



International Civil Aviation Organization

Fifth Meeting of the Aerodrome Safety, Planning & Implementation Group

(ASPIG/5) (Doha, 13-15 June 2023)

Agenda Item 2: Regional Performance Framework for Aerodrome Safety

ANONYMOUS DATASET COLLECTION FOR AERODROMES SAFETY

(Presented by the Secretariat)

SUMMARY

This working paper presents the importance to establish an Anonymous Dataset Collection for Aerodrome Safety. Also, it presents the format of data to be included in it and how such data could be beneficial for the MID Region.

Action by the meeting is at paragraph 3.

REFERENCES

- ASPIG/4 Report

1. INTRODUCTION

1.1 If non-compliances at individual aerodromes are not identified and addressed, it can lead to decreased public confidence in the safety of the aviation industry within the region. This can have a negative impact on the industry as a whole, and can lead to decreased demand for air travel within the region.

1.2 Not addressing non-compliances at individual aerodromes can have a significant impact on other aerodromes within the region. It is important for regional aviation authorities to establish systems for identifying and addressing safety deficiencies to ensure that safety standards are consistent and effective across the entire region.

2. DISCUSSION

2.1 The meeting may wish to highlight that an anonymous database can help to identify regional trends in safety deficiencies and related corrective action plans. 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.

2.2 The meeting may wish to note that an anonymous database can be used to share best practices across aerodromes within a region. 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.

2.3 The meeting may wish to note that an anonymous database can help to harmonize safety standards across aerodromes within a region. 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.

2.4 In addition, the meeting may wish to highlight that an anonymous database can serve as an early warning system for potential safety hazards 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.

2.5 In this regard, the meeting may wish to agree that an anonymous database can help to improve the safety culture within the region. By promoting a culture of safety and encouraging individuals to report safety concerns, it is possible to create a safer and more proactive environment for all those who use and work in the aviation industry within the region.

2.6 In conclusion, an anonymous database 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.

Anonymous Dataset Collection for Aerodrome Safety

2.7 During the ASPIG/4 meeting a Template of the minimum reporting areas of non-compliance, as available at the **Appendix A** of this WP, determining the fundamental infrastructure and core services to be implemented by Aerodromes in line with ICAO Standards and Recommended Practices (SARPs) and transposed national regulations.

2.8 Accordingly, the meeting may wish to invite States, users, and International Organizations to report non-compliances in the subareas listed at the **Appendix A** to this paper.

2.9 The meeting may wish to note that the undesirable outcomes of the proposed approach, which should be guarded against, include reporting only on the listed subareas, instead of all potential non-compliances. Therefore, the proposed tool would be continuously upgraded as deemed necessary.

2.10 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.

2.11 Based on the above, the meeting may wish to agree on the following Draft Conclusion:

WHY	<p>Need to have an overall visibility at the Regional Level on the common non-compliances addressed by aerodromes to ensure:</p> <ul style="list-style-type: none"> • Consistency in reporting across all MID States with respect to the listed Sub-areas; • Ability to derive trends and propose common solutions; • Facilitation of reporting by States and Organizations; and • Consistency in the prioritization of follow-up actions planned by the ICAO MID Regional Office and other concerned parties
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What	Anonymous Dataset Collection for Aerodrome Safety
Who	RASG/11
When	Q2 2024

DRAFT CONCLUSION 5/1: 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 list of Minimum Reporting Areas of non-compliance to be used to feed the MID Region **Anonymous Dataset for Aerodromes Safety**; and*
- b) *nominate a National Focal Point responsible for the anonymous communication of these dataset using the Template presented at **Appendix A**.*

3. ACTION BY THE MEETING

3.1 The meeting is invited to agree to the Draft Conclusion under paragraph 2.12 of this working paper.

ANONYMOUS DATASET FOR AERODROME SAFETY

MINIMUM REPORTING AREAS OF NON-COMPLIANCES

AERODROMES OPERATIONS (AOP)									
	ICAO Reference	National Reference	Description	First reporting Date	Remarks/ Impact of non-implementation	STATE	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.				

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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.				

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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				

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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				

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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.				
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				

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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				
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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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									
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				

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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				

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](#).

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.

- END -