviation Authority aiming to mitigate runway-related accidents, incidents, and other occurrences. The meeting noted that the NRSP is part of a broader commitment to uphold and enhance aviation safety standards in alignment with the National Aviation Safety Plan (NASP) and the State Safety Programme (SSP).

2.27 The meeting highlighted that the NRSP outlines a collaborative framework that involves various stakeholders, from industry and Civil Aviation Authority, to foster safety culture and continuous improvement in runway operations during normal and adverse conditions.

2.28 The meeting highlighted that one of the key components of the programme is the establishment of the National Runway Safety Committee (NRSC), which plays a pivotal role in coordinating efforts across the aviation community, promoting best practices, and facilitating effective communication and information exchange. The meeting noted the sample of the Terms of References (ToRs) of OMAN NRSC at **Appendix 2F**.

2.29 The meeting emphasized on the importance of integration of technology, infrastructure design improvements, technical safety assessments, and training within the programme to address potential risks associated with runway operations. In addition, the meeting reiterated that the programme aims to create a proactive safety environment through regular reviews, data analysis, and the implementation of targeted strategies to prevent runway incursions, excursions, and other runway safety related occurrences.

2.30 The meeting noted that the following objectives of the NRSC:

a) Aligning its outputs with existing industry priorities and ICAO guidelines.
b) Support the State Safety Programme in Sultanate of Oman.
c) Facilitating data exchange and analysis to identify and prioritize national runway safety issues.
d) Establishing a central hub for runway safety performance data.
e) Empower Local Runway Safety Teams (LRSTs) and action groups at every certified aerodrome in Sultanate of Oman.
f) Integrate the safety value of LRSTs at the national level.
g) Enhancing understanding of operational issues from aerodromes, aircraft, and air traffic services that affect runway safety.
h) Ensuring stakeholder participation, commitment, and strong collaboration among NRSC members.
i) Developing and implement a Runway Safety Action Plan (RSAP).
j) Periodically reviewing the effectiveness of RSAP.
k) Prepare, promote and conduct, as deemed necessary, industry runway safety capacity building activities.

2.31 The meeting noted with appreciation the effort made by Oman who is able to provide within the ASPIG Framework the training and supporting tools required to establish or enhance a Runway Safety Programme in the MID Region. The meeting requested the ICAO MID Office the coordinate with Oman about a potential implementation mechanism for the MID States/Aerodromes.

2.32 The meeting encouraged States to adopt similar approach towards the development of their national runway safety initiatives, support of local runway safety teams in full collaboration with the industry.

GRF Implementation in the MID Region

2.33 The subject was addressed in WP/8 presented by the Secretariat.

2.34 The meeting reminded States, who did not yet finalize the implementation Global Reporting Format (GRF) methodology and its deployment on their Aerodromes, should foster the implementation of the ICAO requirements related to GRF.

2.35 The meeting was appraised of the GRF Implementation Level at the Regional Level. The meeting encouraged States to approach the ICAO MID Office and submit their needs in terms of capacity building as deemed necessary. In this regard, the meeting

2.36 The meeting reviewed and updated the Action Millstones sample on the GRF Implementation at **Appendix 2G,** and agreed on the new Template at **Appendix 2H**, to be used for the monitoring of the progress of the GRF Implementation in the MID Region.

2.37 The meeting agreed to the following Draft Conclusion, to be presented to , to be presented to the RASG MID/12 for endorsement to replace, and supersede the previous related PIRG-RASG Conclusion 1/2:

DRAFT CONCLUSION 6/4: GRF IMPLEMENTATION IN THE MID REGION

*That, with reference to the Action Millstones sample on the GRF Implementation at **Appendix 2G**, and in order to monitor the Implementation of the GRF Methodology in the MID Region, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office with the progress of their Aerodromes GRF Deployment Plan, using the Template at **Appendix 2H**.*

ACR-PCR Implementation in the MID Region

2.38 The subject was addressed in PPT/9 presented by the Secretariat.

2.39 The meeting recalled that the ACR-PCR method has been effective since July 2020 as:

- Aircraft manufacturers should start publishing their ACR.
- Trainings for users (CAAs, airports, aircraft manufacturers) could be initiated.
- CAAs should implement the new ICAO standard into the national regulations.
- Airports could consequently start implementing the new protocol.

2.40 The meeting recalled that the method will be fully applicable in November 2024 where Airports would have published their PCR accordingly after getting the necessary training about Airport Pavement Strength Rating. The meeting encouraged States to approach the ICAO MID Office and submit their needs in terms of capacity building as deemed necessary.

2.41 In connection with the above, the meeting reviewed and updated the Action Millstones sample on the ACR-PCR Implementation at **Appendix 2I**, and agreed on the new Template at **Appendix 2J**, to be used for the monitoring of the progress of the ACR-PCR Implementation in the MID Region.

2.42 The meeting agreed to the following Draft Conclusion, to be presented to the RASG MID/12 for endorsement:

DRAFT CONCLUSION 6/5: ACR-PCR IMPLEMENTATION IN THE MID REGION

*That, with reference to the Action Millstones sample on the ACR-PCR Implementation at **Appendix 2I**, and in order to monitor the Implementation of the ACR-PCR Methodology in the MID Region, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office with the progress of their Aerodromes ACR-PCR Deployment Plan, using the Template at **Appendix 2J**.*

Wildlife Strikes Reporting

2.43 The subject was addressed in PPT/10 presented by the Secretariat, PPT/11 presented by IATA and PPT/12 Presented by Oman.

2.44 The meeting emphasized the importance of reporting the Wildlife strikes to ICAO as stipulated in ICAO Annex14. The meeting recalled that since 2023 ICAO have changed the deadlines to a single submission per year containing all reports for the previous year. After that, in 2023 (for 2022 reports), ICAO deadline was set to September 4th and starting from 2024 (for 2023 reports) ICAO deadline has been defined as the end of the first trimester each year to receive all reports for the previous year.

2.45 The meeting highlighted that ICAO would send an email asking for the data in the beginning of each year, therefore States have to commit and send the reports as per the defined deadline.

2.46 The meeting was appraised of the reporting process ICAO related to wildlife strikes and agreed to the following Conclusion:

DRAFT CONCLUSION 6/6: MID REGION WILDLIFE STRIKES REPORTING TO ICAO

*That, in order to feed the Aerodromes Safety Portfolios in the MID Region, States be urged to promptly provide the ICAO, **once receiving the ICAO request and by the end of first trimester the current year**, their respective wildlife strike reports of the **previous year either** via ECCAIRS "e5f/e4f" files, or via an ECCAIRS Excel-based form presented at **Appendix 2K** that also can be downloaded at* www.icao.int/IBIS .

2.47 In addition, the meeting was appraised of the IATA Bird Strike Analysis based on the Pilot reports on bird strike, aircraft maintenance personnel report, personnel on ground report seeing an aircraft striking one or several birds and evidence of bird remains.

2.48 The meeting emphasized that Bird strikes pose a significant operational risk, carrying substantial financial implications and the potential contributing to the loss of control during flight, resulting in severe and undesirable outcomes. The meeting urged States to encourage the service providers to join the IATA IDX platform to facilitate the reporting of bird strikes.

2.49 The meeting agreed that it is crucial for stakeholders to proactively address and mitigate the surge in bird strike incidents.

2.50 The meeting was appraised of Oman experience on wildlife management and noted with appreciation the mitigation measures implemented by Oman at the national level.

Ground Operations/Damage

2.51 The subject was addressed in PPT/13 presented by the IATA.

2.52 The meeting was appraised of the ground damage levels at the global and regional levels as collected by IATA. The meeting encouraged States to implement provisions in ICAO Doc 10121 Manual on Ground Handling, recognize industry initiatives that drive ground operations harmonization, foster the SMS implementation by GHSPs and risk reduction mechanisms for ground operations. In addition, the meeting, recommended that airlines and GHSPs to adopt the IATA IGOM and AHM 1100 and recommended GHSPs to undergo the IATA ISAGO accreditation that validates that IGOM, AHM 1100 and SMS requirements are implemented by the ground handling companies.

Special Authorization

2.53 The subject was addressed in WP/14 presented by Oman.

2.54 The meeting was appraised of Oman experience on the authorization of landing areas in the Sultanate of Oman.

2.55 The meeting noted the guidance provided at **Appendix 2L** and encouraged States to share their specific experience on the matter in order to discuss further any challenges related to the subject at the Regional Level.

Establishment of the Aerodromes Safety Portfolios in the MID Region

2.56 The subject was addressed in WP/15 presented by Secretariat

2.57 The meeting discussed the need for a regional initiative based on a cooperative partnership with the aviation community aiming the share data related to the significant/challenging non-compliances identified by Aerodromes and successfully addressed through the deployment of efficient Corrective action Plans.

2.58 The meeting noted that the Minimum Reporting Areas of Challenging/Significant non-compliance captured by Airport Operators at **Appendix 2M** was endorsed by RASG-MID/11 through Conclusion 11/8. The meeting agreed on the need to establish the Aerodromes Safety Portfolios in the MID Region through an anonymous collection of the necessary data as per the Appendix.

2.59 In this regard, the meeting agreed that in order to generate a Data Base related to that significant non-compliance related to Aerodromes Design and Operations, States been encouraged to coordinate with Aerodromes and share the challenging/significant non compliances that been captured by Airport Operators and efficiently addressed with appropriate corrective action plans.

2.60 The meeting highlighted that States should encourage their Aerodromes through their Safety Committee as well as Local Runway Safety Teams to use the endorsed Template listing the Minimum Reporting Areas of non-compliance.

2.61 The meeting noted that once advised the States should convey these Datasets to the ICAO MID Office for analysis purposes.

2.62 In this regard the meeting agreed to the following Conclusion:

DRAFT CONCLUSION 6/7: MID AERODROMES SAFETY PORTFOLIOS

*That, in order to facilitate the generation, of the MID Region Aerodromes Safety Portfolios, States be urged to provide the ICAO MID Office, by **Q3 of the current Year**, with their respective Anonymous Datasets concerning the Minimum Reporting Areas of significant/challenging non-compliance in AGA Area, as captured by Aerodromes Safety Committees and/or Local RWY Safety Teams, using the endorsed reporting Template at **Appendix 2M**.*

Safety Culture

2.63 The subject was addressed in WP/16 presented by ACI.

2.64 The meeting noted with appreciation the examples and indicators of a positive safety culture at the aviation workplace presented by ACI. The example and indicators aim to:

a. ensure a common understanding of safety culture across industry sectors and States;
b. encourage discussions and thereby facilitate learning from each other between Industry and States;
c. help to understand the broader context of safety culture, i.e. the environment in which employees perform their jobs and interrelate with each other beyond the systems and tools that are already working; and
d. encourage the senior leadership of aviation stakeholders to add their voice and demonstrate behaviour that showcases commitment toward an ever-evolving safety culture and a strong governance of that.

2.65 The meeting encouraged States and Industry to share examples and indicators of a positive safety culture and discuss assessment and promotion of safety culture within the ASPIG Framework.

States preparation for the USOAP CMA/ICVM Activities

2.66 The subject was addressed in PPT/17 presented by Oman.

2.67 The meeting noted that the USOAP CMA audit of the civil aviation system of Oman was carried out from 23 February to 4 March 2020 where the AGA (Aerodromes & Ground Aids) resulting from the audit conducted in terms of (EI) was 57.14%, with 63 (NS) PQs. Subsequent revisions to the USOAP-CMA Protocol Questions (PQs) resulted in a fall in the (EI) to 55.28%, followed by 55 (NS) PQ.

2.68 The meeting noted with appreciation the outstanding effort made by Oman in AGA Area. Oman CAA Aerodrome Safety Department (ASD) extended their heartfelt gratitude to everyone who assist the ASD team to prepare for the 2023 ICVM. The meeting appreciated the professionalism and enthusiasm of all personnel who interacted with the ASD contributed greatly to the success and achieving an (AGA EI) of 90.91 %.

Aerodromes Safety vs State Oversight Capability

2.69 The subject was addressed in PPT/18 presented by the Secretariat.

2.70 The meeting was appraised of the MID States results in relation with the implementation of the ICAO requirements vis a vis the States oversight capabilities. The meeting noted the AGA Data Analysis provided by the Secretariat and encouraged States who are beyond the regional/global EI Levels to address urgently the Not Satisfactory PQs.

2.71 The meeting encouraged States to reach out the ICAO MID Office for any needed Technical Assistance to address the challenges related to those Not Satisfactory PQs.

REPORT ON AGENDA ITEM 3: REGIONAL PERFORMANCE FRAMEWORK FOR AERODROME CAPACITY AND EFFICIENCY

Follow-up on the Endorsed Conclusions related to Aerodrome Capacity and Efficiency

3.1 The subject was addressed in WP/19 presented by the Secretariat. The meeting reviewed the implementation progress of the of the endorsed Conclusions, as at **Appendix 3A**.

Basic Building Block (BBB) Framework for Airport Operations

3.2 The subject was addressed in WP/20 presented by the Secretariat.

3.3 The meeting was appraised of the Global Air Navigation Plan (GANP) structure notably the Basic Building Block (BBB) Framework for Airport Operations covering Aerodromes Design and Operations.

3.4 The meeting noted that the BBB is considered an independent framework and not a block of the ASBU framework as they represent a baseline rather than an evolutionary step. The meeting recalled that this baseline is defined by essential services recognized by ICAO Member States as necessary for international civil aviation to develop in a safe and orderly manner. The meeting reiterated that once these essential services are provided, they constitute the baseline for any operational improvement.

3.5 The meeting encouraged States to give high priority to the capacity building of their technical personnel dealing with the implementation of the BBB within the States Aviation Systems. Accordingly, the meeting agreed to the following Conclusion replacing and superseding the previous related PIRG-RASG Conclusion 1/2:

DRAFT CONCLUSION 6/8: MID AGA CAPACITY BUILDING NEEDS FOR THE AOP BBB IMPLEMENTATION

*That, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office with their Capacity Building Needs of their AGA Inspectors and Airport Operators Technical Personnel, using the Template at **Appendix 3B.***

ASBU Operational Threads: Airport Collaborative Decision Making (ACDM)

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

Establishment of the ACDM Tak Force in the MID Region

3.7 The meeting noted that the MIDANPIRG/21 & RASG-MID/11 Meeting reviewed the Terms of Reference (ToRs) of the ACDM Task Force at **Appendix 3C** the agreed on the following Decision:

PIRG/RASG DECISION 3: ESTABLISHMENT OF THE MID REGION ACDM TASK FORCE (MID ACDM-TF)

*That, the MID Region Airport Collaborative Decision-Making Task Force (MID ACDM-TF) be established, subject to review and confirmation of ASPG/6, in accordance with the Terms of Reference at **Appendix 2A.***

3.8 The meeting agreed that the ToRs be updated at a later/mature stage to include the potential coordination with the ATFM Task Force once the MID REGION ATFM solution and the MID ACDM readiness for implementation reach the maturity levels facilitating such coordination.

3.9 The meeting reviewed, updated the ToRs of the ACDM Task Force at **Appendix 3C**. The meeting officially reconfirmed the establishment of the ACDM Task Force as requested by MIDANPIRG/21 Meeting as per the reviewed ToRs.

Monitoring of the ACDM Implementation in the MID Region

3.10 The meeting reviewed and updated the status of MID Region Readiness for the ACDM Implementation as at **Appendix 3D** (as per the ACDM applicability area, agreed upon by the MID States).

3.11 The meeting reviewed and updated, the Action Milestones for the MID ACDM Planning and Implementation at **Appendix 3E**, available to be used/customized and tailored and used by the States as a reference to foster the planning and implementation of the ACDM in their individual Airports.

3.12 In connection with the above, States reviewed the new Template, at **Appendix 3F,** to be used for the monitoring of the ACDM Implementation in the MID Region.

3.13 Consequently, the meeting reviewed the following Draft Conclusion replacing and superseding the previous MIDANPIRG Conclusion 18/27:

DRAFT CONCLUSION 6/9: MID ACDM IMPLEMENTATION PROGRESS

*That, with reference to the sample of Action Millstones on ACDM Planning and Implementation at **Appendix 3E**, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office, with the progress of Airports ACDM Deployment Plans, as confirmed by Airports included in the RANP Applicability Area, using the Template at **Appendix 3F.***

ASBU Operational Threads: Surface Operations (SURF)

3.14 The subject was addressed in PPT/22 presented by the Secretariat.

3.15 The meeting noted that the proposed operational improvement, as per the Global Air Navigation Plan, consists of implementing the A-SMGCS 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 displays being A-SMGCS for the controller or electronic maps in the cockpit, in addition to some initial alerting services for prevention of runway incursions are proposed to the controller.

3.16 The meeting was appraised of the services of the A-SMGCS as follows:

a. **Surveillance Service** that provides the position, identification and tracking of mobiles, and can include a combination of the following services.
b. The **Airport Safety Support Service** that provides the functions: Runway Monitoring and Conflict Alerting (RMCA), Conflicting ATC Clearances (CATC), Conformance Monitoring Alerts for Controllers (CMAC).
c. The **Routing Service** that generates ground trajectories for mobiles.
d. The **Guidance Service**.

3.17 The meeting highlighted that in addition to the previous services, a Controller Working Position (CWP) is made available to provide Controllers with a Human Machine Interface (HMI) and for some services an Electronic Clearance Input (ECI) means.

3.18 The meeting noted that the elements needed for the efficient implementation of each service of the A-SMGCS would be the following:

- The ***Surveillance Service*** requires a radar system or other sensor technology, such as multilateration or ADS-B, to provide the position, identification, and tracking of mobiles. The system must be able to accurately detect and track all Mobiles (vehicles and aircraft) on the airport surface.
- The ***Airport Safety Support Service*** includes several functions, including Runway Monitoring and Conflict Alerting (RMCA), Conflicting ATC Clearances (CATC), and Conformance Monitoring Alerts for Controllers (CMAC). In order to implement these functions, the system must have access to a database of airport layout and configuration, as well as a set of predefined rules and procedures to detect and alert potential conflicts or deviations from safe operations.
- The ***Routing Service*** generates ground trajectories for mobiles, which requires data on the current location, destination, each aircraft and vehicle on the airport surface, as well as a set of algorithms to determine the most efficient and safe routes to their destinations. The system may also require access to weather and other environmental data to optimize routing decisions.
- ***The Guidance Service*** provides guidance to pilots and ground vehicles, which requires a set of visual and/or audio cues to be displayed on the CWP and/or on mobile devices carried by pilots and drivers. The system may also require access to real-time data on airport conditions, such as weather, runway closures, and ground congestion, to provide accurate guidance.

3.19 The meeting reviewed the Matrix of Implementation Dependencies between the A-SMGCS Services and Functions at **Appendix 3G**. The meeting noted with appreciation the made to elaborate a clear correlation between the A-SMGCS services and the required elements/function to be used by each service, in addition to the link with the ASBU Elements indicated in the GANP .

3.20 Consequently, the meeting agreed to the following Draft Conclusion:

DRAFT CONCLUSION 6/10: A-SMGCS IMPLEMENTATION IN THE MID REGION

*That, with reference to the Matrix of Dependencies between the A-SMGCS Services, Functions and GANP ASBU SURF Elements, at **Appendix 3G**, States be urged to provide, by **Q3 of the current Year**, to the ICAO MID Office, with the progress of Airports A-SMGCS Deployment Plans, as confirmed by Airports included in the RANP Applicability Area, using the Template at **Appendix 3H**.*

GANP / RANP / NANP Matters

3.21 The subject was addressed in WP/23 presented by the Secretariat.

3.22 The meeting recalled that the RANP/NANP TF/1 meeting reviewed and agreed to the Terms of Reference (ToRs) of the RANP/NANP Task Force who reviewed and endorsed the draft of new edition of the MID Air Navigation Strategy (ICAO MID Doc 002).

3.23 The meeting recalled that the Task Force underlined that Subgroups including the ASPIG would allocate enough time in their agenda for the detailed discussion of the ASBU Threads relevant to their technical areas, including the identification of priorities, definition of applicability areas, performance indicators, metrics, targets, etc.

3.24 In this regard, the meeting reviewed and updated the SURF Thread/elements, reflected on new edition of the MID Air Navigation Strategy (ICAO MID Doc 002), as at **Appendix 3I** to be presented to the RANP/NANP TF/2 Meeting for validation.

REPORT ON AGENDA ITEM 4: FUTURE WORK PROGRAMME

4.1 The meeting agreed that the ASPIG/7 Meeting will be held in Q1 of 2025. The ICAO MID Office will confirm the place/dates and inform the States in due course.

REPORT ON AGENDA ITEM 5: ANY OTHER BUSINESS

5.1 The subject is addressed on the WP/23 presented by ICAO HQ.

5.2 The meting noted the ICAO Policy on Innovation including its objectives including but not limited to:

- Definition of a strategic vision on the role of ICAO on innovation, in support of No Country Left Behind (NCLB);
- For internal and external communication purposes; and
- Action-driven strategy accompanied with an implementation plan.

5.3 The meeting noted the three following categories defined by the policy:

- Promotion and support of innovations for the aviation sector (include ICAO processes, such as standardization);
- Understanding the impact from innovation arising from non-traditional aviation sector; and
- Understanding the impact from innovation arising internally to ICAO (to promote and support innovation within the Secretariat and linked to ICAO Transformational Objectives).

5.4 The meeting recalled that a second Regional Workshop is planned to be conducted the current year and encouraged States to participate to the workshop. More details about the place/dates of the event will be communicated in due course to the States.

APPENDICES

Conclusion ID #	conclusions and decisions	Why: concerns/challenges/rationale	deliverables		When: Deadline	Last Revised Deadline	Drafted by	Endorsed by	status	Date of completion	Actions required by the State	States that didn't reply/take action yet	Remarks
			What: item(s)	Who: responsible									
SAFETY													
RSC C 7/5	**Survey on Basic Regulatory Framework FOR Aerodrome Certification**								**Ongoing**				
	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.**	Assurance of the establishment of the necessary Regulatory Framework for Aerodromes Certification by States.	Survey on Basic Regulatory Framework for Aerodrome Certification	States	May-20	15-Aug-21	**ASPIG/1**	RSC/7			Provide State's Regulatory Framework for Aerodrome Certification	Yemen	(Revised Date due to the Pandemic Crisis the deadline has been extended to 2021)
RSC C 7/6	**Aerodrome Certification Implementation Progress**								**Ongoing**				
	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.	Development of a detailed Aerodrome Certification Implementation Progress/Plan	Progress/Plans on the Aerodrome Certification Implementation	States	May-20	15-Aug-21	**ASPIG/1**	RSC/7			Provide State's Implementation Plans for Aerodromes certification	Yemen	(Due to the Pandemic Crisis the deadline has been be extended to 2021)
RSC C 7/7	**Regional Seminar on Global Reporting Format (GRF)**								**Completed**				
	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.	Foster the Implementation of the runway condition assessment new methodology in the MID Region: The Global Reporting Format (GRF)	GRF Regional Seminar	ICAO	Q1 of 2020	27-Oct-20	**ASPIG/1**	RSC/7		27-Oct-20	Participation to the event		(Revised Date Due to the Pandemic) Replaced by a Regional Webinar conducted on 27 Oct 20
RSC C 7/8	**Global Reporting Format (GRF) Implementation and Deployment at Aerodromes**								**Been replaced and superceeded**				
	That, States: a) be requested to report on the implementation of the GRF to the ICAO MID Regional Office by July 2020; 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.	Effective implementation of the GRF methodology and it deployment at the MID Region Airports	Status report of the GRF implementation and deployment at Airports	States	Jul-20	30-Jul-20	**ASPIG/1**	RSC/7			Provide Status Report for GRF implementation	All States	Replaced and superceeded by PIRG-RASG C 1/2
PIRG-RASG C 1/2	**MID REGION GRF IMPLEMENTATION ACTION PLAN**								**Ongoing**				
	That, States be urged to: a) nominate a National GRF implementation Focal Point to coordinate the implementation activities at the National level; b) provide the ICAO MID Office with the contact details of their nominated GRF Focal Points by end of February 2021; and c) provide regular progress reports/updates on the subject to the ICAO MID Office using the MID Region GRF Implementation Plan Template/Milestones at **Appendix 3.2C.**	Effective implementation of the GRF methodology and it deployment at the MID Region Airports	States' GRF Implementation Plans	States	May-20	29-Jul-21	**ASPIG/2**	MIDANPIG/18 RASG/8			Provide State's GRF Implementation Plans		
RSC C 7/9	**Runway Safety Team Implementation Plan**								**Ongoing**				
	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**.	Development of a detailed RSTs Implementation Progress/Plan including the GRF Deployment at Airports	Progress/Plans on RSTs Implementation including the GRF Deployment at Airports	States	May-20	15-Aug-21	**ASPIG/2**	RSC/7			Provide State's RST Implementation Plans	Yemen	(Due to the Pandemic Crisis the deadline has been be extended to 2021)
PIRG-RASG C 2/1	**HLCC RECOMMENDATIONS**								**Ongoing**				
	That, States: a) be encouraged to support and implement the HLCC recommendations; and b) actively participate and support the RASG-MID and its subsidiary groups meetings/activities.	Implementation of the HLCC recommendations	HLCC recommendations implemented	States	Continous		**NIL**	MIDANPIG/19 RASG/9			Endorsed		
PIRG-RASG C 2/2	**NATIONAL OLS IMPLEMENTATION FOCAL POINT**								**Ongoing**				
	That, States be urged to nominate a National OLS implementation Focal Point to coordinate the OLS implementation activities at the National level.	Improvement of the effectiveness of the corrective action process for Aerodromes design and Operations at the regional level	State OLS Focals Points	States	Dec-24		**NIL**	MIDANPIG/19 RASG/9			Endorsed		
RASG-MID C11/8	**ANONYMOUS DATASET COLLECTION FOR AERODROMES SAFETY**								**Completed**				
	That, in order to promote safety and improve the effectiveness of the corrective action process at the regional level, MID States and concerned Stakeholders are urged to: a) endorse the Template listing of Minimum Reporting Areas of non-compliance to be reported, as presented at Appendix 4K, to ICAO MID Office for consolidation and follow-up actions, and b) nominate a Main/National Focal Point responsible for the anonymous communication of these datasets using the Template.	Improvement of the effectiveness of the corrective action process for Aerodromes design and Operations at the regional level	# Lists of Minimum Reporting Areas of non-compliance # State Focals Points	States	Mar-24		**ASPIG/5**	MIDANPIG/21 RASG/11			Endorsed		**Template Endorsed** **States Focal Points contact details to be collected**

Consolidated List of SEIs with their respective Safety Actions

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
Regional Operational Safety Risks					
Goal 1: Achieve a Continuous Reduction in Operational Risks					
G1-SEI-01:	Aircraft Upset in Flight (LOC-I)	**A1-** Guidance material on flight crew proficiency	IATA to be supported by Airbus	Planned 2025	2023- 2025
		A2- Advisory Circular: Mode Awareness and Energy State Management Aspects of Flight Deck Automation	IATA to be supported by Airbus	Planned 2025	2023- 2025
		A3- Conduct Upset Recovery capacity building activities	UPRT Workshop. Airbus, ICAO, Kuwait	Regional ICAO UPRT Workshop (jointly involving Airbus, ICAO, Kuwait) conducted in Kuwait 7-11 May 2023. **Completed for 2023**/Continuous for 2024	2023-2025
		A4- Develop guidance material on the air cargo safety	Oman	Planned for 2024	2023-2025
G1-SEI-02:	Runway Safety- Runway Excursion	**A1-** Support States to implement the Global Reporting Format (GRF) Methodology through capacity building activities.	ICAO and ACI	**Completed for 2023**/ continuous for 2024/2025	2023-2025
		A2- MID Region Action Plan/Milestones on the Global Reporting Format (GRF) Implementation.	ICAO	**Completed for 2023**/ continuous for 2024/2025	2023-2025
G1-SEI-03:	Runway Safety- Runway Incursion	**A1-** Conduct Capacity Building Activities on the Advanced Surface Movement Guidance and Control System (A-SMGCS) Implementation	ICAO To be supported by Euro-Control, FAA	**Completed** Conducted February 2023	2023-2025

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
G1-SEI-04A1:	Controlled Flight into Terrain (CFIT)	**A1-** Advisory Circular: Instrument Approach Procedures Using Continuous Descent Final Approach Techniques.	IATA supported by aircraft manufacturers	Planned 2025	2023-2025
		A2- Guidance for designing RNP Approach	ICAO and MID FPP	Planned for 2024	2023-2025
		A3- Advisory Circular: Crew Resource Management Training Programme (CRM)	IATA supported by Aircraft manufacturers		2023-2025
		A4- Awareness Material on the vulnerabilities of BARO-VNAV approaches and mitigation actions	ICAO	Planned for 2024	2023-2025
G1-SEI-04A2	5G Operations on Radar Altimeter	**A1-** Develop a guidance material on safeguarding measures to protect Radio Altimeter from potential harmful interference from 5G Operation	Radio Altimeter Action Group (RADALT AG) To be supported by Boeing	**Completed** Publication of the guidance material: MID DOC 15 edition 1.0 in May 2023.	2023-2025
		A2- Conduct a Webinar addressing the matter to raise awareness and promote the guidance material developed by the RADALT AG	ICAO and RADALT AG To be supported by Airbus & Boeing	**Completed** The webinar has been conducted.	2023-2025
G1-SEI-05B1:	MAC- Loss of Separation	**A1-** Conduct workshop to implement Civil-Military cooperation.	ICAO supported by States, and International Organizations	At national level, workshop has been conducted in Iran in 2022 and follow up meeting was conducted in Aug 2023. In this respect the action plan has been developed and agreed. **Completed** In addition, this issue has been raised by Iran during MIDANPIRG 20 meeting. As agreed in the side meeting with participation of Bahrain, Iran, Oman, Qatar, Saudi Arabia and UAE, states are going to report safety issues regarding the operation of due regard specifically	2023-2025

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
				over the high seas to ICAO MID for further study and actions. At regional level, the plan was postponed to 2024. The ATM SG developed a draft reporting form, will be presented to the MIDANPIRG/21 for endorsement	
		A2- Conduct seminar on raising awareness among stakeholders related to the potential risk of MAC over high seas	ICAO supported by States, and international organizations		2023-2025
G1-SEI-05B2:	GNSS Interference	**A1**: Raise awareness on the potential impact of GNSS interference on the aviation during the Civil-Mil Workshop	ICAO and IATA	The CMC Workshop is planned during 2024.	2023-2025
		A2- Urge States to follow the reporting procedure agreed by MIDANPIRG Conclusion 19/4 when needed	ICAO	SL has been issued. **Completed**	2023-2025
		A3- Capacity Building on GNSS operations and GNSS RFI	ICAO and ACAO	Regional GNSS Workshop is planned for 2024	2023-2025
G1-SEI-05B3:	Ensure the Safe Operations of UAS (Drones)	**A1**- UAS iPack deployment	ICAO and States		2023-2025
		A2- Organize symposium on Drones related subjects	ICAO and ACAO supported by FAA and Boeing	ACAO organized Drones symposium in Morocco during the period 4-5 October 2023. **Completed**/Continuous for 2024**.**	2023-2025
		A3- Conduct survey on States UAS regulatory framework	ICAO and States	To be circulated during 2024	2023-2025
		A4- Develop an AAM study report	UAE	Planned for 2024	2023-2025

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
G1-SEI-05B4:	Expansion of ATS route Networks	**A1-** Conduct gap analysis to identify current ATS route networks gaps	ICAO and States	Required data and information have been gathered and dashboard was deployed. **Completed**.	2023-2025
		A2- Establishment of parallel unidirectional ATS routes (De-confliction)	ICAO and States	Establishment of the parallel airway at interface of Kuwait and Iraq is on process. In addition Iran requested to establish new parallel ATS route between Iran and Iraq to accommodate regional traffic in the most safe and efficient manner. **Completed.** In addition, During last MIDANPIRG proposed to enhance the structure of the ATS route at interface of MID and APAC regions by establishment of required parallel airways. This WP was supported by UAE and Saudi Arabia and endorsed by MIDANPIRG 20. **Ongoing.**	2023-2025
Organizational Challenges/issues					
Goal 2: Strengthen States' Safety Oversight Capabilities					
G2-SEI-01:	Strengthening of States' Safety Oversight Capabilities	**A1-** Conduct Capacity Building Activities to promote effective implementation of SARPs	ICAO, States, International Organizations, and Industry.	USOAP workshops conducted. ACAO and Singapore CAA: an AOC certification & Flight Inspectors course conducted in Amman the 29 -2 Jun 2023. **Completed**/continuous for 2024. ICAO & GCAA Symposium: "The Future of Aviation safety and Aircraft Accident Investigation" in Dubai, during 3 to 4 May 2023.	2023-2025

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
				"The Prevention of Aircraft Accidents and Incidents through the Collection & Analysis of Safety Data & Information" Workshop held in Rabat, Morocco from 11 to 12 July 2023	
		A2- Conduct technical assistance and NCLB missions to States , with focus on states with EI<80% as well as ANS, AIG, AGA, and OPS areas	ICAO and States	TAs conducted 2023 (Kuwait, Lebanon, Oman, Sudan, Libya). ANS Technical assistance to Kuwait, Sudan, Jordan and Lebanon conducted. **Completed.**	2023-2025
		A3- Develop and implement a specific NCLB plan of actions.	ICAO, States, International Organizations, and Industry		2023-2025
		A4 - Conduct a Capacity Building Activity for Aerodrome Inspectors (Training Course on Aerodrome Inspection) **(Action addressed under G6-SEI-01 A5)**	States (Qatar) and ICAO	Conducted February 2023. **Completed.**	2023-2025
		A5- Develop guidance material to assist MID Region States in the issuance of exemptions related to temporary deviations from standards	Qatar supported by Iran, Sudan, UAE, ACAO, and IATA	Planned for 2024	2023-2025
		A6- Develop guidance material to support States for the conduct of remote surveillance	Qatar supported by Iran, Jordan, Saudi Arabia, Sudan, UAE, and ACAO	Planned for 2024	2023-2025
		A7- Develop guidance material on the enhancement of understanding the	Qatar supported by Saudi Arabia and UAE	Planned for 2024	2023-2025

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
		concept of judicial enforcement for aviation inspectors			
G2-SEI-03:	Establishment of MENA ARCM Database	**A1-** Establishing a Platform for Sharing data for MENA ARCM Member States	ICAO, ACAO, and MENA ARCM Member States	ACAO has established a share folder as an initial step for sharing information. Online platform establishment is on going	2023-2025
G2-SEI-04:	Enhance State Oversight on Dangerous Goods	**A1-** Dangerous Goods (DG) capacity building activities including Lithium batteries fire/smoke risk in cabin	ICAO, States, International Organizations, IATA, And Industry		2023-2025
		A2- Develop guidance material on carriage and transport of Lithium batteries	IATA supported by States, International Organizations, And Industry	Guidance material to be endorsed by RASG-MID/11	2023-2025
G2-SEI-05:	Human factors and Competence of Personnel	**A1-** Advisory Circular: Crew Resource Management Training Programme (CRM). **(Action addressed under G1-SEI-04: CFIT).**	IATA		2023-2025
		A2- Organize Crew Resource Management Capacity building activities	ACAO, ICAO &Airbus,	Planned for 2024	2023-2025
		A3- Organize Team Resource Management Capacity building activities	ACAO, ICAO &Airbus	Planned for 2024	2023-2025
		A4- Conduct Fatigue Risk Management and Mental Health Best Practices Capacity building activities	ACAO, ICAO &Airbus	Planned for 2024	2023-2025
		A5. Data analysis and Artificial intelligence	UAE	Planned for 2025	

SEI Code	SEI Name	Actions	Owner(s)	Status/Progress	Completion Date
G2-SEI-06:	Impact of security on safety	**A1-** Organize seminar/Symposium/Workshop to exchange experiences and good practices on assessing the risks and sharing of information related to the overflying of conflict zones in coordination with RASFG-MID and MIDANPIRG.	ICAO		2023-2025
		A2- Risk management on conflict zone workshop	ICAO/ACAO	Planned for 2024	2023-2025
G2-SEI-07:	Managing cybersecurity risks	**A1-** Develop a Regional Action Plan to bridge the gap between ICAO Cyber Security Action plan and the implementation level of Cyber Resilience in the MID Region	ANS Cyber SeC Action Group	**Completed.**	2023-2025
		A2- Conduct activities on Cyber Security and Resilience- (Jointly ANS and AVSEC)	ICAO supported by Boeing	**Completed** conducted Nov 2023	2023-2025
		A3- Develop a MID Region Cybersecurity Action Plan	Cybersecurity Security Ad-hoc Group	**Completed**	2023-2025
G2-SEI-08:	Impact of COVID-19 pandemic- Safe return to operations	**A1-** Continued support to the aviation industry through MID-RPTF meetings/Activities, as needed	ICAO, States, International Organizations, and Industry	**Completed** Aviation medicine workshop conducted Feb 2023	2023-2025
		A2- Sharing of guidance material/best practices	ICAO, States, International Organizations, and Industry	**Completed.**	2023-2025
Goal 3: Implementation of Effective States Safety Programme (SSP)					

G3-SEI-01:	Implement an effective Safety Management	**A1-** Conduct ICAO SSP/SMS Capacity building activities	SSP workshops for States. 2023 SMS & Flight Data analysis workshop for airlines. ACAO, Airbus and ICAO.	SSP training course and SSP workshop conducted. (Kuwait & Oman) 2023 SRM Workshop conducted 2024. SMS & Flight Data analysis workshop for airlines Conducted Nov 2023. **Completed**/Continuous for 2024.	2023-2025
		A2- Conduct Technical Assistance missions by SMIT	ICAO and States		2023-2025
G3-SEI-02:	NASP Development & Implementation	**A1- Conduct** NASPs workshops & technical assistance missions	ICAO. 2023	Workshop conducted in Kuwait and Qatar 2023. **Completed/**Continuous for 2024	2023-2025
		A2- NASP iPacks deployment	ICAO	If requested by states	2023-2025
Goal 4: Increase Collaboration at the Regional Level					
G4-SEI-01:	Development and Implementation of MID-RASP	**A1-** Development and Implementation of MID-RASP 2023-2025 Edition	SEIG	Published May 2023. **Completed**	2023-2025
G4-SEI-02:	Enhance collaboration between States, international organizations, and industry	**A1-** Develop and agree on joint work activities through MID-RCM meetings	ICAO, States, Regional Groups, International Organizations, and Industry	**Completed** Conducted Oct 2023	2023-2025
		A2- Support the establishment of MENA RSOO and its activities	ICAO and States	States Signed the RSOO MoU on Dec 2023 and RSOO started its operations. **Completed.**	2023-2025

Goal 5: Expand the Use of Industry Programmes and Safety Information Sharing Networks					
G5-SEI-01:	Promote the Use of industry Programmes	**A1-** Encourage IATA's IOSA and ISAGO registrations through safety promotion	IATA	**Completed/** Continuous action for 2024/2025	2023-2025
		A2- Encourage the implementation of ACI Airport Excellence (APEX) in Safety Programme	ICAO and ACI	**Completed**/ Continuous action for 2024/2025	2023-2025
Goal 6: Ensure the Appropriate Infrastructure is available to Support Safe Operations					
G6-SEI-01:	Certification of International Aerodromes	**A1-** Support States on the implementation of the ICAO Annex 14 requirements to achieve compliance with regards to Aerodrome Design and Operations, through capacity building activities.	ICAO and ACI	Planned activity for 2025	2023-2025
		A2- Enhance capacity building for States CAAs and Airport operators related to Aerodromes Certification through capacity building activities.	ICAO and ACI	Planned activity for 2025	2023-2025
		A3 - Deployment of iPack on Aerodrome Re-Start	ICAO and States		2023-2025
		A4 - Support States in implementing aerodrome oversight/inspection mechanism through capacity building activities on Aerodrome Oversight	ICAO Supported by FAA	Planned activity for 2024/2025	2023-2025
		A5 – Conduct a Capacity Building Activity for Aerodrome Inspectors (Training Course on Aerodrome Inspection)	States (Qatar) and ICAO	Conducted February 2023. **Completed.**	2023-2025

		A6 – Conduct a Wildlife Hazard Management Control capacity building Activities	ICAO, ACAO, WBA	Regional Symposium planned for 2024	2023-2025
G6-SEI-02:	Establish Runway Safety Team (RST) at International Aerodromes	**A1-** Conduct Runway Safety Go-Team (RST) assistance missions	ICAO. Supported RSP (Runway Safety Programme Partners)	Planned for 2024	2023-2025
		A2: Support States to implement the Global Reporting Format Methodology through capacity building activities**: (Action addressed under G1-SEI-02: Runway Excursion).**	ICAO and ACI	**Completed for 2023**/ continuous for 2024/2025	2023-2025

MID Region
Aerodromes Safety Dashboard

State	Country Code	Total # of AD (AOP Table I-I)	City	Aerodrome Name (AOP Table I-I)	Location Indicator (AOP Table I-I)	Designation (AOP Table I-I)	AD Certification Implementation		AD Local RST Establishment		AD Readiness for GRF Deployment		National GRF Implementation Plan Progress	Aerodrome Traffic Density		
							Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment		Light	Medium	Heavy
Bahrain	BHR	1	Manama	Bahrain International Airport	OBBI	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%			■
Egypt	EGY	7	Borg ElArab	BORG ELARAB INT AIRPORT	HEBA	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%			
			Aswan	ASWAN INT AIRPORT	HESN	RS	✓		✓		✓					
			Cairo	CAIRO INT AIRPORT	HECA	RS	✓		✓		✓					
			Hurghada	HURGHADA INT AIRPORT	HEGN	RS	✓		✓		✓					
			Luxor	LUXOR INT AIRPORT	HELX	RS	✓		✓		✓					
			Marsa Alam	MARSA ALAM INT AIRPORT	HEMA	RNS	✓		✓		✓					
			Sharm El Sheikh	SHARM EL SHEIKH INT AIRPORT	HESH	RS	✓		✓		✓					
Iran	IRN	9	Bander Abass	Bandar Abbas International Airport	OIKB	RS	✓	44.44%	✓	100.00%	✗	77.78%	80.00%			
			Esfahan	Shahid Beheshti International Airport	OIFM	RS	✗		✓		✓					
			Mashhad	Shahid Hashemi Nejad International Airport	OIMM	RS	✗		✓		✓					
			Shiraz	Shahid Dastghaib International Airport	OISS	RS	✗		✓		✓					
			Tabriz	Tabriz International Airport	OITT	RNS	✗		✓		✓					
			Tahran	Imam Khomaini International Airport	OIIE	RS	✓		✓		✓					
			Tahran	Mehrabad Intl/ OIII	OIII	RS	✗		✓		✓					
			Yazd	Shahid Sadooghi International Airport	OIYY	RS	✓		✓		✓					
			Zahedan	Zahedan International Airport	OIZH	RS	✓		✓		✗					
Iraq	IRQ	6	Al-Najaf	Al-Najaf Al-Ashraf International Airport	ORNI	RNS	✗	0.00%	✗	0.00%	✗	0.00%	13.33%			
			Baghdad	Baghdad International Airport	ORBI	RS	✗		✗		✗					
			Basrah	Basrah International Airport	ORMM	RS	✗		✗		✗					
			Erbil	Erbil International Airport	ORER	RS	✗		✗		✗					
			Mosul	Mosul International Airport	ORBM	RS	✗		✗		✗					
			Sulaymaniyah	Sulaymaniyah International Airport	ORSU	RS	✗		✗		✗					
Jordan	HKJ	2	AMMAN	Queen Alia International Airport	OJAI	RS	✓	100.00%	✓	100.00%	✓	100.00%	93.33%			
			AQABA	King Hussein International Airport	OJAQ	RS	✓		✓		✓					

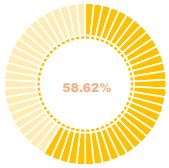
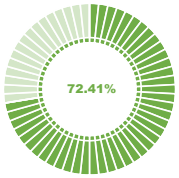
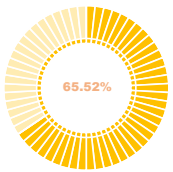
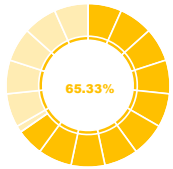
MID Region
Aerodromes Safety Dashboard

State	Country Code	Total # of AD (AOP Table I-I)	City	Aerodrome Name (AOP Table I-I)	Location Indicator (AOP Table I-I)	Designation (AOP Table I-I)	AD Certification Implementation		AD Local RST Establishment		AD Readiness for GRF Deployment		National GRF Implementation Plan Progress	Aerodrome Traffic Density		
							Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment		Light	Medium	Heavy
Kuwait	KWT	1	KUWAIT	Kuwait International Airport	OKBK	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%		■	
Lebanon	LBN	1	BEIRUT	Rafic Hariri International Airport	OLBA	RS	✗	0.00%	✗	0.00%	✗	0.00%	0.00%	■		
Libya	LBY	3	BENGHAZI	Benina International Airport	HLLB	RS	✗	0.00%	✗	0.00%	✗	0.00%	0.00%	■		
			SEBHA	Sebha International Airport	HLLS	RS	✗		✗		✗			■		
			TRIPOLI	Tripoli International Airport	HLLT	RS	✗		✗		✗			■		
Oman	OMN	2	Muscat	Muscat International Airport	OOMS	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%		■	
			Salalah	Salalah International Airport	OOSA	AS	✓		✓		✓			■		
Qatar	QAT	2	Doha	Doha International Airport	OTBD	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%			■
			Doha	Hamad International Airport	OTHH	RS	✓		✓		✓			■		

MID Region
Aerodromes Safety Dashboard

State	Country Code	Total # of AD (AOP Table I-I)	City	Aerodrome Name (AOP Table I-I)	Location Indicator (AOP Table I-I)	Designation (AOP Table I-I)	AD Certification Implementation		AD Local RST Establishment		AD Readiness for GRF Deployment		National GRF Implementation Plan Progress	Aerodrome Traffic Density		
							Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment		Light	Medium	Heavy
Saudi Arabia	SAU	4	DAMMAM	King Fahd International Airport	OEDF	RS	✓	100.00%	✓	100.00%	✓	100.00%	93.33%		■	
			JEDDAH	King Abdulaziz International Airport	OEJN	RS	✓		✓		✓				■	
			MADINAH	Prince Mohammad Bin Abdulaziz International Airport	OEMA	RS	✓		✓		✓				■	
			RIYADH	King Khalid International Airport	OERK	RS	✓		✓		✓				■	
Sudan	SDN	4	EL OBEID	El Obeid International Airport	HSOB	AS	✓	75.00%	✓	100.00%	✓	100.00%	80.00%	■		
			KHARTOUM	Khartoum International Airport	HSSS	RS	✓		✓		✓				■	
			NYALA	Nyala International Airport	HSNN	AS	✗		✓		✓			■		
			PORT SUDAN	Port Sudan International Airport	HSPN	RS	✓		✓		✓			■		
Syria	SYR	3	ALEPPO	Aleppo International Airport	OSAP	RS	✗	0.00%	✓	66.67%	✗	0.00%	20.00%	■		
			DAMASCUS	Damascus International Airport	OSDI	RS	✗		✓		✗				■	
			LATTAKIA	Lattakia International Airport	OSLK	RS	✗		✗		✗			■		
UAE	ARE	8	ABU DHABI	Zayed International Airport	OMAA	RS	✓	100.00%	✓	100.00%	✓	100.00%	100.00%		■	
			ABU DHABI	Al Bateen International Airport	OMAD	RNS	✓		✓		✓			■		
			AL AIN	Al Ain In International Airporttl	OMAL	RS	✓		✓		✓			■		
			DUBAI	Al Maktoum International Airport	OMDW	RS	✓		✓		✓			■		
			DUBAI	Dubai International Airport	OMBD	RS	✓		✓		✓					■
			FUJAIRAH	Fujairah International Airport	OMFJ	RS	✓		✓		✓			■		
			RAS AL KHAIMAH	Ras Al Khaimah International Airport	OMRK	RS	✓		✓		✓			■		
			SHARJAH	Sharjah In International Airporttl	OMSJ	RS	✓		✓		✓				■	
Yemen	YEM	5	ADEN	Aden International Airport	OYAA	RS	✗	0.00%	✗	0.00%	✗	0.00%	0.00%	■		
			HODEIDAH	Hodeidah International Airport	OYHD	RS	✗		✗		✗			■		
			MUKALLA	Riyan International Airport	OYRN	RS	✗		✗		✗			■		
			SANA'A	Sana'a International Airport	OYSN	RS	✗		✗		✗			■		
			TAIZ	Taiz International Airport	OYTZ	RS	✗		B ✗		✗			■		

MID Region
Aerodromes Safety Dashboard

State	Country Code	Total # of AD (AOP Table I-I)		AD Certification Implementation		AD Local RST Establishment		AD Readiness for GRF Deployment		National GRF Implementation Plan Progress	Aerodrome Traffic Density		
				Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment		Light	Medium	Heavy
MID REGION AERODROMES SAFETY DASHBOARD	MID	58		34		42		38			38	17	3

General Guidance:

- ***Country Code : ISO 3-Letter Code of the Country***
- ***City/Aerodrome: Name of the city and aerodrome, preceded by the location indicator.***
- ***Designation: Operability of the aerodrome as indicated on the MID eANP Vol I (AOP Table I-1):***

  RS *: international scheduled air transport, regular use;*
  RNS *: international non-scheduled air transport, regular use;*
  AS *: international scheduled air transport, alternate use;*
  ANS *: international non-scheduled air transport, alternate use.*

  Note 1 *: when an aerodrome is needed for more than one type of use, normally only the use highest on the above list is shown.*
  [Example : an aerodrome required for both RS and AS use would only be shown as RS in the list.]

  Note 2 *: when the aerodrome is located on an island and no particular city or town is served by the aerodrome, the name of the island is included instead of the name of a city.*

- ***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.*

ICAO Region	State	Location name	Location indicator (ICAO code)	Open for Public Use (1=Yes, 0=No)	Domestic Operations Only (1=Yes, 0=No)	International Scheduled IFR Transport (1=Yes, 0=No)	International Non-scheduled IFR Transport (1=Yes, 0=No)	Register Use (1=Yes, 0=No)	Alternate use (1=Yes, 0=No)	Aerodrome Certified (1=Yes, 0=No)	Latest Date of Certification [DD/MM/YYYY]	Applicable Validity Date of the Certificate [DD/MM/YYYY]	National Certification Validity (Regulated Period in Years)	If NOT Certified is the Aerodrome planned for Certification (1=Yes, 0=No)	Estimated Certification Date [DD/MM/YYYY]	Effective Certification Date [DD/MM/YYYY]
EANC	NORWAY	Harstad/Narvik/Evenes Airport	ENEV	1	0	1	0	1	0	1						
NAT	SATSER	Tórshavn Airport	EKVG	1	0	1	0	1	0	1						

ICAO Region	State	Location name	Location Indicator [ICAO code]	Open for Public Use [1=Yes , 0=No]	Domestic Operations Daily [1=Yes , 0=No]	International Scheduled Air Transport [1=Yes, 0=No]	International Non-scheduled Air Transport [1=Yes, 0=No]	Regular Use [1=Yes, 0=No]	Alternate use [1=Yes, 0=No]	RWY Safety Team Implemented [1=Yes , 0=No]	Date of Implementation [DD/MM/YYYY]	Civil-Latest UEST Check Date [DD/MM/YYYY]	IP REET ATS - AIX Planning for UEST Implementation [1=Yes, 0=No]	UEST Forecast Implementation Date [DD/MM/YYYY]	UEST Effective Implementation Date [DD/MM/YYYY]
MID	QATAR	HAMAD INTERNATIONAL	OTHH	1	0	1	0	1		1					
MID	QATAR	DOHA INTERNATIONAL	OTBD	1	0	1	0	1		1					

APPENDIX A : NATIONAL RUNWAY SAFETY COMMITTEE (TOR)

1. Purpose

The National Runway Safety Programme (NRSP), part of the National Aviation Safety Committee (NASC), focuses on enhancing runway safety in the Sultanate of Oman through state-level oversight and continuous safety performance improvements. It proposes, coordinate, and implements national strategies for runway safety improvement by leveraging feedback from forums and various sources.

The establishment of the National Runway Safety Committee (NRSC) aims to enhance communication and coordination across the aviation industry. This effort supports the development of local aerodrome runway safety teams and provides a strategic framework at the national level. The NRSG focuses on identifying, prioritizing, and implementing runway safety initiatives grounded in data analysis and international best practices, ensuring ongoing and enhanced runway safety in Sultanate of Oman.

2. Context

Runway safety is a top global priority, with the International Civil Aviation Organisation (ICAO) advocating for continued efforts to reduce runway incidents like incursions, excursions, and confusion through its Global Aviation Safety Plan (GASP) and Global Runway Safety Action Plan (GRSAP). In Oman, runway safety is a crucial part of the State Safety Programme (SSP) and a shared focus within the aviation industry. Managing runway safety risks demands collaborative efforts from aerodrome operators, pilots/aircraft operators, air navigation service providers, and regulatory bodies.

3. Objective

ICAO through the GRSAP strongly promotes and recommends the establishment of Local Runway Safety Teams (LRST) at aerodromes as an effective means to reduce runway related accidents and incidents. The NRSC performs a national advisory and coordination role to promote the establishment and effectiveness of LRSTs and utilise intelligence from these forums and other sources to develop and implement national strategies to improve runway safety. It brings together industry stakeholders that have a common goal in enhancing runway safety in a collaborative forum.

The NRSC's objectives include:

- *Aligning its outputs with existing industry priorities and ICAO guidelines.*
- *Support the Omani State Safety Programme.*
- *Facilitating data exchange and analysis to identify and prioritize national runway safety issues.*
- *Establishing a central hub for runway safety performance data.*
- *Empower Local Runway Safety Teams and action groups at every certified aerodrome in Oman.*
- *Integrate the safety value of LRSTs at the national level.*
- *Enhancing understanding of operational issues from aerodromes, aircraft, and air traffic services that affect runway safety.*
- *Ensuring stakeholder participation, commitment, and strong collaboration among NRSC members.*
- *Developing and implement a Runway Safety Action Plan (RSAP).*
- *Periodically review the effectiveness of RSAP.*
- *Prepare, promote and conduct (if needed) industry runway safety training, awareness and promotional events.*

4. Scope

- *Evaluation and Progress of Sultanate of Oman's ICAO GRSAP Implementation: Conducting a comprehensive review of Oman's advancements in aligning with the ICAO's Global Runway Safety Action Plan (GRSAP) directives. This includes assessing the establishment, operational effectiveness, and outcomes of Local Runway Safety Teams (LRSTs) in promoting runway safety.*
- *Data Integration and Collaborative Risk Analysis: Facilitating the integration and collective examination of data pertinent to primary runway safety hazards. This process involves the collaboration of various stakeholders to identify and analyse critical data points, contributing to a holistic understanding of runway safety challenges.*
- *Development and Dissemination of Safety Enhancement Programs: Crafting and promoting initiatives aimed at addressing identified runway safety risks. These efforts are grounded in the principles of knowledge exchange, advocacy, educational outreach, and stakeholder empowerment, ensuring a broad-based approach to enhancing runway safety.*
- *Advancement of Runway Safety Initiatives and Forums: Elevating the effectiveness and reach of existing runway safety measures, including LRSTs. This involves refining current initiatives, fostering greater participation, and enhancing the platforms for safety dialogue and collaboration.*
- *Exchange of Best Practices and Safety Insights: Encouraging the sharing of pivotal lessons, success narratives, and significant safety concerns unearthed through LRST engagements or analogous assemblies. This exchange aims to foster a culture of continuous learning and improvement within the aviation sector.*
- *Interdepartmental and Sector-Wide Runway Safety Collaborations: Working in concert with different Civil Aviation Authority (CAA) departments, external organizations, and the broader aviation community to fortify runway safety. These collaborative efforts are essential for the development and implementation of comprehensive safety measures.*
- *Policy Formulation and Data Management for Surface Events: Crafting policies for the accurate categorization and risk evaluation of surface occurrences, alongside establishing and maintaining key performance indicators. This includes the systematic collection, analysis, and classification of data regarding surface events for the Directorate General of Civil Aviation Regulations (DGCAR).*
- *Surface Event Analysis and Risk Classification: Conducting detailed examinations of surface events to determine their nature whether they are runway incursions, runway excursions, or other surface incidents and classifying the severity of these incursions to inform appropriate responses.*

- *Runway Safety Trends and Risk Factor Analysis: Analysing individual surface events and overarching statistics related to runway occurrences. This involves documenting, publishing, and disseminating findings on trends, risk factors, and learned lessons, contributing to informed safety practices.*
- *Development of Safe Surface Operations Resources: Investigating and producing resources that support safe operations on runways and taxiways. These resources aim to guide airport operators, pilots, and air traffic controllers towards best practices in runway safety.*
- *Review and Optimization of Runway Safety Procedures and Practices: Regularly assessing the efficacy and impact of existing runway safety procedures, policies, and practices. This periodic review ensures that safety measures are both effective and reflective of the latest standards and insights.*
- *Standardization and Guidance for LRST Operations: Establishing standardized procedures for the operation of LRSTs, along with providing guidelines and best practices for the conduct of LRST activities. This standardization ensures consistency and efficacy in runway safety efforts across different regions and contexts.*

5. Outcomes – Actions

The National Runway Safety Committee (NRSC) is action and outcome-oriented, focusing on key areas to enhance runway safety:

a) Addressing issues discovered during the implementation and support of effective Local Runway Safety Teams (LRSTs) at aerodromes.
b) Promoting continuous improvement of runway safety.
c) Mitigating the risk of unstable approaches, a common precursor to runway excursions.
d) Standardisation of terminology for consistent sharing of runway safety performance and risk information industry wide.
e) Fostering shared mental model for runway safety.

The following runway safety related occurrences should be considered in the safety performance data set:

(a) Abnormal runway contact.
(b) Ground collision.
(c) Runway excursion.
(d) Runway incursion.
(e) Loss of control on runway ground.
(f) Collision with obstacle(s).
(g) Undershoot/ Overshoot.
(h) Use of the wrong runway (runway confusion);
(i) High speed rejected take-off.
(j) Wildlife event (including bird strike).
(k) Damage from Foreign Object Debris (FOD).
(l) Planned airport developments.
(m) Any user concerns related to runway operations and safety; and
(n) Air Shows and other special events.

6. Membership

The NRSC membership is designed to facilitate wide industry involvement in identifying, creating, executing, and promoting runway safety initiatives at both national and local levels, as well as within the members' own organizations. It's crucial for NRSG members to not only actively participate in NRSG activities and safety initiatives but also have the capacity to drive change within their own organizations.

- *Directorate General of Civil Aviation Regulations (DGCAR), CAA (chair).*
- *Directorate General of Air Navigation (DGAN), CAA.*
- *Oman Transport Safety Bureau (OTSB).*
- *Oman Airports,*
- *Oman Aviation Academy.*
- *Royal Air Force of Oman (RAFO),*
- *Oman Air,*
- *Salam Air,*
- *Alsharqie.*
- *Other organisations to be confirmed.*

7. Administration

The NRSG will meet bi-annually, with additional meetings scheduled as required.
***Chair:** The NRSG will be chaired and coordinated by DGCAR.*
***New business/issues/topics for discussion:** Any new matters for discussion or consideration at the NRSG should be submitted through a formal document and provided to attendees well in advance, ideally three weeks before the meeting.*
***Venue:** The NRSG will meet at a location deemed convenient and cost-effective for NRSG members.*
***Agenda:** Individual agenda will be developed for each meeting and provided to members in a timely manner (ideally one week prior to the meeting).*

8. Reporting

The NRSC, as a hazard specific NASC senior level committee, will provide information only copies of outcomes (generally in the form of Minutes) to the National Aviation Safety Committee (NASC). This reporting is intended to inform the NASC of the status and performance of runway safety at a national (big picture) level.

9. Recommendations and referrals

On occasion, matters may arise that are considered by the NRSC as being nationally significant and may require further or higher consideration. In these circumstances the NRSC may advocate these specific matters formally to the NASC for consideration and escalation as required.
NASC may also request support, guidance, or advice from the NRSC with regard to specific identified runway safety issues as required.

ACTION MILESTONES FOR THE ESTABLISHEMNT AND IMPLEMENTATION OF THE ICAO GLOBAL REPORTING FORMAT METHODOLOGY

(to be tailored/customized and detailed by each State)

[STATE NAME]

[State focal point name: xxxxxxxxx]

[State focal point email address: xxxxxxxxx]

Milestone ID	ACTION	ENTITY RESPONSIBLE	TARGET DATE[1]	EFFECTIVE DATE	REMARKS
GRF 1	Review ICAO provisions and guidance and other Organisations guidance (see below)	CAA	**31/01/2021**		
GRF 2	Designate a focal point to coordinate implementation activities at the national level	CAA	**31/01/2021**		
GRF 3	Identify concerned focal points in each entity (CAA, Airport, ANSP, Aircraft operators – include BA, GA and military as applicable)	CAA, Airports, ANSP, Aircraft operators	**31/01/2021**		
GRF 4	Establish an Implementation Coordination Team including staff from the identified stakeholder entities (as appropriate)	CAA	**15/01/2021**		
GRF 5	Coordinate and support the conduct the initial training for the CAA, Airports, ANSP and Aircraft Operators' personnel (e.g. ICAO/ACI/IATA online courses, national awareness workshop, etc.)	CAA	**15/02/2021**		
GRF 6	Identify regulations, standards, procedures and guidance material to be developed/amended	National Focal Point and the Implementation Coordination Team	**15/02/2021**		

[1] Target dates are indicative only and should be replaced by realistic dates determined by individual State

Milestone ID	ACTION	ENTITY RESPONSIBLE	TARGET DATE[1]	EFFECTIVE DATE	REMARKS
GRF 7	Develop a detailed national implementation plan and safety risk assessment. Each entity should also establish its specific implementation plan and safety risk assessment.	CAA, Airports, ANSP, Aircraft operators	**28/02/2021**		
GRF 8	Identify the necessary means and resources for the implementation (human, financial and material resources)	National Focal Point and the Implementation Coordination Team	**28/02/2021**		
GRF 9	Coordinate with Airport Runway Safety Teams	Airports	**28/02/2021**		
GRF 10	Develop and promulgate regulations and standards	CAA	**30/03/2021**		
GRF 11	Develop procedures and guidance material (translate if required)	National Focal Point and the Implementation Coordination Team	**15/04/2021**		
GRF 12	Provide the necessary means and resources for the implementation (human, financial and material resources)	CAA, Airports, ANSP, Aircraft operators	**31/05/2021**		
GRF 13	Conduct On-the-Job Training (OJT) on the implementation	CAA, Airports, ANSP, Aircraft operators	**30/06/2021**		
GRF 14	Perform tests/trials prior to the effective implementation	All	**31/07/2021**		
GRF 15	Applicability date for the new methodology for assessing and reporting runway surface conditions	All	**4/11/2021**		

Notes: ICAO Runway Safety Go-Team Assistance Missions are available to support States and Airports. ACI APEX Safety Reviews are also available to support Airports.

References:

- ICAO GRF web site https://www.icao.int/safety/Pages/GRF.aspx

ICAO Region	State	Aerodrome location name	location Indicator (ICAO code)	Open Sw Public Use [Y/Yes, N/No]	Domestic Operations Only [Y/Yes, N/No]	International/Scheduled Air Transport [Y/Yes, N/No]	International Non-scheduled Air Transport [Y/Yes, N/No]	Regular Use [Y/Yes, N/No]	Alternate use [Y/Yes, N/No]	AIS SSP Deployed [Y/Yes, N/NO]	Date of Implementation [DD/MM/YYYY]	CAA Latest SSP Deployment Check Date [DD/MM/YYYY]	If NOT SP, Aerodrome planning SSP Deployment [Y/Yes, N/NO]	Estimated AIS SSP Deployment Date [DD/MM/YYYY]	Effective AIS SSP Deployment Date [DD/MM/YYYY]
MID	QATAR	HAMAD INTERNATIONAL	OTHH												
MID	QATAR	DOHA INTERNATIONAL	OTBD												

ACTION MILESTONES FOR THE ESTABLISHMENT AND IMPLEMENTATION OF THE ICAO ACR-PCR METHODOLOGY

(to be tailored/customized and detailed by each State)

[STATE NAME]

[State focal point name: xxxxxxxxx]

[State focal point email address: xxxxxxxxx]

Milestones	ACTION	RESPONSIBLE ENTITY	TARGET DATE [1]	OBSERVATIONS
PCR 1	Designate a focal point to coordinate activities at National Level.	CAA		
PCR 2	Identify stakeholder focal points (aerodrome operator, aeronautical publication service provider).	CAA, (AGA and ANS), provider of aeronautical publications, aerodrome operators (AO)		
PCR 3	Establish a Mechanism/Team to ensure the proper implementation of the ACR-PCR Method, which includes personnel from the identified stakeholder	CAA		
PCR 4	Ensure the Training of the Team responsible of the Milestone PCR 3	CAA and concerned Stakeholders		
PCR 5	Identify regulations, standards, and procedures (e.g. overload operations) that will be developed/amended.	National focal point and work team		

[1] Target dates are indicative only and should be replaced by realistic dates by each State

ICAO Region MID MID	State QATAR QATAR	Aerodrome location name HAMAD INTERNATIONAL OOHA INTRNATIONAL	Location Indicator [ICAO code] OTHH OTBD	Open for Public Use [Y/Yes, /N/No]	Domestic Operations Only [Y/Yes, /N/No]	International Scheduled Air Transport [Y/Yes, /N/No]	International Non-scheduled Air Transport [Y/Yes, /N/No]	Regular Use [Y/Yes, /N/No]	Alternate use [Y/Yes, /N/No]	AD-ACN PCN Implemented [Y/Yes, , /N/ No]	AD-ACN PCN Implementation Date [DD/MM/YYYY]	latest CAA AD-ACN PCN Deployment Check [DD/MM/YYYY]	If NOT MT, AD planning for ACN PCN Deployment [Y/Yes, /N/ No]	AD ACN PCN Estimated Deployment Date [DD/MM/YYYY]	AD ACN PCN Effective Deployment Date [DD/MM/YYYY]

ICAO Region	State	Aerodrome Location name	Location indicator [ICAO code]	AD ACR-PCR Implemented	AD ACR-PCR Implementation Date [DD/MM/YYYY]	latest CAA AD ACR-PCR Deployment Check [DD/MM/YYYY]	AD Planning ACR-PCR Deployment (Yes / No)	AD ACR-PCR Estimated Deployment Date [DD/MM/YYYY]	AD ACR-PCR Effective Deployment Date [DD/MM/YYYY]
MID	QATAR	HAMAD INTERNATIONAL	OTHH						
MID	QATAR	DOHA INTERNATIONAL	OTBD						

Flight phase	Light conditions	Aircraft height (FT)	Speed (KT)	Phenomenon type	Cloud amount	Bird size	Birds/wildlife seen	Birds/wildlife struck	Pilot advised of birds	Wildlife species	Wildlife Name	Struck Parts 1 Radome	Struck Parts 2 Windshield	Struck Parts 3 Nose
										KIWIS	KIWIS			

State/area of occ [ICAO_REG_OFF]	Flight Phase	Light Conditions	Phenomenon Type	Cloud amount	Bird size	Birds/wildlife seen	Birds/wildlife struck	Pilot advised of birds	Wildlife species	Wildlife Name
APAC	Approach	Dawn	Drizzle	Broken (5/8 to 7/8)	Large		1	1 No	ALBATROSS, SHEARWATERS, PETREL	ABDIM'S STORK
En Route	En Route	Daylight	Dust	CAVOK	Medium	2 up to 10	2 up to 10	Unknown	CASSOWARIES, EMU	ACCENTORS
ESAF	Landing	Dusk/Twilight	Dust/sand whirls	Few clouds (1/8-2/8)	Small	11 up to 100	11 up to 100	Yes	CHICKEN-LIKE BIRDS	AFRICAN EAGLE OWL
EUR_NAT	Manoeuvring	Night/Dark	Duststorm	No significant Clouds (NSC)	Unknown	More	More		COLIES OR MOUSEBIRDS	AFRICAN WOOD-OWL
MID	Post-impact	Night/Moonlight	Fog	Overcast		Unknown	Unknown		CRANES, RAILS	ALBATROSSES
NACC	Standing	Unknown	Funnel cloud	Scattered (3/8 to 4/8)					CUCKOOS	ALLIGATOR
SAM	Take-off		Hail	Sky obscured					DUCKS, GEESE, SWANS	ALLIGATORS, CROCODILES
WACAF	Taxi		Haze	Unknown					GOATSUCKER NIGHTJAR FROGMOUTH	AM. MOURNING DOVE
N/A	Tow		Ice crystals						GREBES	AMERICAN AVOCET
	Unknown		Ice pellets						HAWKS, EAGLES, VULTURES	AMERICAN BEAVER
			Mist						HERON, STORK, IBIS, FLAMINGO	AMERICAN BITTERN
			Rain						IGUANAS	AMERICAN BLACK DUCK
			Sand						KINGFISHERS, MOTMOTS, HORNBILL	AMERICAN BLACK VULTURE
			Sandstorm						KIWIS	AMERICAN COOT
			Small hail/snow pellets						MAMMALS	AMERICAN CROW
			Smoke						OSTRICH, RHEAS	AMERICAN GOLDFINCH
			Snow						OTHER	AMERICAN KESTREL
			Snow grains						OWLS	AMERICAN MAGPIE
			Squall						PARROT, MACAW, PARAKEET, LORIE	AMERICAN REDSTART
			Tornado or waterspout						PELICANS, CORMORANTS, BOOBIES	AMERICAN ROBIN
			Volcanic ash						PERCHING BIRDS	AMERICAN TREE SPARROW
			Unknown						PIGEONS, GROUSE	AMERICAN WHITE IBIS
			NIL						REPTILES	AMERICAN WHITE PELICAN
									SHORE BIRDS	AMERICAN WIGEON

MINIMUM REQUIREMENTS TO BE CONSIDERED WHEN AUTHORIZING OPERATIONS IN A LANDING AREA

Item	Specifications	Required	Optional
I. PHYSICAL CHARACTERISTICS			
1. Runway		☒	☐
Length	A runway length equal to or greater than that specified in the aeroplane's Approved Flight Manual (AFM) or approved performance charts for the prevailing conditions is required. Both take-off and landing requirements need to be considered for both directions.	☒	☐
Width	A minimum width of 18 metres is required for runways.	☒	☐
Longitudinal slope	The longitudinal slope between the runway ends should not exceed 2%.	☐	☒
Transverse Slope	The transverse slope should not exceed 2%.	☐	☒
Surface testing	The surface of the runway shall be assessed to determine its effect on aeroplane control and performance.	☒	☐
Runway Strip	A minimum length of 30m and width of 30m is recommended to be available.	☐	☒
2. Taxiway	The taxiway width should be a minimum of 7.5 m wide.	☐	☒
II. Obstacle Limitation surfaces			
1. Approach surface	Specifications are under development.	☒	☐
2. Take off surface		☒	☐
3. Transitional surface		☒	☐
4. Inner horizontal surface		☒	☐
5. Conical surface		☒	☐
III. Visual Aids for Navigation			
1. Marking	It is highly recommended to provide markings similar to those found at aerodromes open for public use. If markings are provided, they should follow the specifications set out in CAR 139, part 1.	☐	☒
2. Wind direction indicator	It is the preferred method to be provided at landing areas.	☒	☐

Item	Specifications	Required	Optional
IV. Aerodrome operational services, facilities and equipment			
1. Suitability of the aerodrome	A pilot shall not use an aerodrome unless the aeroplane is clear of all persons, animals, vehicles or other obstructions.	☒	☐
2. Airport operations safety plan	The aerodrome operator shall develop a plan for the safety operations of the aircraft.	☒	☐
3. Aerodrome security program	It is highly recommended to provide an aerodrome security program. Fencing might be the preferred method to be provided.	☐	☒
4. Aerodrome emergency plan	An aerodrome emergency plan shall be established at the aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome.	☒	☐
5. Coordination with ATC	It is highly recommended to provide a coordinator for the exchange of operational information with air traffic control units.	☒	☐
6. Safety of the runway	The aerodrome operator shall confirm the safety of the runway before it is used for take-off and landing.	☒	☐
V. AERONAUTICAL STUDY/RISK ASSESSMENT			
1. Aeronautical study/Risk assessment	It is the responsibility of the aerodrome operator/Aircraft operator to develop a risk assessment for the use of the aerodrome with the presence of all stakeholders involved in the operation (Air Navigation Services, etc.). Items to be discussed but not limited to are as follows: - Geographic location, - Environmental considerations, - Aerodrome data, - Air Navigation Services requirements, - Etc.	☒	☐

Note: This guidance is only for flights conducted by day light hours and under Visual Flight Rules (VFR).

ANONYMOUS DATASET FOR AERODROME SAFEY

MINIMUM REPORTING AREAS OF CHALLENGING/SIGNIFICANT NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non-implementation	STATE/ Concerned Aerodrome (s)	Corrective Action Plan(s) (CAP(s))		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon	Estimated Date for CAP completion / Status
AERODROME DESIGN									
1.	Annex 14 - Vol 1, Chapter 1 PANS-Aerodromes, Part 1, 2		**Aerodrome Master Plan**		The lack of airports master plans affect their short to medium term capacity and efficiency enhancement projects; restricting their ability to fulfil operational needs.				
2.	Annex 14 - Vol 1, Chapter 2, 3 PANS-Aerodromes, Part 1, 2 MID ANP, Vol II - AOP		**Runways**		In view of the vital function of runways in providing for safe and efficient aircraft landings and take-offs, it is imperative that their design take into account the operational and physical characteristics of the aeroplanes expected to use the runway, as well as engineering considerations.				

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
3.	Annex 14 - Vol 1, Chapter 2, 3 PANS-Aerodromes, Part 1, 2		**Taxiways**		A properly designed taxiway system ensures a smooth, continuous flow of aircraft ground traffic, operating at the highest level of safety and efficiency and contributes to optimum aerodrome utilization				
4.	Annex 14 - Vol 1, Chapter 2, 3 PANS-Aerodromes, Part 1, 2		**Aprons**		Apron design should take into account safety procedures for aircraft manoeuvring and contribute to a high degree of efficiency for aircraft movements and dispensing apron services.				

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
5.	Annex 14 - Vol 1, Chapter 2, 5, 6, 7 PANS-Aerodromes, Part 1 MID ANP, Vol II - AOP		**Visual Aids**		Visual aids contribute to the safety and operational efficiency of aircraft and vehicle movements. Design and Good maintenance of these aids is essential to ensure that the cues that they provide are available in all circumstances.				
6.	Annex 10 - Vol 1, Chapter 3		**Radio Navigation Aids**		Radio Navigation Aids contribute to the safety and operational efficiency of aircrafts. Good maintenance of these aids is essential to ensure that the cues that they provide are available in all				

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
7.	Annex 14 - Vol 1, Chapter 8 PANS-Aerodromes, Part 1 MID ANP, Vol II - AOP		**Electrical Systems**		Electrical systems contribute to the safety and operational efficiency of aircraft and vehicle movements. Their design and good maintenance of these aids is essential to ensure that the cues that they provide are available in all circumstances				
8.	Annex 14 - Vol 1, Chapter 1		**Terminals**		Architectural and infrastructure-related requirements for the optimum implementation of international civil aviation security measures shall be integrated into the design and construction of new facilities and alterations to existing facilities at an aerodrome.				

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MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non-implementation	STATE/ Concerned Aerodrome (s)	Corrective Action Plan(s) (CAP(s))		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon	Estimated Date for CAP completion / Status
9.	Annex 14 - Vol 1, Chapter 9 PANS-Aerodromes, Part 1		**Fencing**		Lack of fences on an aerodrome could lead to the entrance to the movement area of animals large enough to be a hazard to aircraft.				
AERODROME OPERATIONS									

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
10.	Annex 14 - Vol 1, Chapter 2 PANS-Aerodromes, Part 1, 2 MID ANP, Vol II - AOP		**Aerodrome Data**		Determination and reporting of aerodrome-related aeronautical data shall be in accordance with the accuracy and integrity classification required to meet the needs of the end-users of aeronautical data				
11.	Annex 14 - Vol 1, Chapter 9 PANS-Aerodromes, Part 1		**Emergency planning**		Lack of adequately effective emergency planning can seriously affect the effects of an emergency, particularly in respect of saving lives and maintaining aircraft operations.				

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MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
12.	Annex 14 - Vol 1, Chapter 2, 9 PANS-Aerodromes, Part 1 MID ANP, Vol II – AOP		**Rescue and Firefighting**		Lack of adequately effective rescue and firefighting service can affect capabilities to save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity				
13.	Annex 14 - Vol 1, Chapter 2, 9 PANS-Aerodromes, Part 1		**Disable Aircraft Removal**		Disabled aircraft can interfere with normal activity of an aerodrome. In addition, runway and taxiway closures can substantially reduce the number of arrivals and departures and restrict movement around the aerodrome, resulting in the reduction of the aerodrome capacity.				

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
14.	Annex 14 - Vol 1, Chapter 9 PANS-Aerodromes, Part 1		**Wildlife Strike Hazard Reduction**		Lack of measures (successful bird/wildlife control programme) on an airport and in its vicinity to minimize the likelihood of collisions between wildlife and aircraft will increase the risk to aircraft operations				
15.	Annex 14 - Vol 1, Chapter 2, 9 PANS-Aerodromes, Part 1		**Operational Area Management**		Lack of appropriate airport operational services will affect the safety and efficiency of aircrafts operations.				
16.	Annex 14 - Vol 1, Chapter 9		**Ground Servicing of Aircraft**		Lack of appropriate Ground Servicing of Aircraft will affect the safety and efficiency of aircrafts operations.				

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MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
17.	Annex 14 - Vol 1, Chapter 4, 6 PANS-Aerodromes, Part 1		**Control of obstacles**		The airspace around aerodromes shall be maintained free from obstacles so as to permit the intended aeroplane operations at the aerodromes to be conducted safely and to prevent the aerodromes from becoming unusable by the growth of obstacles around the aerodromes				
18.	Annex 14 - Vol 1, Chapter 10 PANS-Aerodromes, Part 1		**Aerodrome Maintenance**		A maintenance programme, shall be established at an aerodrome to maintain facilities in a condition which does not impair the safety, regularity or efficiency of air navigation				

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
19.	Annex 14 _ Vol1, Chapter 2 PANS-Aerodromes, Part 2		**Global Reporting Format**		Assessing and reporting the condition of the movement area and related facilities is necessary in order to provide the flight crew with the information needed for safe operation of the aeroplane. The runway condition report (RCR) is used for reporting assessed information.				

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MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
20.	Annex 14 - Vol 1, Chapter 1 PANS-Aerodromes, Part 1		**Safety Management**		Implementation of SMS seeks to proactively mitigate safety risks before they result in aviation accidents/ incidents and improve operational efficiencies.				
AERODROME CERTIFICATION									

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	**National Reference**	**Description**	**First reporting Date**	**Remarks/ Impact of non-implementation**	**STATE/ Concerned Aerodrome (s)**	**Corrective Action Plan(s) (CAP(s))**		
							Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	**Residual impediment(s)/obstacles faced during the implementation of each CAP and action thereon**	**Estimated Date for CAP completion / Status**
21.	Annex 14 - Vol 1, Chapter 1 to 10 PANS-Aerodromes, Part 1, 2		**Aerodrome Certification**		Lack of certification of an aerodrome means that aerodrome does not meet the specifications regarding the facility and its operation				
22.	PANS-Aerodromes, Part 1		**Safety assessments and Aerodrome Compatibility**		The compatibility between aeroplane operations and aerodrome infrastructure and operations when an aerodrome accommodates an aeroplane that exceeds the certificated characteristics of the aerodrome should be assessed				

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MINIMUM REPORTING AREAS OF NON-COMPLIANCES

Important Note:

*** : Please include the reference of the CAP for each concerned Aerodrome with a hyperlink to the CAP Document as a separate Attachment/Folder.**

General Guidance on the minimum elements that any CAP should include:

Overall, establishing a CAP for each reported non-compliance is important for ensuring that safety concerns are addressed in a timely and effective manner. By investigating the non-compliance, **identifying the root causes and their related corrective measures**, **assigning responsibility**, **establishing timelines**, **monitoring progress**, and **evaluating effectiveness**, aerodrome operators and aviation authorities could ensure that safety risks are minimized, and that each aerodrome remains a safe environment for all users.

Conclusion ID #	conclusions and decisions	Why: concerns/challenges/rationale	deliverables		When: Deadline	Last Revised Deadline	Drafted by	Endorsed by	status	Date of completion	Actions required by the State	States that didn't reply/take action yet	Remarks
			What: item(s)	Who: responsible									
CAPACITY & EFFICIENCY													
MIDANPIRG C 18/24	**STATES NEEDS FOR THE BBB-AOP IMPLEMENTATION**								**Ongoing**				
	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: a) States requiring assistance are urged to provide the ICAO MID Office, by March 2021, with their Needs for the BBB-AOP Implementation using the Table at **Appendix 5.2J**; and b) States and stakeholders having the required experience and expertise are encouraged to volunteer to joint efforts with ICAO for the provision of necessary technical assistance.	Monitor the MID States BBB-AOP Implementation needs	Survey on MID States BBB-AOP Implementation needs	States	Mar-20	18-Aug-21	ASPIG/2	MIDANPIRG/18		**Action condcution on yearly basis**	Complete the Questionnaire on MID States BBB-AOP Implementation needs	Libya, Oman, and Yemen	(Revised Date: due to the Pandemic Crisis the deadline has been extended to 2021)
MIDANPIRG C 18/25	**AIRPORT PLANNING SEMINAR**								**Completed**				
	That, ICAO organize an Airport Planning Seminar in 2022 and States are encouraged to participate actively in this event.	Prepare States to the upcoming requirements on Airport Master plan	Airport Planning Seminar	ICAO	Dec-22		ASPIG/2	MIDANPIRG/18		15-Sep-22	Participation to the event		At the Draft stage: This conclusion amended the DRAFT CONCLUSION 1/8: AIRPORT PLANNING SEMINAR (ref: ASPIG/1 Meeting Report)
MIDANPIRG C 18/26	**A-SMGCS IMPLEMENTATION SEMINAR**								**Completed**				
	That, a) ICAO organize an A-SMGCS Implementation Seminar/Workshop in 2021- 2022; and b) States are encouraged to participate actively in this event.	Ensure proper Implementation of the A-SMGCS on Aerodromes as part of the ASBU Block 0 SURF module of the GANP 6th Edition	A-SMGCS Implementation Seminar/Webinar	ICAO	Dec-22		ASPIG/2	MIDANPIRG/18		1-Feb-23	Participation to the event		At the Draft stage: This conclusion amended the DRAFT CONCLUSION 1/7: A-SMGCS IMPLEMENTATION SEMINAR (ref: ASPIG/1 Meeting Report)
MIDANPIRG C 18/27	**MID REGION ACDM IMPLEMENTATION PLAN**								**Ongoing**				
	MID REGION ACDM IMPLEMENTATION PLAN That, by March 2021, concerned States (according to the applicability area included in the MID Region Air Navigation Strategy) be urged to: a) provide the ICAO MID Office with the contact details of their designated National ACDM Implementation Focal Points; and b) populate the Questionnaire on ACDM Implementation Plan, using the template at **Appendix 5.2K**.	Ensure proper implementation of the ASBU Block 0 ACDM module of the GANP 6th Edition	List of MID States ACDM focal points & Survey on ACDM Implementation Plan	States	Mar-21	18-Aug-21	ASPIG/2	MIDANPIR/18			Provide State's ACDM focal Point & complete the Questionnaire on the State's ACDM Implementation Plan		**Important Note : States concerned by this conclusion are : BAHRAIN, EGYPT, IRAN, KUWAIT, OMAN, QATAR, SAUDI ARABIA & UAE as agreed and defined on the MID eANP**
PIRG-RASG D 3/3	**ESTABLISHMENT OF THE MID REGION ACDM TASK FORCE (MID ACDM-TF)**								**Completed**				
	That, the MID Region Airport Collaborative Decision-Making Task Force (MID ACDM-TF) be established, subject to review and confirmation of ASPG/6, in accordance with the Terms of Reference at **Appendix 2A.**	Establish an interface between the Airports, the CAAs and ICAO MID Office to ensure the proper implementation of the ACDM	ACDM TF ToRs	States	Mar-24		ASPIG/5	MIDANPIG/21 RASG/11			Endorsed		**Pending ToRs confirmation by the ASPIG/6**

APPENDIX 3B

ICAO Region	State	CAA Name or AD Location name	CAA Acronym or AD Location indicator [ICAO code]	Airport Capacity and Master Plan (1=Yes, 0=No)	Airside Design (1=Yes, 0=No)	Visual Aids (1=Yes, 0=No)	Ground Navigation Aids (1=Yes, 0=No)	Electrical Systems (1=Yes, 0=No)	Terminals Capacity (1=Yes, 0=No)	Automated Switching of TCL (1=Yes, 0=No)	Aerodrome Emergency Plan (1=Yes, 0=No)	Rescue and Firefighting (1=Yes, 0=No)	Disable Aircraft Removal (1=Yes, 0=No)	Wildlife Strike Hazard Reduction (1=Yes, 0=No)	Airside Adverse Condition Operations (1=Yes, 0=No)	Ground Servicing of Aircraft (1=Yes, 0=No)	Control of Obstacles (1=Yes, 0=No)	Pavement Management (1=Yes, 0=No)	Airside Markings (1=Yes, 0=No)	AD SMS Implementation (1=Yes, 0=No)
MID	QATAR	HAMAD INTERNATIONAL	OTHH																	
MID	QATAR	DOHA INTERNATIONAL	OTBD																	
MID	QATAR	Qatar Civil Aviation Authority	QCAA																	

ICAO Region	State	CAA Name or AD Location name	CAA Acronym or AD Location indicator [ICAO code]	Airport Capacity and Master Plan (1=Yes, 0=No)	Airside Design (1=Yes, 0=No)	Visual Aids (1=Yes, 0=No)	Ground Navigation Aids (1=Yes, 0=No)	Electrical Systems (1=Yes, 0=No)	Terminals Capacity (1=Yes, 0=No)	Automated Switching of TCL (1=Yes, 0=No)	Aerodrome Emergency Plan (1=Yes, 0=No)	Rescue and Firefighting (1=Yes, 0=No)	Disable Aircraft Removal (1=Yes, 0=No)	Wildlife Strike Hazard Reduction (1=Yes, 0=No)	Airside Adverse Condition Operations (1=Yes, 0=No)	Ground Servicing of Aircraft (1=Yes, 0=No)	Control of Obstacles (1=Yes, 0=No)	Pavement Management (1=Yes, 0=No)	Airside Markings (1=Yes, 0=No)	AD SMS Implementation (1=Yes, 0=No)
MID	QATAR	HAMAD INTERNATIONAL	OTHH																	
MID	QATAR	DOHA INTERNATIONAL	OTBD																	
MID	QATAR	Qatar Civil Aviation Authority	QCAA																	

MID Region

Airports Collaborative Decision-Making Task Force

(MID ACDM-TF)

Terms of Reference

1. SCOPE

The scope and objective of the MID ACDM-TF is to identify, plan and assist in the implementation of A-CDM at the list of Airports concerned by the ACDM Implementation, as defined on the MID Regional Air Navigation Plan (ACDM applicability area agreed by the MID States).

2. PURPOSE:

The purpose of the Regional Task Force is to enhance the MID Region Airports preparedness for the ACDM Implementation. The task force will provide technical assistance, guidance, and support for Airports to ensure the successful implementation of ACDM processes and tools.

3. COMPOSITION:

The Regional Task Force will be composed ACDM Experts from different ICAO Partners who will be meeting with the concerned representatives from individual State defined within the ANP ACDM applicability Area, as well as with their Airport Stakeholders, including airlines, ground handlers, air traffic control, and airport operators.

4. ROLES AND RESPONSIBILITIES:

The Regional Task Force will have the following roles and responsibilities:

a) Assist, support and enhance the MID Region Airports preparedness for the ACDM Implementation,
b) Review the Current status of ACDM Implementation Plan in MID Region,
c) Check the Readiness of the newly Implemented Elements/Enablers of any ACDM Project,
d) Review the effectiveness of existing Airports ACDM projects in the MID Region,
e) Assist, as requested, the implementation of coordination procedures between Airports and relevant stakeholders:
   i. Facilitate the exchange of information and best practices between airport stakeholders to ensure that stakeholders are aware of the latest developments in ACDM processes, tools, and technologies,
   ii. Provide guidance and support for the implementation of ACDM processes, including training and education for Airport and relevant stakeholders,
   iii. Monitor the implementation of ACDM processes and evaluate their effectiveness to identify areas for improvement,
   iv. Ensure that ACDM processes are achieving their intended objectives, including optimizing the use of airport resources, reducing delays, and enhancing safety.

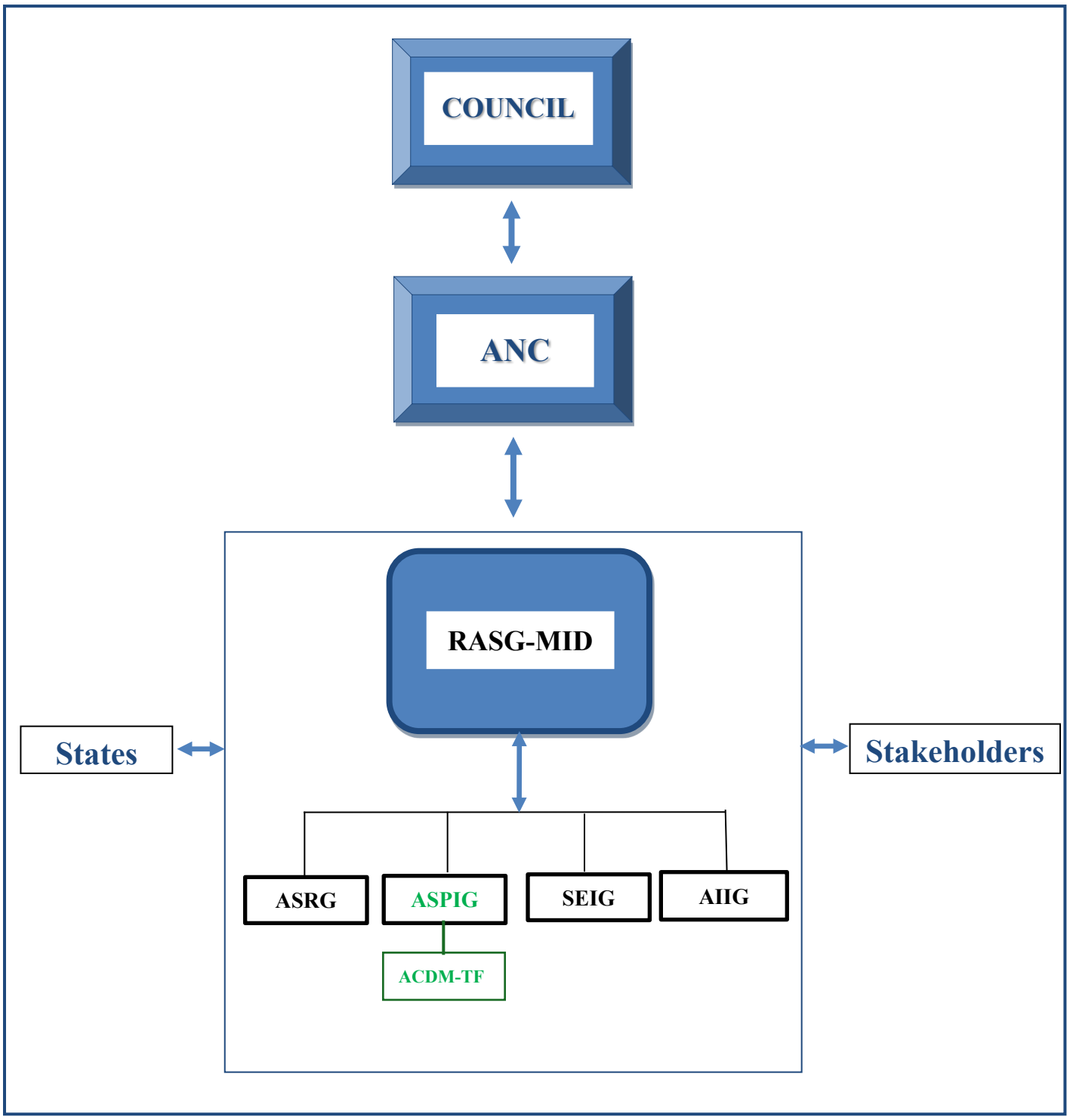
5. MEETINGS AND REPORTING:

The task force will report to the ASPIG and produce their progress reports including the recommendations for improvements to the State including their airport stakeholders. The task force will be chaired by the state ACDM Focal Point and ICAO MID RO-AGA will be the Secretariat.

6. WORKING METHODS:

The Regional Task Force will meet physically once a year with the concerned State individually. Acting as a Go-Team the taskforce will review the implementation of ACDM processes and tools at the concerned Airport Premises and the concerned State will coordinate with the Airport about the facilitation and arrangements of the meeting.

MID ACDM-TF reflected on
The RASG-MID ORGANIZATIONAL STRUCTURE



ASRG	Annual Safety Report Group	SEIG	Safety Enhancement Implementation Group
ASPIG	Aerodromes Safety & Planning Implementation Group	AIIG	Accident & Incident Investigation Group
ACDM-TF	Airport Collaborative Decision Making Task Force		

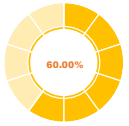
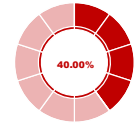
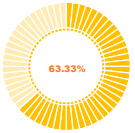
Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implemention Plan

State	Country Code	Total # of AD as defined in the Applicabilty Area	City	Aerodrome Name (AOP Table I-I)	Location Indicator (AOP Table I-I)	Designation (AOP Table I-1)	ICAO Reference Code		Aerodrome Traffic Density			Information Sharing	Milestones Approach	Variable Taxi Time	Collaborative Management of Flight Updates	Collaborative Pre-departure Sequence	ACDM in Adverse Conditions	ACDM Elements Implementation Progress
							Number	Letter	Light	Medium	Heavy							
Bahrain	BHR	1	Manama	Bahrain International Airport	OBBI	RS	4	F				✓	✓	✗	✓	✓	✗	66.67%
Egypt	EGY	1	Cairo	CAIRO INTERNATIONAL AIRPORT	HECA	RS	4	F				✓	✓	✗	✗	✗	✗	33.33%
Iran	IRN	1	Tahran	Mehrabad International Airport	OIII	RS	4	E				✗	✗	✗	✗	✗	✗	0.00%
Kuwait	KWT	1	Kuwait	Kuwait International Airport	OKBK	RS	4	F				✗	✗	✗	✗	✗	✗	0.00%
Oman	OMN	1	Muscat	Muscat International Airport	OOMS	RS	4	F				✓	✗	✓	✗	✓	✗	50.00%

Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implemention Plan

State	Country Code	Total # of AD as defined in the Applicabilty Area	City	Aerodrome Name (AOP Table I-I)	Location Indicator (AOP Table I-I)	Designation (AOP Table I-1)	ICAO Reference Code		Aerodrome Traffic Density			Information Sharing	Milestones Approach	Variable Taxi Time	Collaborative Management of Flight Updates	Collaborative Pre-departure Sequence	ACDM in Adverse Conditions	ACDM Elements Implementation Progress
							Number	Letter	Light	Medium	Heavy							
Qatar	QAT	1	Duha	Hamad International Airport	OTHH	RS	4	F				✓	✓	✓	✓	✓	✓	100.00%
Saudi Arabia	SAU	2	Jeddah	King Abdulaziz International Airport	OEJN	RS	4	F				✓	✓	✓	✓	✓	✓	100.00%
			Riyadh	King Khalid International Airport	OERK	RS	4	E				✓	✓	✓	✓	✓	✓	100.00%
UAE	ARE	2	Abu Dhabi	Zayed International Airport	OMAA	RS	4	F				✓	✓	✓	✓	✓	✓	100.00%
			Dubai	Dubai International Airport	OMBD	RS	4	F				✓	✓	✓	✓	✓	✗	83.33%

Aerodromes Readiness for ACDM Operations based on the MID Region ACDM Implemention Plan

		Total # of AD as defined in the Applicabilty Area		Aerodrome Traffic Density			Information Sharing	Milestones Approach	Variable Taxi Time	Collaborative Management of Flight Updates	Collaborative Pre-departure Sequence	ACDM in Adverse Conditions	ACDM Elements Implementation Progress
				Light	Medium	Heavy							
MID REGION	MID	10		0	7	3							

Action Milestones

for the MID ACDM Planning and Implementation

State/: _ _ _ _ _ _ _ _ _ _ _ _ _ _

State ACDM Focal Point Name/email: _ _ _ _ _ _ _ _ _ _ _ _ _ _

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:

2. **If A-CDM has been/is Implemented / 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:

A-CDM Implementation Plan

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:

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:

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:

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)

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 (*Please specify)*	

Please add free text comments if needed:

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:

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 (*Please specify)*	

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:

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:

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:

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:

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 *(please indicate what other objectives are identified in box below)*	

Please add free text comments if needed:

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:

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:

--------- END --------

ICAO Region	State	Location name	Location indicator (ICAO code)	ACDM Information Sharing (1=Yes, 0=No)	Milestones Approach (1=Yes, 0=No)	Variable Taxi Time Calculation (1=Yes, 0=No)	Collaborative Pre-Departure Sequencing (1=Yes, 0=No)	ACDM in Adverse Conditions (1=Yes, 0=No)	Colaborative Mangement of Fligh Updates (1=Yes, 0=No)
MID	QATAR	HAMAD INTERNATIONAL	OTHH						
MID	QATAR	DOHA INTERNATIONAL	OTBD						

Implementation Dependencies between the A-SMGCS Services, Functions, and ICAO GANP ASBU SURF Elements

A-SMGCS Services	ICAO GANP SURF Thread (corresponding Element)	A-SMGCS Components	Services/Functions Required ✓							
			Surveillance	RMCA	CATC	CMAC	Routing	Automated Switching of	Automated Switching of	Automated Activation A-VDGS
Surveillance	SURF – B0/2	Surveillance	⚙							(✓)
Airport Safety Support Service	SURF – B0/3	RMCA	✓	⚙						
	SURF – B1/3	CATC	✓		⚙		(✓)			
		CMAC	✓			⚙	(✓)			
Routing Service	SURF – B1/4	Routing	✓				⚙			
Guidance Service	SURF – B2/1	Automated Switching of TCL	✓				✓	⚙		(✓)
		Automated Switching of Stop Bars	✓				✓		⚙	
	-	Automated Activation of A-VDGS	(✓)							⚙

Note 1: *The highlighted cells* ⚙ *indicates that* ***an ECI technical enabler is required***.

Note 2: *The symbol* (✓) *denotes* ***Optional***

Implementation Dependencies between the A-SMGCS Services, Functions, and ICAO GANP ASBU SURF Elements

Acronyms / Descriptions:

- ***Automated Switching of TCL*** *: Automated Switching of Taxiway Centreline Lights (TCL). This Function provides individual guidance information to any mobile which has a cleared route. This is also known as Follow the Greens (FtG).*
- ***Automated Switching of Stop Bars*** *: This function provides the capability to switch off and on stop bars (some stop bars after being turned off are automatically turned back on after a specified time or when activated by sensors) following a Clearance input by the Controller. They can either be placed at a RWY Holding Position (as already in use at many airports) or across a taxiway.*
- ***Automated Activation of A-VDGS*** *: Automated Activation of Advanced-Visual Docking Guidance Systems (A-VDGS).This Function:*
  - *shall switch on the A-VDGS of an unoccupied assigned stand when the position of the mobile is D metres or T seconds away from the stand.*
  - *may be used to enhance the Surveillance Service for mobiles approaching the stand*
  - *should provide the Actual In/Off Block Time (AIBT/AOBT) and stand status to external systems*
- ***CATC*** *: Conflicting ATC Clearances (CATC)*
- ***CMAC*** *: Conformance Monitoring Alerts for Controllers (CMAC)*
- ***ECI*** *: Electronic Clearance Input*
- ***RMCA*** *: Runway Monitoring and Conflict Alerting (RMCA)*

ICAO Region	State	Location name	Location indicator (ICAO code)	Visual Aids and Signals (1=Yes, 0=No)	Surveillance (1=Yes, 0=No)	RMCA (1=Yes, 0=No)	CATC (1=Yes, 0=No)	CMAC (1=Yes, 0=No)	Routing (1=Yes, 0=No)	Automated Switching of TCL (1=Yes, 0=No)	Automated Switching of Stop Bars (1=Yes, 0=No)	Automated Activation of A-VDGS (1=Yes, 0=No)
MID	QATAR	HAMAD INTERNATIONAL	OTHH									
MID	QATAR	DOHA INTERNATIONAL	OTBD									

MID DOC 002

INTERNATIONAL CIVIL AVIATION ORGANIZATION

MIDDLE EAST AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL GROUP (MIDANPIRG)

MID REGION

AIR NAVIGATION STRATEGY

EDITION MARCH, 2024

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AIR NAVIGATION PRIORITIES AND MONITORING OF THE STATUS OF IMPLEMENTATION

AIR NAVIGATION PRIORITIES AND MONITORING OF THE STATUS OF IMPLEMENTATION

1. Introduction

1.1 As traffic volume increases throughout the world, the demands on air navigation service providers in a given airspace increase, and air traffic management becomes more complex.

1.2 It is foreseen that the implementation of the components of the ATM operational concept will provide sufficient capacity to meet the growing demand, generating additional benefits in terms of more efficient flights and higher levels of safety. Nevertheless, the potential of new technologies to significantly reduce the cost of services will require the establishment of clear operational requirements.

1.3 Taking into account the benefits of the ATM operational concept, it is necessary to make many timely decisions for its implementation. An unprecedented cooperation and harmonization will be required at both global and regional level.

1.4 ICAO introduced the Aviation System Block Upgrades (ASBU) framework as a systemic manner to achieve a harmonized implementation of the air navigation services. An ASBU designates a set of improvements that can be implemented globally from a defined point in time to enhance the performance of the ATM system.

1.5 In accordance, with the Resolutions of the 40th Session of the ICAO Assembly, particularly Resolution A40-1 "ICAO global planning for safety and air navigation", the ICAO Assembly urged States and PIRGs to utilize the guidance provided in the GANP for planning and implementation activities which establish priorities, targets and indicators consistent with globally-harmonized objectives, taking into account operational needs. In response to this, the MID Region developed the MID Region Air Navigation Strategy – Part 1, which is aligned with the GANP and ASBU Framework.

1.6 Stakeholders including service providers, regulators, airspace users and manufacturers are facing increased levels of interaction as new, modernized ATM operations are implemented. The highly integrated nature of capabilities covered by the block upgrades requires a significant level of coordination and cooperation among all stakeholders. Working together is essential for achieving global harmonization and interoperability.

2. Strategic Air Navigation Capacity and Efficiency Objective

2.1 The Strategic Objective related to Air Navigation Capacity and Efficiency is to realize sound and economically-viable civil aviation system in the MID Region that continuously increases in capacity and improves in efficiency with enhanced safety while minimizing the adverse environmental effects of civil aviation activities.

3. MID Air Navigation Objectives

3.1 The MID Region air navigation objectives are set in line with the global air navigation objectives and address specific air navigation operational improvements identified within the framework of the Middle East Regional Planning and Implementation Group (MIDANPIRG).

3.2 Blocks ‘0’ and “1” feature Elements are characterized by operational improvements, which have already been developed and implemented in many parts of the world. The MID Region priority 1 Block 0 & 1 Elements are reflected in **Table 1** below.

3.3 The MID Region Air Navigation Strategy aims to maintain regional harmonisation. The States should develop their National Air Navigation Plan (NANP), including action plans for the implementation of relevant priority 1 ASBU Elements and other ASBU elements or non ASBU solutions based on the States’ operational requirements and cost benefits analysis.

3.4 The implementation of the ASBU Block 0 Elements in the MID Region started before 2013 and is continuing. For the short and medium term, the MID Region priorities include identified ASBU Elements from Block 0 and Block 1.

4. MID Region ASBU Threads/Elements Prioritization and Monitoring

4.1 On the basis of operational requirements and taking into consideration the associated benefits, **Table 1** below shows the priority associated for each ASBU element from Block 0 and Block 1, as well as the MIDANPIRG subsidiary bodies that will be monitoring and supporting the implementation of these Threads/Elements:

Priority 1 ASBU Element*: Elements that have the highest contribution to the improvement of air navigation safety and/or efficiency in the MID Region. These Elements should be implemented where applicable and will be used for the purpose of regional air navigation monitoring and reporting.*

Priority 2 ASBU Element*: Elements recommended for implementation based on identified operational needs and benefits by States.*

Priority 1 Thread: *Any Thread with at least one priority 1 element*

Table 1. MID REGION ASBU THREADS & ELEMENTS (BLOCK 0 & 1) PRIORITIZATION AND MONITORING

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
Information Threads							
DAIM							
DAIM	**B1/1**	Provision of quality-assured aeronautical data and information	**1**	2021	AIM SG	RANP/ NANP TF	
	B1/2	Provision of digital Aeronautical Information Publication (AIP) data sets	2				
	B1/3	Provision of digital terrain data sets	**1**	2021	AIM SG	RANP/ NANP TF	
	B1/4	Provision of digital obstacle data sets	**1**	2021	AIM SG	RANP/ NANP TF	
	B1/5	Provision of digital aerodrome mapping data sets	2				
	B1/6	Provision of digital instrument flight procedure data sets	2				
	B1/7	NOTAM improvements	2				
AMET							
AMET	**B0/1**	Meteorological observations products	**1**	2014	MET SG	RANP/ NANP TF	
	B0/2	Meteorological forecast and warning products	**1**	2014	MET SG	RANP/ NANP TF	
	B0/3	Climatological and historical meteorological products	**1**	2014	MET SG	RANP/ NANP TF	

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
	B0/4	Dissemination of meteorological products	**1**	2014	MET SG	CNS SG RANP/ NANP TF	
	B1/1	Meteorological observations information	2				
	B1/2	Meteorological forecast and warning information	2				
	B1/3	Climatological and historical meteorological information	2				
	B1/4	Dissemination of meteorological information	2				
FICE							
FICE	**B0/1**	Automated basic inter facility data exchange (AIDC)	**1**	2014	CNS SG ATM SG	RANP/ NANP TF	
Operational Threads							
APTA							
APTA	**B0/1**	PBN Approaches (with basic capabilities)	**1**	2014	PBN SG	ATM SG AIM SG CNS SG RANP/ NANP TF	
	B0/2	PBN SID and STAR procedures (with basic capabilities)	**1**	2014	PBN SG	ATM SG AIM SG RANP/ NANP TF	
	B0/3	SBAS/GBAS CAT I precision approach procedures	2				
	B0/4	CDO (Basic)	**1**	2014	PBN SG	ATM SG RANP/ NANP TF	
	B0/5	CCO (Basic)	**1**	2014	PBN SG	ATM SG RANP/ NANP TF	
	B0/6	PBN Helicopter Point in Space (PinS) Operations	2				
	B0/7	Performance based aerodrome operating minima – Advanced aircraft	**1**	2021	PBN SG	AIM SG CNS SG e RANP/ NANP TF	
	B0/8	Performance based aerodrome operating minima – Basic aircraft	2				

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
	B1/1	PBN Approaches (with advanced capabilities)	2				
	B1/2	PBN SID and STAR procedures (with advanced capabilities)	2				
	B1/4	CDO (Advanced)	2				
	B1/5	CCO (Advanced)	2				
FRTO							
	B0/1	Direct routing (DCT)	2				
	B0/2	Airspace planning and Flexible Use of Airspace (FUA)	**1**	2014	ATM SG	RANP/ NANP TF	
	B0/3	Pre-validated and coordinated ATS routes to support flight and flow	2				
	B0/4	Basic conflict detection and conformance monitoring	**1**	2014	ATM SG	CNS SG RANP/ NANP TF	
	B1/1	Free Route Airspace (FRA)	2				
FRTO	**B1/2**	Required Navigation Performance (RNP) routes	2				
	B1/3	Advanced Flexible Use of Airspace (FUA) and management of real time airspace data	2				
	B1/4	Dynamic sectorization	2				
	B1/5	Enhanced Conflict Detection Tools and Conformance Monitoring	2				
	B1/6	Multi-Sector Planning	2				
	B1/7	Trajectory Options Set (TOS)	2				
NOPS							
	B0/1	Initial integration of collaborative airspace management with air traffic flow management	**1**	2015	ATM SG	RANP/ NANP TF	
NOPS	**B0/2**	Collaborative Network Flight Updates	2				
	B0/3	Network Operation Planning basic features	2				

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
	B0/4	Initial Airport/ATFM slots and A-CDM Network Interface	2				
	B0/5	Dynamic ATFM slot allocation	2				
	B1/1	Short Term ATFM measures	2				
	B1/2	Enhanced Network Operations Planning	2				
	B1/3	Enhanced integration of Airport operations planning with network operations planning	2				
	B1/4	Dynamic Traffic Complexity Management	2				
	B1/5	Full integration of airspace management with air traffic flow management	2				
	B1/6	Initial Dynamic Airspace configurations	2				
	B1/7	Enhanced ATFM slot swapping	2				
	B1/8	Extended Arrival Management supported by the ATM Network function	2				
	B1/9	Target Times for ATFM purposes	2				
	B1/10	Collaborative Trajectory Options Program (CTOP)	2				
ACAS							
ACAS	**B1/1**	ACAS Improvements	**1**	2014	ATM SG CNS SG	RANP/ NANP TF	
SNET							
SNET	**B0/1**	Short Term Conflict Alert (STCA)	**1**	2017	ATM SG	CNS SG RANP/ NANP TF	
	B0/2	Minimum Safe Altitude Warning (MSAW)	**1**	2017	ATM SG	CNS SG RANP/ NANP TF	
	B0/3	Area Proximity Warning (APW)	**1**	2020	ATM SG	CNS SG RANP/ NANP TF	
	B0/4	Approach Path Monitoring (APM)	2				
	B1/1	Enhanced STCA with aircraft parameters	2				
	B1/2	Enhanced STCA in complex TMA	2				
GADS							

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
GADS	B1/1	Aircraft Tracking	2				
	B1/2	Operational Control Directory	1	2021	ATM SG	RANP/ NANP TF	
RSEQ							
RSEQ	B0/1	Arrival Management	1	2021	ATM SG	CNS SG ASPIG RANP/ NANP TF	
	B0/2	Departure Management	2				
	B0/3	Point merge	2				
	B1/1	Extended arrival metering	2				
SURF							
SURF	B0/1	Basic ATCO tools to manage traffic during ground operations	1	2014	ASPIG	ATM SG CNS SG RANP/ NANP TF	Guidance and Routing Services
	B0/2	Comprehensive situational awareness of surface operations	1	2014	ASPIG	ATM SG CNS SG RANP/ NANP TF	Surveillance Service
	B0/3	Initial ATCO alerting service for surface operations	1	2021	ASPIG	ATM SG CNS SG RANP/ NANP TF	Airport Safety Support Service : RMCA
	B1/1	Advanced features using visual aids to support traffic management during ground operations	2				
	B1/2	Comprehensive pilot situational awareness on the airport surface	2				
	B1/3	Enhanced ATCO alerting service for surface operations	~~2~~1		ASPIG	ATM SG CNS SG RANP/ NANP TF	Airport Safety Support Service : CATC + CMAC
	B1/4	Routing service to support ATCO surface operations management	~~2~~1		ASPIG	ATM SG CNS SG RANP/ NANP TF	Routing Service
	B1/5	Enhanced vision systems for taxi operations	2				
ACDM							
ACDM	B0/1	Airport CDM Information Sharing (ACIS)	1	2014	ASPIG	CNS SG, AIM SG, ATM SG, RANP/ NANP TF	
	B0/2	Integration with ATM Network function	1	2014	ASPIG	CNS SG, AIM SG, ATM SG,	

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
						RANP/ NANP TF	
CSEP	**B1/1**	Basic airborne situational awareness during flight operations (AIRB)	**2**				
	B1/2	Visual Separation on Approach (VSA)	**2**				
	B1/3	Performance Based Longitudinal Separation Minima	**2**				
	B1/4	Performance Based Lateral Separation Minima	**2**				
DATS	**B1/1**	Remotely Operated Aerodrome Air Traffic Services	**2**				
OPFL	**B0/1**	In Trail Procedure (ITP)	**2**				
	B1/1	Climb and Descend Procedure (CDP)	**2**				
TBO	**B0/1**	Introduction of time-based management within a flow centric approach	**2**				
	B1/1	Initial Integration of time-based decision making processes	**2**				
Technology Threads							
ASUR							
ASUR	**B0/1**	Automatic Dependent Surveillance – Broadcast (ADS-B)	**1**	2021	CNS SG	ATM SG, ASPIG, RANP/ NANP TF	
	B0/2	Multilateration cooperative surveillance systems (MLAT)	**1**	2021	CNS SG	ATM SG, ASPIG, RANP/NA NP TF	
	B0/3	Cooperative Surveillance Radar Downlink of Aircraft Parameters (SSR-DAPS)	**1**	2021	CNS SG	ATM SG, ASPIG, RANP/ NANP TF	
	B1/1	Reception of aircraft ADS-B signals from space (SB ADS-B)	2				
NAVS							
NAVS	**B0/1**	Ground Based Augmentation Systems (GBAS)	2				
	B0/2	Satellite Based Augmentation Systems (SBAS)	2				

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
	B0/3	Aircraft Based Augmentation Systems (ABAS)	**1**	2021	CNS SG	PBN SG, ATM SG, AIM SG, RANP/ NANP TF	
	B0/4	Navigation Minimal Operating Networks (Nav. MON)	**1**	2021	CNS SG	PBN SG, RANP/ NANP TF	
	B1/1	Extended GBAS	2				
COMI							
COMI	**B0/1**	Aircraft Communication Addressing and Reporting System (ACARS)	2				
	B0/2	Aeronautical Telecommunication Network/Open System Interconnection (ATN/OSI)	2				
	B0/3	VHF Data Link (VDL) Mode 0/A	2				
	B0/4	VHF Data Link (VDL) Mode 2 Basic	2				
	B0/5	Satellite communications (SATCOM) Class C Data	2				
	B0/6	High Frequency Data Link (HFDL)	2				
	B0/7	AMHS	**1**	2014	CNS SG	RANP/ NANP TF	
	B1/1	Ground-Ground Aeronautical Telecommunication Network/Internet Protocol Suite (ATN/IPS)	**1**	2021	CNS SG	RANP/ NANP TF	
	B1/2	VHF Data Link (VDL) Mode 2 Multi-Frequency	2				
	B1/3	SATCOM Class B Voice and Data	2				
	B1/4	Aeronautical Mobile Airport Communication System (AeroMACS) Ground-Ground	2				
COMS							
COMS	**B0/1**	CPDLC (FANS 1/A & ATN B1) for domestic and procedural airspace	2				

Thread	Element code	Title	Priority	Start Date	Monitoring		Remarks
					Main	Supporting	
	B0/2	ADS-C (FANS 1/A) for procedural airspace	2				
	B1/1	PBCS approved CPDLC (FANS 1/A+) for domestic and procedural airspace	2				
	B1/2	PBCS approved ADS-C (FANS 1/A+) for procedural airspace	2				
	B1/3	SATVOICE (incl. routine communications) for procedural airspace	2				

5. Implementation and Monitoring of the priority 1 ASBU Elements

5.1 The monitoring of air navigation performance and its enhancement is achieved, inter-alia, through identification of relevant air navigation Metrics and Indicators as well as the adoption and attainment of air navigation system Targets. The monitoring of the priority 1 ASBU Threads/Elements is carried out through the MID eANP Volume III.

5.2 MIDANPIRG through its activities under the various subsidary bodies will continue to update and monitor the implementation of the ASBU Threads and elements to achieve the air navigation targets.

5.3 The priority 1 Threads/Elements along with the associated elements, applicability, performance Indicators, supporting Metrics, and performance Targets are shown in the **Table 2** below.

***Note**: Further details on the ASBU elements objectives, description, implementation requirements and performance impact assessment can be found on the ICAO GANP Portal https://www4.icao.int/ganpportal/ASBU*

6. Governance

6.1 Progress report on the status of implementation of the different priority 1 Threads/Elements should be developed by MIDANPIRG Subsidary bodies. A consolidated MID Air Navigation Report showing the status of implementation of the different priority 1 ASBU Elements by Thread will be developed by the RANP/NANP TF on annual basis and presented to MIDANPIRG for endorsement.

6.2 The MIDANPIRG will be the governing body responsible for the review and update of the MID Region Air Navigation Strategy.

6.3 The MID Region Air Navigation Strategy will guide the work of MIDANPIRG and its subsidary bodies and all its member States and partners.

6.4 Progress on the implementation of the MID Region Air Navigation Strategy and the achievement of the agreed air navigation targets will be reported to the ICAO Air Navigation Commission (ANC), through the review of the MIDANPIRG Reports, MID Air Navigation Reports, etc.; and to the stakeholders in the Region within the framework of MIDANPIRG.

Table 2. MONITORING THE IMPLEMENTATION OF THE PRIORITY 1 ASBU THREADS/ELEMENTS (Block 0 & 1) IN THE MID REGION

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
Information Threads							
DAIM							
DAIM B1/1	Provision of quality-assured aeronautical data and information	All States	Indicator*: Regional average implementation status of DAIM B1/1 (provision of quality-assured aeronautical data and information). Supporting Metrics: 1. Number of States that have implemented an AIXM-based AIS database (AIXM V5.1+) 2. Number of States that have established formal arrangements with at least 50% of their AIS data originators.	(2023) 53%	80%	Dec 2024	N/A
DAIM B1/3	Provision of digital terrain data sets	All States	Indicator*: Regional average implementation status of DAIM B1/3(Provision of Terrain digital datasets). Supporting Metric: Number of States that provide required Terrain digital datasets.	(2022) 35%	60%	Dec 2024	N/A
DAIM B1/4	Provision of digital obstacle data sets	All States	Indicator*: Regional average implementation status of DAIM B1/4(Provision of obstacle digital datasets). Supporting Metric: Number of States that provide required obstacle digital datasets.	(2022) 35%	60 %	Dec 2024	N/A
AMET							
AMET B0/1	Meteorological observations products	All states	Indicator*: Regional average implementation status of B0/1 (Meteorological observations products). Supporting Metrics: Number of States that provide the following Meteorological observations products, as required: 1. Automatic Weather Observation System (AWOS) information	(2022) 65%	80%	Dec 2021	N/A

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
			(including real-time exchange of wind and RVR data) 2. Local reports (MET REPORT/SPECIAL) 3. Aerodrome reports (METAR/SPECI) 4. Lightning Information 5. Ground-based weather radar information. 6. Meteorological satellite imagery 7. Aircraft meteorological report (ie. ADS-B, AIREP, etc.) 8. Vertical wind and temperature profiles 9. Wind shear alerts				
AMET B0/2	Meteorological forecast and warning products	All states	Indicator*: Regional average implementation status of B0/2 (Meteorological forecasts and warning products) Supporting Metrics: Number of States that provides the following Meteorological forecast and warning products, as required: 1. World Area Forecast System (WAFS) gridded products. 2. Significant Weather (SIGWX) 3. Aerodrome Forecast (TAF) 4. Trend Forecast (TREND) 5. Take-off Forecast 6. SIGMET 7. Aerodrome Warning 8. Wind Shear Warning	(2022) 60%	90%	Dec 2021	N/A
AMET B0/3	Climatological and historical meteorological products	All states	Indicator: % of States that provide Climatological and historical meteorological products, as required. Supporting Metric: Number of States that provide Climatological and historical meteorological products, as required.	(2022) 60%	85%	Dec 2021	N/A
AMET B0/4	Dissemination of meteorological products	All states	Indicator: % of States disseminating Meteorological products using a variety of formats and means (TAC, Gridded, Graphical, BUFR code, IWXXM)	(2022) 60%	85%	Dec 2021	N/A

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
			Supporting Metric: Number of States disseminating Meteorological products using a variety of formats and means (TAC, Gridded, Graphical, BUFR code, IWXXM)				
FICE							
FICE B0/1	Automated basic inter facility data exchange (AIDC)	According to the MID Region AIDC/OLDI Priority 1 Applicability Area	Indicator*: % of priority 1 AIDC/OLDI Interconnection have been implemented. Supporting metric: Number of AIDC/OLDI interconnections implemented between adjacent ACCs.	(2023) 26%	70%	Dec 2026	N/A
Operational Threads							
APTA							
APTA B0/1	PBN Approaches (with basic capabilities)	All RWYs ENDs at International Aerodromes	Indicator: % of Runway ends at international aerodromes served by PBN approach procedures with basic functionalities - down to LNAV or LNAV/VNAV minima. Supporting metric: Number of Runways ends at international aerodromes served by PBN approach procedures with basic functionalities - down to LNAV or LNAV/VNAV minima.	(2017) 46.7%	100%	Dec 2018	Capacity/ KPI 10
APTA B0/2	PBN SID and STAR procedures (with basic capabilities)	All RWYs ENDs at International Aerodromes	Indicator: % of Runway ends at international aerodromes provided with PBN SID and STAR (basic capabilities). Supporting Metric: Number of Runway ends at international aerodromes provided with PBN SID and STAR (basic capabilities).	(2022) 55%	70%	Dec 2022	Efficiency Capacity/ KPI 10 KPI 11 KPI 17 KPI 19/
APTA B0/4	CDO (Basic)	OBBI, OIIE, OIKB, OIFM, OJAI, OLBA, OOMS, OTHH, TBD, OEJN, EMA, OEDF, ERK, HSSK,	Indicator*: % of International Aerodromes with CDO implemented and published as required. Supporting Metric: Number of International Aerodromes with CDO implemented and published as required.	(2022) 65%	100%	Dec 2022	Efficiency/ KPI 19

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
		HSPN, OMAA, MAL, OMAD, DW, OMDB, MSJ, OMRK and OMFJ	*As per the applicability area				
APTA B0/5	CCO (Basic)	OBBI, OIIE, OIKB, OIFM, OJAI, OLBA, OOMS, OTHH, TBD, OEJN, EMA, OEDF, ERK, HSSK, HSPN, OMAA, MAL, OMAD,MDW, OMDB, MSJ, OMRK and OMFJ	Indicator*: % of International Aerodromes with CCO implemented and published as required. Supporting Metric: Number of International Aerodromes with CCO implemented and published as required. *As per the applicability area	(2022) 65%	100%	Dec 2022	Efficiency/ KPI 17
APTA B0/7	Performance based aerodrome operating minima – Advanced aircraft	All States	Indicator: % of States authorizing Performance-based Aerodrome Operating Minima for Air operators operating Advanced aircraft. Supporting Metric: Number of States 1- having provisions for operational credits to enable lower minima based on advanced aircraft capabilities. (Reference: Annex 6 Part I para. 4.2.8.2.1) 2- Number of States Putting in place an approval process for the operational credit to Aircraft operator conducting PBAOM operations for low visibility operations (Reference: Doc 9365 (AWO Manual)), as applicable.	(2022) 50%	80%	Dec 2025	Capacity/ KPI 10
FRTO							
FRTO B0/2	Airspace planning and Flexible Use of Airspace (FUA)	Bahrain, Egypt, Jordan, Qatar, Saudi Arabia (2 ACCs), Sudan, UAE	Indicator*: % of ACCs using and implementing appropriate means (procedures and tools (automation)) to support Airspace planning and FUA and improve data exchange between Civil and Military to improve efficiency of Airspace. Supporting metric: Number of ACCs using and implementing appropriate means (procedures and tools (automation)) to support Airspace planning and FUA and improve data exchange	(2022) 63%	70%	Dec 2022	Efficiency Access and equity/ KPI 04 KPI 05 KPI 17 KPI 18/ KPI 19

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
			between Civil and Military to improve efficiency of Airspace. * As per the applicability area				
FRTO B0/4	Basic conflict detection and conformance monitoring	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia (2 ACCs), Sudan, UAE	Indicator*: % States that implemented MTCD and MONA, for ACCs, as required. Supporting metric: The number of States that implemented MTCD and MONA for ACCs, as required. * As per the applicability area	(2022) 63%	100%	Dec 2022	Capacity/ KPI 06 Safety/ KPI 20 KPI 23
NOPS							
NOPS B0/1	Initial integration of collaborative airspace management with air traffic flow management	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE	Indicator*: % of States implementing ASM/ATFM techniques, procedures and tools for the initial establishment of an integrated collaborative airspace management and air traffic flow and capacity management process. Supporting metric: number of States implementing ASM/ATFM techniques, procedures and tools for the initial establishment of an integrated collaborative airspace management and air traffic flow and capacity management process. * As per the applicability area	(2022) 42%	70%	Dec 2022	Efficiency Capacity/ KPI 04 KPI 05 KPI 17 KPI 18 KPI 19/
ACAS							
ACAS B1/1	ACAS Improvements Operational	All States	Indicator: % of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons Supporting metric: Number of States requiring carriage of ACAS (TCAS v 7.1) for aircraft with a max certificated take-off mass greater than 5.7 tons	(2022) 87%	100%	Dec 2024	Safety/ KPI 20 KPI 23
SNET							
SNET B0/1	Short Term Conflict Alert (STCA)	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman,	Indicator*: % of States that have implemented Short-term conflict alert (STCA)	(2018) 100%	100%	Dec 2018	Safety/ KPI 20 KPI 23

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
		Qatar, Saudi Arabia, Sudan, UAE	Supporting metric: number of States that have implemented Short-term conflict alert (STCA) * As per the applicability area				
SNET B0/2	Minimum Safe Altitude Warning (MSAW)	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE	Indicator*: % of States that have implemented Minimum safe altitude warning (MSAW) Supporting metric: number of States that have implemented Minimum safe altitude warning (MSAW) * As per the applicability area	(2018) 100%	100%	Dec 2018	Safety/ KPI 20
SNET B0/3	Area Proximity Warning (APW)	Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, UAE	Indicator*: % of States that have implemented Area Proximity Warning (APW) for ACCs, as required. Supporting metric: number of States that have Implemented Area Proximity Warning (APW) for ACCs, as required. * As per the applicability area	(2022) 67%	100%	Dec 2022	Safety/ KPI 20
GADS							
GADS B1/2	Operational Control Directory	All States	Indicator: % of States that provided GADSS Point of Contact (PoC) information Supporting Metric: Number of States that provided GADSS Point of Contact (PoC) information.	(2022) 73%	100%	Dec 2022	N/A
RSEQ							
RSEQ B0/1	Arrival Management	OBBI, HECA, EBA, HELX, HESN, HESH, OTBD, THH, OEJN, OEDF, OEMA, ERK OMDB, MAA	Indicator*: % of Aerodromes that have implemented arrival manager (AMAN), where required/applicable. Supporting Metric: Number of Aerodrome that have implemented arrival manager (AMAN), where required/ applicable. * As per the applicability area	(2022) 36%	80%	Dec 2024	Capacity Efficiency/ KPI 08 KPI 10 KPI 11 KPI 14/
SURF							
SURF-B0/1	Basic ATCO tools to manage traffic during ground operations	All International Aerodromes	Indicator: % of Aerodromes having implemented Basic ATCO tools to manage traffic during ground operations	(2022) 90%	100%	Dec 2022	Efficiency/ KPI 02 KPI 13

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
			Supporting metric: Number of Aerodromes having implemented Basic ATCO tools to manage traffic during ground operations				Safety/ KPI 20 KPI 21
SURF-B0/2	Comprehensive situational awareness of surface operations	OBBI, HECA, OIII, OOMS, OTBD, THH, OEDF, OEJN, OERK, EMA, OMDB, MAA.	Indicator*: % of Airports having implemented the surveillance service of A-SMGCS Supporting metric: Number of Airports having implemented the surveillance service of A-SMGCS * As per the applicability area	(2022) 61%	80%	Dec 2022	Safety/ KPI 20 KPI 21
SURF-B0/3	Initial ATCO alerting service for surface operations	OBBI, HECA, OIII, OOMS, OTBD, OTHH, OEDF, OEJN, OERK, OEMA, OMDB, OMAA.	Indicator*: % of Airports having implemented the A-SMGCS alerting service. Supporting metric: Number of Airports having implemented the A-SMGCS alerting service. * As per the applicability area	(2022) 74%	80%	Dec 2022	Safety/ KPI 20
ACDM							
ACDM B0/1	Airport CDM Information Sharing (ACIS)	HECA, OBBI, OIII, OKKK, OOMS, OTHH, OEJN, OERK, OMDB, OMAA	Indicator*: % of Airports having implemented ACIS. Supporting metric: number of Airports having implemented ACIS. * As per the applicability area	(2022) 75%	90%	Dec 2024	N/A
ACDM B0/2	Integration with ATM Network function	HECA, OBBI, OIII, OKKK, OOMS, OTHH, OEJN, OERK, OMDB, OMAA.	Indicator*: % of Airports having integrated ACDM with the ATM Network function. Supporting metric: Number of Airports having integrated ACDM with the ATM Network function * As per the applicability area	(2022) 25%	50%	Dec 2024	N/A
Technology Threads							
ASUR							
ASUR B0/1	Automatic Dependent Surveillance – Broadcast (ADS-B)	Bahrain, Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi	Indicator*: % of States that have implemented ADS-B to improve surveillance coverage/capabilities for provision of ATS.	(2022) 60%	80%	Dec 2022	N/A

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
		Arabia, , Sudan, UAE	Supporting Metric: Number of States that have implemented ADS-B to improve surveillance coverage/capabilities for provision of ATS. * As per the applicability area				
ASUR B0/2	Multilateration cooperative surveillance systems (MLAT)	Bahrain, , Kuwait, Oman, Qatar, Saudi Arabia, UAE	Indicator*: % of States that have implemented Multi-lateration (M-LAT) for provision of ATS. Supporting Metric: Number of States that have implemented Multi-lateration (M-LAT) for provision of ATS. Indicator*: % of States that have implemented ADS-B to improve surveillance coverage/capabilities for provision of ATS. Supporting Metric: Number of States that have implemented ADS-B to improve surveillance coverage/capabilities for provision of ATS. * As per the applicability area	(2022) 63%	80%	Dec 2022	N/A
ASUR B0/3	Cooperative Surveillance Radar Downlink of Aircraft Parameters (SSR-DAPS)	Bahrain, Egypt, Iran, Iraq, Kuwait, Lebanon, Jordan, Oman, Qatar, Saudi Arabia, Sudan and UAE	Indicator*: % of States that have implemented Downlink of Aircraft Parameters (SSR-DAPS) Supporting Metric: Number of States that have implemented Downlink of Aircraft Parameters (SSR-DAPS) * As per the applicability area	(2022) 83%	90%	Dec 2023	N/A
NAVS							
NAVS B0/3	Aircraft Based Augmentation Systems (ABAS)	All States	Indicator: % of States requiring Aircraft Based Augmentation System (ABAS) equipage for aircraft with a max certificated take-off mass greater than 5,700 Kg to enable PBN Operations Supporting metric: Number of States requiring Aircraft Based Augmentation System (ABAS) equipage for aircraft with a max certificated take-off mass greater than 5,700 Kg to enable PBN Operations	(2022) 40%	70%	Dec 2022	N/A

Element		Applicability	Performance Indicators/ Supporting Metrics	Baseline	Target	Timeline	KPA/ KPI
NAVS B0/4	Navigation Minimal Operating Networks (Nav. MON)	All States	Indicator: % of States that have developed a plan of rationalized conventional NAVAIDS network to ensure the necessary levels of resilience for navigation Supporting metric: Number of States that have developed a plan of rationalized conventional NAVAIDS network to ensure the necessary levels of resilience for navigation.	(2022) 47%	70%	Dec 2022	N/A
COMI							
COMI B0/7	ATS Message Handling System (AMHS)	All States	Indicator: % of States that have established AMHS interconnections with adjacent COM Centres Supporting metric: Number of States that have established AMHS interconnections with adjacent COM Centres	(2022) 73%	90%	Dec 2022	N/A
COMI B1/1	Ground-Ground Aeronautical Telecommunication Network/Internet Protocol Suite (ATN/IPS)	All States	Indicator: % of States that have established National IP Network for voice and data communication Supporting metric: Number of States that have established National IP Network for voice and data communication	(2022) 60%	80%	Dec 2022	N/A

ATTACHMENT A

ICAO MID

Attachment A

LIST OF PARTICIPANTS

State/ Org	Contact	Title
Bahrain	Mrs. Leena Ahmed Alkooheji	Chief, Airport and Air Navigation Audit
Egypt	Ms. Sahar Mostafa Mohamed	Head of Central Administration (Safety and Standards)
	Mr. Khaled Ibrahim M. Mohamed	Safeguarding General Manager
Iran	Mr. Ghasem Rahmani Kivi	Aerodrome Inspector
Jordan	Mr. Yaser Mustafa Issa Ziad	Chief of AFS Engineering Division
Libya	Mr. Ezedean Aburawi Maruwan	Aerodrome Inspector
	Mr. Mohamed Younis Wali	Director of Department of Aerodrome Safety and Standard
Oman	Mr. Mubarak Saleh Al Gheilani	A/Director General of Civil Aviation Regulation
	Mr. Khalid Abdullah A. Al Yusufi	A/Director of Aerodrome Safety
	Mr. Moosa Abdulaziz Al Bulushi	Air Navigation Safety Director
	Mr. Adnan Hamed S. Al Mamari	Aerodrome Safety Inspector
	Mr. Bader Nasser Mohamed Al Jaradi	Aerodrome Safety Inspector
	Mr. Omar Said Nasah Al Rashdi	Aerodrome Safety Department
	Mr. Naif Nasser Al Daghari	Safety Regulation Department
	Mr. Jameleddine Merai	Aerodrome Safety Inspector
	Mr. Amr Saber Ahmed Atwa	Safety Regulation Expert
	Mr. Majid Rezaei	AIS/Chart Safety Inspector
	Mr. Ahmed Abdelwahab ElMarady	CNS Inspector
	Mr. Asaad Said Hamed Al-Alawi	Civil Engineer
	Mr. Usama Saleh Salim AlJaafari	Aerodrome Controller - Instructor
	Mr. Yousuf Sulaiman Younis Al Naabi	Certification & Compliance Senior Specialist
	Mr. Abdulaziz Khamis A. Al Sariri	Certification & Compliance Senior Specialist
	Mr. Amjad Abdullah Al-Harssi	Acting Chief of Tower
	Mr. Nasser Mohamed A Rawahi	Specialized Director in Aerodrome Safety
	Mr. Ali Bakhit Ali Fadhil	Oman Airport
Qatar	Mr. Jean-Luc Meyts	Manager Aviation Safety
	Mr. Mohamed Hassan Elmegharbal	Ground Safety Manager
Saudi Arabia	Mr. Abdulrahman Hussain Mugabel	Compliance and Quality Assurance Manager
	Mr. Davy Maddick-Semal	Aerodrome Optimization Manager
	Mr. Mashaal M. Almhaiza	GM of OPS Planning & Control

State/ Org	Contact	Title
	Mr. Ali Mohammed Alnashri	GM of Airside and Baggage Operations
	Mr. Abdullah Al Alqarni	Director of Airports and Helipads
	Mr. Meshari Musaad A. Alotaibi	Aerodromes Safety Inspector
	Mr. Mohammed Hassan Khalifah	Head of Aviation Obstacles Section
	Mr. Darren Williams	GM Airfield
Sudan	Mr. Omer Abdelwahab Hassan	Head of Safety Section
	Mr. Nader Hayder Mohamedkhair	Aerodrome Inspector
UAE	Ms. Reem Hussain Ismail Ali Al Saffar	Senior Manager Aerodromes
ACI	Mr. Adeeb Ahmed Mohammed Mobaraki	Environment Manager – ACI Asia Pacific & Middle East
IATA	Mr. Jehad Faqir	Head Regional Safety Africa & Middle East
IFALPA	Capt. Rola Hoteit	Regional Vice-President, MID/East
ICAO-MID	Mr. Mohamed Iheb Hamdi	RO/AGA

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