

International Civil Aviation Organization

Sixth Meeting of the Aerodrome Safety, Planning & Implementation Group

(ASPIG/6) (Muscat, Oman, 27-29 May 2024)

Agenda Item 2: Regional Performance Framework for Aerodrome Safety

AERODROMES SAFETY PORTFOLIOS IN THE MID REGION

(Presented by the Secretariat)

SUMMARY

This working paper presents the data needed for the establishment of the Aerodromes Safety Portfolios in the MID Region.

Action by the meeting is at paragraph 3.

REFERENCES

- ASPIG/5 Report
- RASG/11 Report

1. Introduction

1.1 The Aerodromes Safety Portfolios in the MID Region is an collaborative initiative to a joint cooperative partnership within the aviation community for the sharing and analysis of data in MID Region related to Aerodromes Design & Operations.

2. DISCUSSION

- 2.1 The meeting may wish to note that the MID Region vision is to foster a voluntary and collaborative partnership within the aviation community, aiming to share and analyse data, ultimately enhancing the safety of the Middel East Aviation Systems, particularly in AGA Area.
- 2.2 The initiative aims to effectively manage the ever-expanding array of data stores found across various Sates within the Middel East Aviation Systems. By doing so, it will gather a substantial volume of data and facilitate anonymous data sharing, enabling comprehensive analysis of safety risks on a Regional scale.
- 2.3 The key objectives of this initiative are as follows:
 - a) Streamline the increasing number of Aerodrome safety data within different States.
 - b) Establish a significant pool of data and facilitate anonymous data sharing.
 - c) Centralize available analysis capabilities by providing a unified platform for predicting, evaluating, and mitigating systemic safety risks.
- 2.4 The meeting may wish to recall that the RASG/11 noted the fact the lack of efficiency of 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.

- 2.5 During the RASG/11 meeting, several key points were highlighted regarding the establishment of an anonymous dataset for aerodrome safety. To address these concerns, the meeting emphasized the potential benefits of an anonymous dataset. Firstly, such a dataset would enable the identification of regional trends in safety deficiencies and the development of corrective action plans. By collecting data from multiple aerodromes, patterns and trends that may not be apparent at the individual aerodrome level can be recognized.
- 2.6 Additionally, the RASG/11 meeting noted that an anonymous dataset could facilitate the sharing of best practices among aerodromes within the region. The meeting may wish to highlight that with capturing successful corrective action plans, operators and civil aviation authorities can learn from one another and implement effective solutions to address safety deficiencies.
- 2.7 Furthermore, the RASG/11meeting highlighted that an anonymous dataset can help harmonize safety standards across aerodromes in the region. The meeting may wish to note that via the identification of common safety deficiencies and implementation of similar efficient corrective action plans, consistent and effective safety measures can be ensured throughout the MID Region.
- 2.8 The RASG/11 meeting also emphasized the potential of an anonymous dataset as an early warning system for identifying emerging safety issues related to aerodrome design and operations. The meeting may wish a agree that through the collection data from numerous aerodromes, potential hazards can be identified before they become widespread.
- 2.9 Moreover, the meeting RASG/11 agreed that establishing an anonymous dataset would be a valuable tool for promoting safety and improving the effectiveness of corrective actions at the regional level. This tool could be used to identify trends and share best practices and serve as an early warning system to enhance safety culture.
- 2.10 In conclusion, the meeting also recognized several benefits that would arise from the proposed Anonymous Dataset Collection for Aerodrome Safety, including consistency in reporting across all MID States, the ability to derive trends and propose common solutions, easier reporting by states and organizations, and consistency in prioritizing follow-up actions by the ICAO MID Regional Office and other concerned parties.
- 2.11 Based on the above, the RASG/11 meeting endorsed to the following Conclusion:

RASG-MID CONCLUSION 11/8: ANONYMOUS DATASETS 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 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.
- 2.12 In this regard, the meeting may wish to agree that in order to feed to Data Base related to those significant non-compliance, related to Aerodromes Design and Operation, that been faced by Airport Operators in the MID Region and efficiently addressed with appropriate correction measures, State are encouraged to urge their Aerodromes Safety Committee as well as Local Runway Safety Teams to use the endorsed Template listing the Minimum Reporting Areas of non-compliance.

- 2.13 The meeting may wish to recognize that the Airport Operators should submit to the State Civil Aviation Authorities the Datasets related to those non-compliances and their respective Corrective Action Plans effectively addressing those non-compliances then CAAs **Anonymously** convey these Datasets to the ICAO MID Office for analysis purposes.
- 2.14 The meeting may wish to agree about the need to establish the Aerodromes Safety Portfolios in the MID Region through the anonymous collection of the necessary data as presented at **Appendix A**.

3. ACTION BY THE MEETING

3.1 The meeting is invited to review and agree to the following Draft Conclusion:

Why	Ensure sufficient data needed to generate the Aerodromes Safety Portfolios in the MID Region
What	Minimum Reporting Areas of challenging/significant non-compliance captured by Airport Operators and submitted by the States using the endorsed Template at Appendix A
Who	States
When	Q3 of the current Year

DRAFT CONCLUSION 6/7: MID AERODROMES SAFETY PORTFOLIOS

That, in order to facilitate the generation 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 A**.

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)	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)											
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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 OPERATIONS (AOP)											
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non- implementation	STATE/ Concerned Aerodrome (s)						
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							

	AERODROMES OPERATIONS (AOP)											
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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.							

	AERODROMES OPERATIONS (AOP)											
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					AERODROME OPE	RATIONS						
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.							

	AERODROMES OPERATIONS (AOP)											
							Corrective Action Plan _(s) (CAP _(s))					
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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.							

	AERODROMES OPERATIONS (AOP)											
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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.							

	AERODROMES OPERATIONS (AOP)											
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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			thereon				
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)										
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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.						
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.						

					AERODROMES OPI	RATIONS			
							Corrective Action Plan _(s) (CAP _(s))		
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					AERODROME CERT	IFICATION			
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.