

International Civil Aviation Organization

#### MIDANPIRG/21 & RASG-MID/11 Meetings

(Abu Dhabi, UAE, 4 – 8 March 2024)

# Agenda Item 4.2: Outcomes of the RASG-MID Groups (ASRG, SEIG, ASPIG and AIIG)

#### **AGA-OPS SAFETY MATTERS**

#### **SUMMARY**

This paper presents the outcome of the Fifth Aerodromes Safety Planning and Implementation Group (ASPIG/5) Meeting with a focus on Aerodromes Safety.

Action by the meeting is at paragraph 3.

#### REFERENCES

- MIDANPIRG/20-RASG-MID/11 Report
- ASPIG/5 Report

#### 1. Introduction

1.1 The Fifth meeting of the Aerodrome Safety & Planning Implementation Group (ASPIG/5) was held gracefully hosted by Qatar in Doha from 13 to 15 June 2023. The meeting was attended by a total of 70 participants from 13 MID States (Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, S.A., Syria, UAE and Yemen) and 3 International Organizations (IATA, IFALPA, and FAA).

#### 2. DISCUSSION

### Follow-up on the endorsed Conclusions related to Aerodrome Safety

2.1 The ASPIG/5 meeting reviewed the progress made for the implementation MIDANPIRG/RASG-MID Conclusions related to Aerodromes Safety, as at **Appendix A**.

#### Aerodromes Safety Dashboard Updates

- 2.2 The ASPIG meeting reviewed. and updated the Aerodromes Safety Dashboard as at the **Appendix B.**
- 2.3 The ASPIG meeting agreed that the list of International Airport to be monitored should be updated as per the individual AIP of each State. IATA supported 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.

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

2.4 The meeting may wish to note the implementation progress AGA related to Safety Enhancement Initiatives (SEIs) included on the MID Regional Aviation Safety Plan (MID RASP) 2023-2025 Edition.

# Anonymous Dataset for Aerodromes Safety

- 2.1 The ASPIG meeting noted the fact that not efficiently addressing identified non-compliances at individual aerodromes, could lead to decreased public confidence in the safety of the aviation industry within the region. The meeting highlighted that this could have a negative impact on the industry as a whole and might lead to decreased demand for air travel within the region.
- 2.2 In this regard, the ASPIG meeting highlighted that an anonymous dataset can help to identify regional trends in safety deficiencies and related corrective action plans. The meeting indicated that by collecting data from a large number of aerodromes within a region, it is possible to identify patterns and trends that may not be apparent at the individual aerodrome level.
- 2.3 In addition, the meeting ASPIG noted that an anonymous dataset can be used to share best practices across aerodromes within a region. Consequently, by identifying successful corrective action plans, aerodrome operators and Civil aviation authorities within the MID Region can learn from each other and implement effective solutions to safety deficiencies.
- 2.4 Moreover, the meeting ASPIG noted that an anonymous dataset can help to harmonize safety standards across aerodromes within a region. Therefore, by identifying common safety deficiencies and implementing similar corrective action plans, it is possible to ensure that safety standards are consistent and effective across the MID Region.
- 2.5 The meeting may wish to underline that an anonymous dataset could serve as an early warning system for potential safety hazards related Aerodromes Design and Operations within the MID Region. Consequently, by collecting data from a large number of aerodromes within the region, it is possible to identify emerging safety issues before they become widespread.
- 2.6 In conclusion, the meeting may wish to agree that an anonymous dataset can be a useful tool for promoting safety and improving the effectiveness of the corrective action process at the regional level. By identifying trends, sharing best practices, harmonizing safety standards, serving as an early warning system, and improving the safety culture, aerodrome operators and aviation authorities within a region can work together to create a safer and more efficient system.
- 2.7 The meeting may wish to note that the envisaged benefits of the proposed Anonymous Dataset Collection for Aerodrome Safety include the following:
  - a) Consistency in reporting across all MID States with respect to the listed Sub-areas;
  - b) Ability to derive trends and propose common solutions;
  - c) Facilitation of reporting by States and Organizations.
  - d) Consistency in the prioritization of follow-up actions to be planned by the ICAO MID Regional Office and other concerned parties.
- 2.8 Based on the above, the meeting may wish to endorse to the following Draft Conclusion:

WHY

Use a tool intended to ensure:

• Consistency in reporting across all MID States with respect to the specific AGA Technical Sub-areas;

	<ul> <li>Ability to derive trends and propose common solutions based on the CAPs successfully implemented by Airports/CAAs</li> <li>Facilitation of reporting by States and Organizations; and</li> <li>Consistency in the prioritization of follow-up actions to be included in the Regional Aviation Safety Plan.</li> </ul>
What	Template of the Anonymous Dataset Collection for Aerodrome Safety
Who	RASG/11
When	Q1 2024

# DRAFT RASG CONCLUSION 11/XX: ANONYMOUS DATASET COLLECTION FOR AERODROMES SAFETY

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 C**, 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.

#### Solar Lighting and Sustainable Technologies

- 2.9 The meeting may wish to note that the UAE GCAA has taken proactive measures to promote adoption of solar lighting technology in aerodromes. To this end, the UAE GCAA launched a National Sustainable Lighting initiative in January 2023 and UAE GCAA organized a series of industry workshops, creating a platform for industry experts to exchange ideas, share best practices, and discuss the challenges and opportunities of solar lighting systems. The meeting noted that the workshops brought together stakeholders from the aviation industry and government entities to explore the latest innovations and advancements in sustainable lighting technologies.
- 2.10 The ASPIG meeting highlighted that UAE emphasized on the need to have international provisions about Solar Lighting and Sustainable Technologies. Therefore, the ASPIG meeting agreed that an Action Group be tasked to explore more about the subject and work on the rationale behind the need to have international provisions/guidance using Data Driven approach.
- 2.11 The ASPIG meeting noted that an Action Group be championed by UAE and supported by IFALPA and Libya and agreed that the outcomes of the Action Group will be presented during the upcoming ASPIG/6 Meeting and the following members of the Solar Lighting Action Group be:

from UAE:
 from IFALPA:
 from Libya:
 Ms. Reem Hussain Ismail Al Saffar (Champion)
 Mr. Arnaud Du Bédat (supporting Member)
 Mr. Mohamed Wali (supporting Member)

#### Air Cargo Safety Management

2.12 The meeting may wish to recall that the RASG/10 Meeting agreed that this initiative will be considered as safety action in the MID-RASP 2023-2025 Edition and the Aerodromes Safety Planning and Implementation Group (ASPIG) will be coordinating the development of the related guidelines.

2.13 The ASPIG meeting noted that an Action Group be championed by Oman and supported by Bahrain, IFALPA and IATA. The meeting agreed that the outcomes of the Action Group will be presented during the upcoming ASPIG/6 Meeting and the following members of the Air Cargo Action Group be:

o from Oman: Mrs. Ramzi Smirani (Champion)

from Bahrain: Mrs. Leena Ahmed Alkooheji (supporting Member)
 from IFALPA: Mr. Arnaud Du Bédat (supporting member)
 from IATA: Mr. Jihad Farir (supporting member)

### Ground Damage: Aircraft Ground Incidents

2.14 The meeting was apprised of the IATA charts indicating the Aircrafts Ground Incidents rate in the MID Region. The meeting noted with concern the accumulated rate of incidents and encouraged States to report ground damage incidents/serious incidents to feed the IATA IDX Database. The meeting agreed that IATA and ICAO MID coordinate a Webinar on the IDX Database with a focus on ground damage.

#### ICAO Bird Strike Information System (IBIS) Focal Points

- 2.15 The ASPIG meeting noted the ICAO Bird Strike Information System (IBIS) and the importance of reporting Bird Strike events to ICAO for data processing. The meeting noted the following main challenges related to data processing:
  - Not full-scale contribution from States,
  - Lack of data qualification due to uniformity (different parameter ranks, languages, file format etc),
  - Lack of contact point/responsible person,
  - COVID-19 pandemic period (2019-2021),
  - Data from ECCAIRS consists only 14% of total data,
  - Majority of data is gathered by requesting from contact point personally,
  - Insufficient capabilities of ECCAIRS.
- 2.16 The ASPIG meeting noted with concern the very low reporting rate of bird strike events emanating from the MID Region. Therefore, the meeting encouraged States to feed the ICAO IBIS after registering the bird strike events by systematically conveying these records to ICAO HQ.
- 2.17 The ASPIG meeting agreed that all MID State should update, if not done yet and without delay, their States Focal Points Contacts to them by replying to the ICAO MID Office State Letter Ref.:  $AN \ 5/1.1 23/121$  dated 1 June 2023.

### Aerodrome Certification vs Proposal of Amendment of the Regional ANP

- 2.18 The meeting indicated that the list of international Airport should be reflected on the Regional ANP Vol I, Table I-I. In this regard, the meeting noted the following general principals:
  - The plan does not list all the facilities and services existing in the region but only those required as approved by the ICAO Council for international civil aviation operations.
  - Air navigation facilities, services and procedures recommended for the area under consideration should form an integrated system designed to meet the requirements of all international civil aircraft operations.

- The plan should meet the requirements of all operations planned to take place in the area during the **next five years**, but not necessarily limited to that period, taking due account of the long-term planning and implementation strategies.
- Corrections to the plan should be notified to the ICAO Regional Office accredited to the State.
- 2.19 The ASPIG meeting was apprised of the procedure to amend ANPs found in ANPs and the online system to process amendments to eANPs. The meeting noted that Airports listed in ANP are not necessarily listed in AIPs since these airports may be planned and are being built but not commissioned. Conversely, all international airports listed in AIP should be listed in the ANP since the AIP shows "operating" airports.
- 2.20 In conclusion, the meeting noted the following considerations:
  - International airports can be found not just in ANPs but also AIPs;
  - not all airports listed in ANPs are listed in AIPs but the reverse is true;
  - not listing international airports in ANPs does not obviate the need for certification;
  - all airports used for international operations to be certified per Annex 14, Vol I, para 1.4.1 irrespective if it is listed/not listed in ANPs; and
  - list of certified international airports can be found in a State's AIP.

#### Water Aerodromes

2.21 The meeting may wish to recall that the Assembly Resolution A40-8 that requests the Council, within the current allotted budget, and as a matter of priority, to review existing SARPs related to aerodromes and to develop specific Standards and Recommended Practices in the appropriate Annexes to the Convention in order to address the design, certification, management, safety and reporting requirements for water aerodromes operations.

### Vertiport Regulation

- 2.22 The meeting may wish to note that, in 2022, the UAE carried out an applicability assessment, initial impact assessment and a gap analysis against ICAO Annex 14 Volume 2, FAA Engineering Brief No. 105 Vertiport Design, and EASA PTS-VPT-DSN, and drafted the first national regulation of its kind on Vertiports.
- 2.23 The meeting may wish to highlight that, the UAE has developed a robust regulatory framework for the certification and oversight of vertiports with the following objectives:
  - a) Ensure continued safety, regularity and efficiency of VTOL/eVTOL aircraft operations at vertiports and aerodromes.
  - b) Ensure the vertiport is in compliance with the relevant national regulations and international standards and best practices.
- 2.24 To ensure that the vertiport is designed, constructed, and operated in a way that minimizes the risk of accidents and injuries to passengers, crew, and other personnel. The regulations cover the certification requirements for public use vertiports and private use, and are categorised as follows:
  - a) Vertiport certification
    - Public
    - Hospitality and tourism
  - b) Vertiport Landing Area Acceptance (LAA)
    - Private
    - Flight training
    - Hospitals/ Clinics / Helicopter Emergency Medical Services

- Corporate facility
- Shipboard vertiports
- Emergency evacuation vertipad
- 2.25 The meeting noted that UAE referred the UAE Civil Aviation Regulation on Vertiports (CAR-HVD) to the ICAO Vertiport Design Subgroup for discussion and consideration in the development of relevant SARPS.
- 2.26 The meeting may wish to note with appreciation, UAE proposal to offer support in providing guidance and trainings to member states on vertiports certification. The meeting agreed that UAE will coordinate with ICAO MID Office to conduct a two day Webinar on Vertiports Certification.

### The New concept of the Aircraft Classification Rating/Pavement Classification Rating (ACR-PCR)

- 2.27 The ASPIG meeting was apprised of the Development process of the ACR-PCR method that was finalized by the Airfield Pavement Expert Group (APEG) in the beginning of 2018, followed by the full ICAO review and adoption process.
- 2.28 The meeting noted 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.
- 2.29 The meeting noted that the method will be fully applicable in November 2024 where Airports would have published their PCR accordingly. The meeting emphasis on the importance of training prior the deployment phase. The meeting highlighted that training should be targeting specific audience notably:
  - Specialized airport engineers.
  - Consultants working on airport pavement design.
  - Specialized State CAA engineers
- 2.30 The ASPIG meeting agreed that there is a need to identify States Focal points to coordinate with ICAO MID Office the roadmap of the implementation of the new concept of the ACR/PCR.

#### 3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
  - a) note the outcomes of the ASPIG/5 Meeting, and
  - b) endorse on the Draft Conclusion in para 2.8.

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# APPENDIX A

Conclusion ID#	conclusions and decisions	Why: concerns/challenges/rationale	deliv	erables	When: Deadline	Last Revised Deadline	Drafted by	Endorsed by	status	Date of completion	Actions required by the State	reply/take action	Remarks
		-	What: item(s)	Who: responsible						,		yet	
					SAFETY								
	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.		Survey on Basic Regulatory Framework for Aerodrome Certification	States	Мау-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 82; 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.	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 C7/8	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 LCAD 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 report/yudates 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	Мау-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)

#### APPENDIX B

#### **MID Region Aerodromes Safety Dashboard** Aerodrome Traffic Total # AD Certification Implementation AD Local RST Establishment AD Readiness for GRF Deployment Designation Location Aerodrome Name of AD National GRF State City Indicator ( AOP Table Iv Code (AOP ( AOP Table I-I ) Implementation Plan Progress Established Level of Deployment Level of Implementation Level of Implementation AOP Table I-I ) Table I-I) 100.00% 100.00% RS Bahrain Bahrain International Airport ORRI RODG ELABAR INT AIRPORT Rorg FlArah HERA $\bigcirc$ WAN INT AIRDORT HESN **(** AIRO INT AIRPORT RS Ø RGHADA INT AIRPORT FGY 100.00% Egypt **O** Marsa Alam MARSA ALAM INT AIRPORT HEMA RNS Bandar Abbas International Airport OIKB X **②** Esfahan Shahid Beheshti International Airport OIFM RS × **(** Shahid Hashemi Nejad International Airpor OIMM **⊘** Shahid Dastghaib International Airport OISS RS X × 44.44% Tabriz Tabriz International Airport OITT RNS **S** $\bigcirc$ Imam Khomaini International Airport OIIE RS Tahran X Tahran Mehrabad Intl/ OIII OIII RS $\bigcirc$ $\bigcirc$ Shahid Sadooghi International Airport OIVV **⊘ S** RS Zahedan International Airport OIZH × × Al-Najaf Al-Ashraf International Airport Baghdad Baghdad International Airport X × X X Basrah srah International Airport ORMM RS X X × RS Erbil International Airport ORER X X losul International Airport ORBM RS Mosul RS Sulaymaniyah International Airport ORSU $\checkmark$ Queen Alia International Airport RS OIAI 100.00% 100.00% 100.00% $\bigcirc$ RS King Hussein International Airport OALO

							ļ	MID Region		ard						
State	Countr y 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 Ce	rtification Implementation  Level of Implementation	AD L	coal RST Establishment  Level of Implementation	AD Rea	Level of Deployment	National GRF Implementation Plan Progress	Aerod I Light	rome T Density Medium	Y
Kuwait	KWT	1	KUWAIT	<u>Kuwait International Airport</u>	OKSK	RS	•	100.00%	<b>Ø</b>	100.00%	<b>⊗</b>	100.00%	100.00%			
Lebanon	LBN	1	BEIRUT	Rafic Hariri International Airport.	OLBA	RS	⊗	0.00%	⊗	0.00%	8	0.00%	0.00%			
			BENGHAZI	Benina International Airport	HLLB	RS	8		8		8					
Libya	LBY	3	SEBHA	Sebha International Airport	HLLS	RS	8	0.00%	8	0.00%	8	0.00%	0.00%			
			TRIPOLI	Tripoli International Airport	HLLT	RS	8		8		8					Щ
			Muscat	Muscat International Airport	OOMS	RS	<b>Ø</b>		•		<b>Ø</b>					
Oman	OMN	2	Salalah	Salalah International Airport	OOSA	AS	•	100.00%	•	100.00%	<b>&gt;</b>	100.00%	100.00%			
Qatar	QAT	2	Doha	Doha International Airport	OTBD	RS	<b>Ø</b>	100.00%	•	100.00%	<b>Ø</b>	100.00%	100.00%			
			Doha	Hamad International Airport	ОТНН	RS	<b>Ø</b>		•		<b>②</b>					

							P	MID Region		ard						
		Total #			Location	Designation	AD Ce	rtification Implementation	AD L	ocal RST Establishment	AD Rea	diness for GRF Deployment		Aerod	rome Tra	fic
State	Countr y Code	of AD (AOP Table I-I)	City	Aerodrome Name ( AOP Table I-I )	Indicator ( AOP Table I-I )	( AOP Table I-I	Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment	National GRF Implementation Plan Progress	Light	Density Medium He	avy
			DAMMAM	King Fahd International Airport	OEDF	RS	<b>Ø</b>		<b>Ø</b>		•					
Saudi Arabia	SAU	4	JEDDAH	King Abdulaziz International Airport	OEJN	RS	<b>Ø</b>	100.00%	<b>Ø</b>	100.00%	<b>Ø</b>	100.00%	93.33%			
			MADINAH	Prince Mohammad Bin Abdulaziz International Airport	OEMA	RS	<b>Ø</b>		<b>Ø</b>		<b>Ø</b>					_
			RIYADH	King Khalid International Airport	OERK	RS	<b>Ø</b>		<b>Ø</b>		<b>Ø</b>					_
			EL OBEID	El Obeid International Airport	HSOB	AS	<b>Ø</b>		<b>Ø</b>		<b>Ø</b>					
Sudan	SDN	4	KHARTOUM	Khartoum International Airport	HSSS	RS	<b>Ø</b>	75.00%	<b>Ø</b>	100.00%	<b>Ø</b>	100.00%	80.00%			
			NYALA	Nyala International Airport	HSNN	AS	8		<b>Ø</b>		<b>Ø</b>					
			PORT SUDAN	Port Sudan International Airport	HSPN	RS	<b>Ø</b>		<b>Ø</b>		<b>Ø</b>					_
			ALEPPO	Aleppo International Airport	OSAP	RS	8		<b>Ø</b>		8					
Syria	SYR	3	DAMASCUS	Damascus International Airport	OSDI	RS	8	0.00%	<b>Ø</b>	66.67%	8	0.00%	20.00%			
			LATTAKIA	Lattakia International Airport	OSLK	RS	8		8		8					
			ABU DHABI	Zayed International Airport	OMAA	RS	<b>②</b>									
			ABU DHABI	Al Bateen International Airport	OMAD	RNS			<b>S S S S S S S S S S</b>		0	ANIIIIIIIAA				
			AL AIN	Al Ain In International Airporttl	OMAL	RS	<b>Ø</b>				<b>S</b>				$\vdash$	
			DUBAI	Al Maktoum International Airport	OMDW	RS	<b>S</b>	100.00%		100.00%		100.00%			<del></del>	
UAE	ARE	8	DUBAI	Dubai International Airport  Fuiairah International Airport	OMBD	RS RS	<b>S</b>	100.00%	0			100.00%	100.00%			
			RAS AL KHAIMAH	Ras Al Khaimah International Airport	OMRK	RS			<b>Ø</b>		<b>Ø</b>	100.00%			$\vdash$	_
			SHARJAH	Sharjah In International Airportt	OMSJ	RS	<b>⊘</b>		0		<b>Ø</b>					_
			ADEN	Aden International Airport	OYAA	RS	8		8		8					
			HODEIDAH	Hodeidah International Airport	OYHD	RS	8		8		8					
Yemen	YEM	5	MUKALLA	Riyan International Airport	OYRN	RS	8	0.00%	8	0.00%	8	0.00%	0.00%			
			SANA'A	Sana'a International Airport	OYSN	RS	8		8		8					
			TAIZ	Taiz International Airport	OYTZ	RS	8		8		8					

			Δ	MID Regional MID R		ard						
	Countr	Total # of AD	AD Cei	tification Implementation	AD L	ocal RST Establishment	AD Rea	diness for GRF Deployment	National GRF		drome <sup>-</sup> Density	Traffic v
State	y Code		Certified	Level of Implementation	Established	Level of Implementation	Ready	Level of Deployment	Implementation Plan Progress		Medium	
MID REGION AERODROMES SAFETY DASHBOARD	MID	58	34	58.62%	42	72.41%	38	65.52%	65.33%	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.

<u>Note 1</u>: 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.

<u>Note 1.</u> 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. <u>Note 2.</u> Either a take-off or a landing constitutes a movement.

# APPENDIX C

# ANONYMOUS DATASET FOR AERODROME SAFEY MINIMUM REPORTING AREAS OF NON-COMPLIANCES

					AERODROMES OPE	RATIONS			
								ective Action Plan <sub>(s)</sub> ( CAP <sub>(s)</sub> )	
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non- implementation	STATE/ Concerned Aerodrome (s)	Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	Residual impediment(s)/obstacl es faced during the implementation of each CAP and action thereon	Estimated Date for CAP completion / Status
					AERODROME D	ESIGN	•		
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.				

# AERODROMES OPERATIONS (AOP)

							Corre	ctive Action Plan <sub>(s)</sub> ( CAP <sub>(s)</sub> )	
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non- implementation	STATE/ Concerned Aerodrome (s)	Document of the Corrective Action Plan accepted by the State for each concerned Aerodrome	Residual impediment(s)/obstacl es 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.				
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.				

					AERODROMES OPE (AOP)	RATIONS			
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						(s)	<u>Aerodrome</u>	each CAP and action thereon	Status
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				
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				

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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.				
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** 

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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.				
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				

# AERODROMES OPERATIONS (AOP)

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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.				
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.				

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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.				
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				

#### **AERODROMES OPERATIONS** (AOP) Corrective Action Plan(s) ( CAP<sub>(s)</sub> ) Residual **Document** of the **ICAO** National First **Corrective Action Plan** impediment(s)/obstacl **Estimated Date** Remarks/ Impact of non-STATE/ Reference Reference Description reporting accepted by the **State for** es faced during the for CAP Concerned Date implementation each concerned implementation of completion / Aerodrome Aerodrome each CAP and action Status (s) thereon Global 19. Annex 14 Assessing and reporting the Reporting Vol1, condition of the movement **Format** area and related facilities is Chapter 2 necessary in order to provide PANSthe flight crew with the Aerodromes, information needed for safe Part 2 operation of the aeroplane. The runway condition report (RCR) is used for reporting assessed information. 20. Annex 14 -Safety Implementation of SMS seeks Vol 1, Management to proactively mitigate safety risks before they result in Chapter 1 aviation accidents/incidents PANSand improve operational Aerodromes, efficiencies. Part 1

**AERODROME CERTIFICATION** 

AERODROMES OPERATIONS (AOP)									
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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				

#### **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.