APPENDIX B TO NPA/ADR/01/2022

SEYCHELLES TECHNICAL STANDARDS
STS-ADR
Issue 03, [*to insert applicable month*] 2022

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ABBREVIATIONS AND SYMBOLS

Abbreviations

AAIA	Aircraft Accident Investigation Authority
ACN[1]	Aircraft Classification Number
ACR[2]	Aircraft Classification Rating
ADP	Airside driver permit
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PAPI	Precision Approach Path Indicator
PCN[3]	Pavement Classification Number
PCR[4]	Pavement Classification Rating
RESA	Runway End Safety Area
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CHAPTER 1 – INTRODUCTION

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1.2.4 Relevant legislation and document

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1.2.4.6 Aerodrome ~~Safety~~ Directives ~~and/or Aerodrome Safety Publications, where published, are intended to supplement the standards and recommended practices contained in the Seychelles Technical Standards, or to provide recommended practices and additional materials for education. These documents illustrate a means, but not necessarily the only means, of complying with the Regulations. These Directives or Publications may explain certain regulatory requirements by~~

[1] Applicable until 27 November 2024
[2] Applicable as of 28 November 2024
[3] Applicable until 27 November 2024
[4] Applicable as of 28 November 2024

~~providing interpretive and explanatory materials. It is expected that aerodrome operators will provide adequate practices and/or document internal actions in their own Aerodrome Manuals to address the subject matter contained in these Directives or Publications~~ may be promulgated in circumstances where mandatory action is required. Aerodrome Directives may contain instructions and/or prescribe conditions and/or requirements to be met by the aerodrome operator for aerodrome certification, or to ensure continued validity of an aerodrome certificate, or to address a specific safety concern.

1.2.4.7 Aerodrome Safety Publications may be published by the SCAA for purposes of promulgating supplementary guidance materials to the Standards and Recommended Practices (SARPs) in the Seychelles Technical Standards and/or to provide recommended practices and/or additional materials for education. The publications are intended to provide recommendations and guidance to illustrate a means, but not necessarily the only means, of complying with SARPs. Aerodrome Safety Publications may explain certain regulatory requirements by providing interpretive and explanatory materials.

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1.4. Publication of differences in AIP

1.4.1. Differences between the Standards prescribed in this STS and those contained in ICAO Annex 14 Vol. I, if any, are promulgated by the Aerodrome Safety & Standards Inspectorate through **S*ection Gen 1.7*** of the Seychelles Aeronautical Information Publications (AIP) and also notified to ICAO.

1.4.2. ~~Aerodrome operators shall publish any differences between the provisions at their aerodromes and the Standards prescribed in this STS under the Aerodrome (AD) section of~~ Exemptions granted by the SCAA are promulgated through the AIP.

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1.7. Definitions

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Aircraft Classification Number (ACN)[5]	A number expressing the relative effect of an aircraft on a pavement for a specified standard subgrade category. *Note – The aircraft classification number is calculated with respect to the centre of gravity (CG) position which yields the critical loading on the critical gear. Normally the aftmost CG position appropriate to the maximum gross apron (ramp) mass is used to calculate the CAN. In exceptional cases the forwardmost CG position may result in the nose gear loading being more critical.*
Aircraft	A number expressing the relative effect of an aircraft on a pavement for

[5] Applicable until 27 November 2024

Classification Rating[6]	a specified standard subgrade category.
Aircraft stand	A designated area on an apron intended to be used for parking an aircraft.
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Pavement classification number (PCN)[7]	A number expressing the bearing strength of a pavement ~~for unrestricted operations~~.
Pavement Classification Rating (PCR)[8]	A number expressing the bearing strength of a pavement.
Precision approach runway	See 'Instrument runway'.
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~~1.10. Safety management~~

1.10.1. ~~Operators of a certified aerodromes shall implement a Safety Management System (SMS) acceptable to the SCAA that, as a minimum:~~

~~a) identifies hazards;~~
~~b) mitigate risks;~~
~~c) ensures the implementation of remedial action necessary to maintain agreed safety performance;~~
~~d) provides for continuous monitoring and regular assessment of the safety performance; and~~
~~e) aims at a continuous improvement of the overall performance of the safety management system.~~

~~*Note – Guidance on defining safety performance is contained in ICAO's Safety Management Manual (SMM) (ICAO Doc 9859).*~~

1.10.2. ~~The SMS shall be:~~

~~i. established in accordance with the framework elements contained in Appendix I; and~~
~~ii. commensurate with the size of the aerodrome and aerodrome operator, and the complexity of the aviation activities at the aerodrome.~~

[6] Applicable as of 28 November 2024
[7] Applicable until 27 November 2024
[8] Applicable as of 28 November 2028

1.10.3. ~~A safety management system shall clearly define lines of safety accountability within the aerodrome operator structure, including a direct accountability for safety on the part of senior management.~~

~~*Note — The framework for the implementation and maintenance of a safety management system is contained in Appendix 2 of ICAO Annex 19. Guidance on safety management systems is contained in the Safety Management Manual (SMM) (ICAO Doc 9859), and in the Manual on Certification of Aerodromes (ICAO Doc 9774).*~~

1.11. Airport design and master plan [Master plan requirements are applicable as of 03 November 2022]

Introductory Note – A master plan for the long-term development of an aerodrome displays the ultimate development in a phased manner and reports the data and logic upon which the plan is based. Master plans are prepared to support modernization of existing aerodromes and creation of new aerodromes, regardless of size, complexity, and role. It is important to note that a master plan does not constitute a confirmed implementation programme. It provides information on the types of improvements to be undertaken in a phased manner. Guidance on all aspects of the planning of aerodromes is contained in the Airport Planning Manual *(Doc 9184), Part 1.*

1.11.1. A master plan containing detailed plans for the development of aerodrome infrastructure shall be established for aerodromes used for international operations.

1.11.2. **Recommendation** – A master plan containing detailed plans for the development of aerodrome infrastructure should be established for aerodromes serving scheduled commercial operations and deemed appropriate by the Safety & Security Regulation Department.

Note 1 – A master plan represents the development plan of a specific aerodrome. It is developed by the aerodrome operator based on economic feasibility, traffic forecasts, current and future requirements provided by, among others, aircraft operators (see 1.11.4).

Note 2 – A master plan may be required when the lack of capacity at an airport, due to conditions such as, but not limited to expected traffic growth, changing weather and climatic conditions or major works to address safety or environmental concerns, would put the connectivity of a geographical area at risk or cause severe disruption to the air transport network.

1.11.3. **Recommendation** – The master plan should:

a) contain a schedule of priorities including a phased implementation plan; and
b) *be reviewed periodically to take into account current and future aerodrome*

traffic.

1.11.4. **Recommendation –** *Aerodrome stakeholders, particularly aircraft operators, should be consulted in order to facilitate the master planning process using a consultative and collaborative approach.*

Note 1 – Provision of advanced planning data to facilitate the planning process include future aircraft types, characteristics and numbers of aircraft expected to be used, the anticipated growth of aircraft movements, number of passengers and amount of cargo projected to be handled.

Note 2 – See Annex 9, Chapter 6 on the need for aircraft operators to inform aerodrome operators concerning the former's service, schedule and fleet plans to enable rational planning of facilities and services in relation to the traffic anticipated.

Note 3 – See ICAO's Policies on Charges for Airports and Air Navigation Services Doc 9082), *Section 1, regarding consultation with users concerning provision of advance planning data and protection of commercially sensitive data.*

1.11.5. 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.

~~*Note – Guidance on all aspects of the planning of aerodromes including security considerations is contained in the Airport Planning Manual (Doc 9184), Part 1.*~~

1.11.6. **Recommendation.** – The design of aerodromes should take into account~~, where appropriate,~~ land-use and environmental control measures.

Note – Guidance on land-use planning and *environmental control measures are described in the Airport Planning Manual (Doc 9184), Part 2.*

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CHAPTER 2 – APPLICATION OF STANDARDS AND RECOMMENDED PRACTICES TO AERODROMES

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2.4. Aeronautical studies

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2.4.7. The determination to require caution will be primarily dependent on two considerations:

i. Pilots need to be made aware of potentially hazardous conditions; and

ii. the responsibility of the ~~aerodrome operator~~ Safety & Security Regulation Department to publish deviations from standards and recommended practices that would otherwise be assumed under the certificate status.

2.5. Exemptions from aerodrome standards and recommended practices

2.5.7. When an aerodrome is not able to comply with any standard or recommended practice specified in the STSs, the aerodrome operator may apply for exemptions from the relevant standard or recommended practice. Applications must be supported, in writing, by cogent reasons including any aeronautical study and/or safety assessment conducted and their associated results, and where appropriate, an indication of when compliance with the current standards and/or recommended practices can be expected.

Note – Refer to procedures relating to application for exemption from regulations and directives.

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CHAPTER 3 – AERODROME CERTIFICATION PROCESS AND AERODROME MANUAL REQUIREMENTS

Subpart A – General

3.1. Introduction

3.1.1 This chapter describes the requirement for aerodromes to operate with an Aerodrome Certificate~~,~~ and the process ~~and procedures~~ of certification by the Aerodrome Safety & Standards Inspectorate of the Seychelles Civil Aviation Authority.

3.1.2 The aerodrome certification process only addresses the aviation safety aspect of the aerodrome. It is the responsibility of the applicant to ensure that the use of the site as an aerodrome is in compliance with other ~~State and local~~ National statutory requirements such as land-use or environment regulations. The Aerodrome Certificate does not absolve the applicant from observing such requirements.

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Subpart B – Certification process

~~**3.3. The five phases of certification**~~

~~3.3.1. The aerodrome certification process entails the following phases:~~

~~Phase 1: Expression of interest~~
~~Phase 2: Assessment of formal application, including evaluation of aerodrome manual~~
~~Phase 3: Assessing the aerodrome facilities and equipment~~

~~Phase 4: Issuing or refusing an aerodrome certificate~~

~~Phase 5: Promulgating the certified status of the aerodrome and the required details in the AIP~~

3.3. Applying for an Aerodrome Certificate

3.3.1. An applicant for the grant or renewal of an Aerodrome Certificate shall submit ~~formally express their interest and/or intentions to the Safety & Security Regulation Department at the following address~~:

a) an application in the form set out in this document; and

b) an Aerodrome Manual for the aerodrome for which the application is made.

~~General Manager Safety & Security Regulation~~
~~Safety & Security Regulation Department~~
~~Seychelles Civil Aviation Authority (SCAA)~~
~~PO Box 181, Victoria, Mahe,~~
~~Seychelles~~

3.3.2. The applicant must be the owner of the aerodrome site, or have obtained permission from the owner to use the site as an aerodrome.

3.3.3. Approvals from other Local authorities as required by other National statutory requirements shall be obtained by the applicant and submitted together with the application.

3.3.4. The Form For Application/Renewal Of An Aerodrome Certificate, sample of which is attached as Appendix C, or can be obtained from, and the completed form must be submitted to, the Safety & Security Regulation Department of the Seychelles Civil Aviation Authority at the following address:

TBC

~~3.3.5. After receiving the expression of interest, a meeting will be held with the intending applicant to discuss their interest further. The applicant shall ensure that their key personnel are present during the meeting. Thereafter, the ASSI will initiate a flight operations assessment to assess the location or proposed location of the aerodrome ensure that the operation of the aerodrome at the location will not endanger the safety of aircraft operations.~~

3.3.6. ~~After completion of 3.4.3, if the process is to be continued, the applicant will be informed and will be required to obtain other required clearances and/or approvals from other local authorities such as, but not limited to, those responsible for environment, land use or security. The applicant will be required to complete and submit a formal application form (see Appendix C). An Aerodrome Manual and approvals/ clearances obtained from other local authorities shall be submitted along with the formal application form.~~

3.3.7. The Aerodrome Manual to be submitted with the application shall contain information and instructions relating to the matters specified in~~, as a minimum, the information and instructions relating to the matters specified in~~ Appendix H ~~of this~~

~~STS, and contain such other information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties. The detailed requirements of the Aerodrome Manual are explained in~~ Subpart C of this Chapter, and shall also contain such other information and instructions as may be necessary to enable the aerodrome operating staff to perform their duties.

3.3.8. Applications shall be submitted in sufficient time to allow for processing ~~by the ASSI~~, including inspection of the aerodrome before the intended or desired date of grant of the Aerodrome Certificate.

3.3.9. Engineering and survey reports of the physical characteristics of the movement area, pavement strength and surface, obstacle limitation surfaces, etc., as required by the Aerodrome Safety & Standards Inspectorate ~~should~~ shall be provided as part of the submission.

3.4. Aerodrome Certificate processing fee

[Not used.]

3.5. Processing an Aerodrome Certificate application

3.5.1. As part of the certification process, the ASSI may carry out inspection or testing of any aspect of the aerodrome or require substantiation of any information provided by the applicant. However, it should be clearly understood that the ASSI's sample checking process does not absolve the applicant from the responsibility to provide accurate information.

3.5.2. Special assessment(s) may be necessary if there are aerodrome facilities that are not in full compliance with the applicable standards contained in the STSs. This may involve more time and resources and may result in restrictions being imposed on aircraft operations.

~~3.5.3. The first verification done with the submitted application form, aerodrome manual and other relevant documents will be to check for completeness and format. To avoid delays, aerodrome operators are to ensure that all documents submitted are complete and are structured in accordance with specifications provided by this STS.~~

3.5.4. ~~After completing the first check stipulated in 3.6.1 above~~ On receipt of the application, the Aerodrome Safety & Standards Inspectorate will carry out a detailed examination of the Aerodrome Manual. Where necessary, the ASSI will request for amendments and/or supplementary information to the Aerodrome Manual. This shall be prepared by the applicant and submitted accordingly. All aspects of the aerodrome operation, including the management structure; adequacy and competency of management, operation and maintenance staff; arrangements and provisions for their training; aerodrome site, facility, equipment, related services and operating procedures; etc. will be assessed in relation to the scale, scope and circumstances of the applicant's proposed operations. Relevant documents submitted by the aerodrome operator will be retained by the Aerodrome Safety & Standards Inspectorate during the currency of the Aerodrome Certificate.

3.5.5. A flight operations assessment may be required by the Aerodrome Safety & Standards Inspectorate to ensure that the operation of the aerodrome at the location will not endanger the safety of aircraft operations.

3.5.6. The Aerodrome Safety & Standards Inspectorate will conduct a visit to the applicant's aerodrome for on-site verification of aerodrome data; inspection of aerodrome services, facilities and equipment; interview of aerodrome management and operating staff; examination of operating procedures and training methods; checking the availability and adequacy of related services needed to support aerodrome operations; assessment of the aerodrome's safety management system (SMS); review of aerodrome operator's safety documents and records; as well as survey for any presence of obstacles in obstacle limitation surfaces at and in the vicinity of the aerodrome. The applicant shall allow the SCAA or any other authorised person access to any part of the aerodrome or any aerodrome facility, equipment, records and operator personnel, and cooperate and facilitate the activities relating to the on-site verification.

3.5.7. Subject to any considerations that the Aerodrome Safety & Standards Inspectorate may decide, any deficiencies found by the Aerodrome Safety & Standards Inspectorate during the on-site verification ~~mentioned above~~ shall be addressed and rectified by the applicant within the time frame given by the Aerodrome Safety & Standards Inspectorate. Where necessary, changes to the Aerodrome Manual shall be made accordingly and the revised Aerodrome Manual shall be submitted to the Aerodrome Safety & Standards Inspectorate for acceptance before the issuance of an Aerodrome Certificate can be considered.

3.5.8. Once the Aerodrome Manual is accepted by the Aerodrome Safety & Standards Inspectorate, the applicant shall make copies of the Aerodrome Manual and distribute it to its stakeholders and other relevant parties, as appropriate.

3.6. Granting of an Aerodrome Certificate

3.6.1. The SCAA may grant an Aerodrome Certificate (See sample in Appendix D) to an applicant upon being satisfied that:

a. the applicant is competent to operate and maintain his aerodrome properly, having regard to his previous conduct and experience, equipment, organisation, staffing, maintenance and other arrangements;

b. the Aerodrome Manual prepared for the applicant's aerodrome and submitted with his application contains accurate information and complies with the requirements specified in ~~Appendix H of~~ this STS.

c. the applicant's aerodrome facilities, equipment and services comply with the standards specified in the STSs;

d. the applicant's aerodrome operating procedures make satisfactory provision for

the safety of aircraft; and

e. ~~for the purpose of any application,~~ an acceptable safety management system is in place at the applicant's aerodrome.

3.6.2. The holder of an Aerodrome Certificate or an applicant for an Aerodrome Certificate shall be required to establish and implement an operating safety management system that complies with the standards specified in the STSs for each aerodrome.

3.6.3. The SCAA may grant an Aerodrome Certificate subject to such conditions as he thinks fit. In such cases, these conditions shall be set out in ~~an endorsement on~~ the General Conditions and/ or Special Conditions of the Aerodrome Certificate or otherwise notified to the applicant in writing, and the reasons for the conditions shall be provided to the applicant in writing.

3.6.4. ~~Included in the Aerodrome Certificate will be~~The General Conditions included with an Aerodrome Certificate shall be applicable to all aerodrome operators. ~~and~~ Special Conditions shall be applicable to ~~relating~~ to particular aerodrome operators. As one of the conditions of granting the Aerodrome Certificate, aerodrome operators shall ensure that the General and Special Conditions of their Aerodrome Certificate are brought to the attention of their managerial and operating staff, and strictly complied with. A copy of the Aerodrome Certificate, General Conditions and Special Conditions, if any, shall be included in the aerodrome operator's Aerodrome Manual that is distributed to aerodrome operating staff.

3.6.5. Aerodrome Certificates are granted on the condition that the aerodrome operator will, at all times, be in compliance with the applicable regulations and mandatory requirements.

3.6.6. Once granted, an Aerodrome Certificate ~~will~~ shall remain in force for the duration specified on the certificate or until it is amended, suspended or cancelled.

~~3.6.7. After granting an aerodrome certificate, the ASSI will inform the AIS to publish the certified status of the aerodrome in the AIP.~~

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3.11. Distribution and amendment of an Aerodrome Manual

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3.11.10. The aerodrome operator shall send the amended pages, together with an amendment list to Aerodrome Safety & Standards Inspectorate for acceptance.

3.12. Information to be included in the Aerodrome Manual

~~3.12.1. Appendix H outlines the format, organization and particulars to be included in an Aerodrome Manual.~~

3.12.2. The Aerodrome Manual shall contain the details of the particulars ~~to be covered in the Aerodrome Manual are~~ explained in Appendix E.

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Subpart D – AIP and NOTAM action

3.13. Initiating AIP and NOTAM to promulgate a certified aerodrome

3.13.1. An aerodrome operator shall ensure that, in respect of his aerodrome and amongst other services related to safety to be provided, Aeronautical Information Services are available.

3.13.2. Upon being granted an Aerodrome Certificate, the aerodrome operator shall prepare and submit, through the Aerodrome Safety & Standards Inspectorate, to the Aeronautical Information Services a Notice to Airmen (NOTAM) and/or Aeronautical Information Publication (AIP) Amendment setting out all the aerodrome information which will be permanently included in AIP, including the effective dates for which the aerodrome is certified and for which it will commence operations ~~all the aerodrome information which is required to be included in the AIP~~.

~~3.13.3. The Aerodromes Safety & Standards Inspectorate should provide the Aeronautical Information Services with information on the certified status of an aerodrome.~~

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3.21. Transfer of Aerodrome Certificate

3.21.1. An Aerodrome Certificate shall not be transferable and any purported transfer of any certificate shall be void.

~~3.21.2. In the event of change in ownership, the prospective certificate holder shall apply for a new certificate.~~

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CHAPTER 4 – AERODROME OPERATOR ORGANIZATION AND DOCUMENT MANAGEMENT

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4.1.4. Where maintenance activities or aircraft ground handling services are performed by external contractors or agencies and not directly by the aerodrome operator, a senior post should be established to coordinate arrangements and to provide continuous liaison with the maintenance contractors or handling agencies. It is the

responsibility of the aerodrome operator to ensure that his contractors and/or agencies are competent to perform their duties having regard to their experience, equipment, organization, staffing, training and other arrangements.

Note - Contractors and agencies refer to those who perform aerodrome maintenance services and inspections, construction works, and ground handling services at the aerodrome.

4.1.1 The aerodrome operator shall ensure proper and efficient maintenance of the aerodrome facilities and equipment. In addition, as part of the aerodrome organization, an aerodrome operator shall, in respect of his aerodrome, ensure that:

(a) appropriate air traffic services are available to ensure the safety of aircraft in the airspace associated with the aerodrome; and

(b) aeronautical information services, meteorological services and provision of security and other services related to safety are available.

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4.2.5. Pursuant to the requirements of ~~paragraphs~~ 4.2.1 to 4.2.3 above, an aerodrome operator shall satisfy the Aerodrome Safety & Standards Inspectorate that he has an adequate number of operational staff for the proposed aerodrome operations. This requirement will not be assessed against a set formula, as there will clearly be a wide variation according to particular circumstances. ~~All operational staff should be employed full-time. The employment of part-time staff will be acceptable only in exceptional circumstances~~

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Subpart C – Additional aerodrome operator responsibilities

4.1. Aerodrome operator responsibilities

4.1.1. The aerodrome operator is responsible for the safe operation and maintenance of the aerodrome in accordance with:

a) Civil Aviation (Safety) Regulations, 2017 and its Directives;
b) the terms of its certificate;
c) the content of the aerodrome manual; and
d) any other manuals for the aerodrome equipment available at the aerodrome, as applicable.

4.1.2. The aerodrome operator shall ensure directly, or coordinate through arrangements as required with the accountable entities providing the following services:

a) the provision of air navigation services appropriate to the level of traffic and the operating conditions at the aerodrome; and

b) the design and maintenance of the flight procedures, in accordance with the applicable requirements.

4.1.3. The aerodrome operator shall coordinate with the Aerodrome Safety & Standards Inspectorate to ensure that relevant information for the safety of aircraft is contained in the aerodrome manual and is published where appropriate. This shall include:

a) exemptions or derogations granted from the applicable requirements; and
b) special conditions and limitations with regard to the use of the aerodrome.

4.1.4. If an unsafe condition develops at the aerodrome, the aerodrome operator shall, without undue delay, take all necessary measures to ensure that those parts of the aerodrome found to endanger safety are not used by aircraft.

4.1.5. A description of cases involving exemptions, derogations, cases of equivalent level of safety, special conditions, including limitations with regard to the use of the aerodrome, should be published in the Aeronautical Information Publication (AIP), after coordination with the Safety & Security Regulation Department.

4.2. Findings and corrective actions

4.2.1. After receipt of a notification of findings, the aerodrome operator shall:
a) identify the root cause of the non-compliance;
b) define a corrective action plan; and
c) demonstrate the corrective action implementation to the satisfaction of the Aerodrome Safety & Standards Inspectorate within the period agreed with the Aerodrome Safety & Standards Inspectorate.

4.2.2. The corrective action plan defined by the aerodrome operator should address the effects of the non-compliance, as well as its root cause.

4.3. Immediate reaction to a safety problem – compliance with safety directives

4.3.1. The aerodrome operator shall implement any safety measures, including safety directives, taken and/or directed by the SCAA.

4.4. Prevention of fire

4.4.1. The aerodrome operator shall establish procedures to prohibit:
a) smoking within the movement area, other operational areas of the aerodrome, or areas of the aerodrome where fuel or other flammable material is stored;
b) display of an open flame or undertaking of an activity that would create a fire hazard within:
i. areas of the aerodrome where fuel or other flammable material is stored;

ii. the movement area or other operational areas of the aerodrome, unless authorised by the aerodrome operator.

4.4.2. The aerodrome operator should develop procedures and assign responsibilities for the control of smoking or activities that involve the use of fire hazard, as appropriate. These procedures should address the adoption and use of mitigating measures when necessary activities (e.g. maintenance, etc.) which might involve fire hazard need to be authorised. Such authorised activities may not include smoking within the movement area, other operational areas of the aerodrome, or areas of the aerodrome where fuel or other flammable material are stored.

4.5. Use of alcohol, psychoactive substances and medicines

4.5.1. The aerodrome operator shall establish procedures on the level of consumption of alcohol, psychoactive substances, and medicines by:

a) personnel involved in the operation, rescue and firefighting, and maintenance of the aerodrome;
b) any personnel that perform any safety-critical duties and functions;
c) unescorted persons operating on the movement area or other operational areas of the aerodrome.

Note - The procedures should be applicable to all persons referred to above irrespectively of the relationship they have with the aerodrome operator (e.g. directly employed by the aerodrome operator or by organisations contracted by the aerodrome operator).

4.5.2. These procedures shall include the requirements that such persons shall:

a) not consume alcohol during their duty period;
b) not perform any duties under the influence:
   i. of alcohol, or any psychoactive substance; or
   ii. any medicine that may have an effect on his/her abilities in a manner contrary to safety.

Note - Further guidance on this issue may be found in the ICAO Manual on Prevention of Problematic Use of Substances in the Aviation Workplace (Doc 9654).

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CHAPTER 5 – AERODROME WORK SAFETY, SAFETY MANAGEMENT SYSTEM AND ACCIDENT/INCIDENT REPORTING AND INVESTIGATION PROCEDURES

Subpart A – Aerodrome work safety

5.1. Introduction

5.1.1 From time to time, the aerodrome operator may intend to carry out works that affect the physical characteristics of the aerodrome and/or affect aerodrome operations. These works include development of new infrastructure, modifications, or maintenance of existing infrastructure, on the airside. The aerodrome operator shall ensure that such developments and changes to the airside infrastructure comply with the STS requirements. As hazards to aerodrome operations may be introduced in the process of these works, it is essential that the work process is well controlled.

Note – Refer to ASP relating to PANS-ADR for further on work in progress.

5.2. Submission of documents for development and modification works

5.2.1. The aerodrome operator shall, before carrying out any works that affect the physical characteristics of a runway, taxiway or aircraft parking stand, notify the ASSI and submit the following documents to the ASSI at least 3 months before the commencement of works:

a) a completed Notification Form;

b) a compliance matrix demonstrating compliance of the design of the proposed infrastructure with relevant STSs; and

c) drawings, in sufficient detail, to enable the ascertainment of the compliance of the physical characteristics of the proposed infrastructure with the STSs.

5.2.2. The aerodrome operator shall provide all required documents as described in 5.2.1 at the point of submission and continuously provide updates as and when they become available in ensuring continued compliance with the STSs.

5.2.3. In cases where the development or modification works as described in 5.2.1 could result in any non-compliance with the STSs, the aerodrome operator shall submit the required documents as described in 5.2.1 not later than 6 months before the commencement of works. The aerodrome operator shall not commence works in the affected areas where any non-compliance is not resolved.

5.3. Aerodrome manual and submission of risk assessment

5.3.1. An aerodrome operator shall plan and implement works to be carried out at an aerodrome so as not to create any hazard to aircraft operations or confusion to pilots ~~establish and implement procedures for works to be carried out at an aerodrome to ensure that any hazard to aircraft operation or confusion to pilots are not created by aerodrome works~~ and so that aerodrome works safety is not affected by aerodrome operational activities.

5.3.2. The Aerodrome Manual submitted by an aerodrome operator shall include details of the procedures for planning and safe execution of such work activities at the aerodrome. These procedures should be appropriate to the volume and nature of

operations at the aerodrome.

5.3.3. An aerodrome operator shall, in his Aerodrome Manual, address how aerodrome works are to be carried out so that:

a) where the works are of a nature that they will disrupt operations, these works shall be carried out with proper planning in advance; and

b) where the works are of a minor/maintenance nature, these works may be carried out as time-limited works where normal aircraft operation are not disrupted and the movement area can be restored to normal safety standards and any obstacle created by those works removed in a timely manner. Depending on the nature and extent of each activity, time-limited works may include minor maintenance of markings and lights, grass mowing, sweeping of aircraft pavements, surveys and inspections, etc.

5.3.4. The aerodrome operator shall be responsible for coordinating works on the movement areas and for dictating safety requirement for execution of works.

5.3.5. Written authorizations shall be given by the aerodrome operator for all works to be performed (includes routine maintenance, minor construction/ maintenance, and major construction/ maintenance works).

5.3.6. For minor work on the movement area, a system of work permits should be established.

5.3.7. An aerodrome operator shall notify the ASSI of any significant aerodrome activities as early as practicable and submit associated risk assessments to the ASSI at least two weeks prior to the commencement of the works.

5.3.8. An aerodrome operator shall notify the ASSI of any finalized plan for major aerodrome activities, provide updates at significant junctures of the project and submit associated risk assessments to the ASSI as early as practicable, but at least two weeks prior to the commencement of each major phase of the project.

~~Note – Refer to ASP relating to PANS-ADR for further on work in progress.~~

5.4. Aerodrome work plans

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5.4.3. The aerodrome operator shall ensure that clear and ample prior notification for works at the maneuvering area is provided to the Aeronautical Information Services, the aerodrome air traffic control unit, aircraft operators and other users or service providers of the aerodrome. Such notification shall include timely and accurate promulgation of AIP Supplements or NOTAMs, with clear details of the extent and period of works.

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5.5. Management and control of aerodrome works

…

5.5.3. The person responsible for the aerodrome works ~~should~~ shall be satisfied that the work plan is adequately prepared and that sufficient safety measures are put in place on the work site at all times during the execution of the aerodrome works when the aerodrome is open to aircraft operations.

5.5.4. An aerodrome operator ~~should~~ shall take all reasonable measures to ensure that aerodrome works are well-organized and that all work personnel carries out aerodrome works in a manner that will ensure the safety of aircraft operations.

5.5.5. Persons, vehicles, plant and equipment required for carrying out aerodrome works ~~must~~ shall not be permitted to enter the movement area or remain on it except for the purpose of carrying out those works.

5.5.6. Procedures for entering the work areas shall be addressed in the work plan.

…

5.7. Communications equipment

5.7.1. At a controlled aerodrome, vehicles used by work parties carrying out aerodrome works on the movement area should, as far as practicable, be equipped with a radio for two-way communications with the aerodrome air traffic control unit.

5.7.2. For the purpose of communication with the air traffic control unit, each vehicle used for carrying out aerodrome works on the movement area should be given a call sign.

5.7.3. Any vehicle or plant that is not:

i. marked or lit in accordance with section 5.4 above; or
ii. if applicable, equipped with a two-way radio;

~~may~~ shall only be used in carrying out aerodrome works if it is:

1. used under the direct supervision of another vehicle that is equipped with a two-way radio set and which is responsible for escorting the vehicle or plant without radio when carrying out aerodrome works; or

2. used only within the limits of appropriately marked and lit work areas.

5.7.4. The drivers of vehicles equipped with a radio for two-way communications with the aerodrome air traffic control unit shall be properly trained and be responsible for checking that their radio sets are switched on and serviceable at all times when working on the movement area.

5.8. Works near aircraft movement areas

5.8.1. The aerodrome operator shall refer to Chapters 7 and 8 of this document and ICAO Airport Services Manual (Doc 9137) Part 6 – Control of Obstacles to determine the extent of work allowed near aircraft movement areas.

5.8.2. Works on or near aircraft movement areas or runway strips should be carried out as quickly as practicable to minimize any potential risks arising out of changes associated with the works in progress.

5.8.3. Where works are to be undertaken in the vicinity of navigational or landing aids located within the runway strips, considerations ~~should~~ shall be taken to ensure that neither the works nor vehicles or plant associated with the works may affect the performance of the aids.

5.9. Completion

5.9.1. The aerodrome operator shall not commence operations of any new or modified infrastructure, as described in 5.2.1, without the approval of the SCAA.

5.9.2. On completion of these aerodrome works, but at least one month prior to operational use, the aerodrome operator shall submit evidence as required by the SCAA which may include, but are not limited to, safety case, aeronautical studies, site survey reports, computer simulations, tests, demonstrations or inspection reports to the Authority to demonstrate compliance with the STSs.

5.9.3. On the completion of aerodrome works and restoration of normal safety standards to the movement area, the aerodrome operator should cancel any AIP Supplement or NOTAM issued to advise of those works.

5.9.4. An aerodrome operator shall be required to inspect his aerodrome, as circumstances require, to ensure aviation safety during and immediately after any period of construction or repair of an aerodrome facility or equipment that is critical to the safety of aircraft operations, and at any other time when there are conditions at the aerodrome that could affect aviation safety.

Subpart B – Safety management system

Note - The provisions in this subpart is not intended to be a prescriptive formula but serves to provide basic explanation of the essential components of a SMS. An aerodrome operator shall start to develop its own SMS taking into account these regulatory guidelines and any other supplementary material that the SCAA may publish from time to time.

5.10. Introduction

5.10.1. A Safety Management System (SMS) shall be established by an aerodrome operator

for operations and maintenance of its aerodrome.

~~5.10.2. Every aerodrome operator shall, establish and implement an operating safety management system that complies with the standards and requirements specified in this STS at each of his aerodromes.~~

5.10.3. Aerodrome operators shall ensure that service providers and/or contractors operating on their aerodromes (such as ground handling agents, catering companies, companies providing fuel, construction companies, etc.) establishes and implements an SMS that is commensurate to the aerodrome operator's SMS.

5.10.4. The SMS of the aerodrome operator shall:

a) be established in accordance with, at least, the framework and elements contained ~~in this STS and other documents published by ASSI~~ below; and
b) be commensurate with their size and the complexity of its aerodrome and aerodrome operations.

5.10.5. The aerodrome safety performance indicators, alerts and targets shall be established by the aerodrome operator, to be accepted by the Aerodrome Safety & Standards Inspectorate. The aerodrome operator shall review the safety performance indicators, alerts and targets, at least annually and when necessary, propose revision to the indicators, alerts and targets for acceptance by the Aerodrome Safety & Standards Inspectorate.

Note – Guidance on establishing aerodrome safety performance indicators and targets is contained in the ICAO Safety Management Manual (SMM) (Doc 9859).

~~5.10.6. The operator of a certified aerodrome shall establish a safety program, in order to achieve an acceptable level of safety in aerodrome operations and a plan to facilitate SMS implementation.~~

~~5.10.7. The acceptable level(s) of safety to be achieved shall be established by the Safety & Security Regulation Department.~~

~~5.10.8. The operator of a certified aerodrome shall implement a safety management system acceptable to the Aerodrome Safety & Standards Inspectorate that, as minimum:~~

~~i. identifies safety hazards;~~
~~ii. ensures that remedy actions necessary to maintain an acceptable level of safety is implemented;~~
~~iii. provides for continuous monitoring and regular assessment of the safety level achieved; and~~
~~iv. aims to make continuous improvement to the overall level of safety.~~

~~5.10.9. A safety management system shall clearly define lines of safety accountability throughout the aerodrome operator's organisation, including direct accountability for safety on that part of management.~~

~~*Note – Guidance on safety management system is contained in the ICAO Safety Management Manual (Doc 9859), in the Manual on Certification of Aerodromes (Doc 9774), and in ICAO Annex 19.*~~

~~**5.11. General description**~~

~~5.11.1. An SMS is a systematic, explicit and comprehensive process for the management of safety risks, one that integrates operations and technical systems with financial and human resource management. For the purpose of this STS, the SMS applies to all activities related to the requirements for aerodrome certification and for ensuring the continuous safe functioning of aerodrome operations.~~

~~5.11.2. The SMS should be one that permeates throughout the aerodrome operator organization, and be implemented through a continuing safety program based on a coherent policy that leads to well-designed work procedures. The SMS should also extend to include interfaces between the aerodrome operator and its suppliers, sub-contractors, agents, business partners and other relevant external service providers.~~

5.11.3. ~~The SMS should focus principally on the hazards associated with the operation of the aerodrome and their effects upon those activities critical to safety. It should provide for goal setting, planning and measuring performance, and should place emphasis on organizational safety rather than conventional health and safety-at-work concerns. Active monitoring and auditing processes should be applied to validate that the necessary controls identified through the hazard management process are effectively put in place so as to ensure continuing active commitment to safety and to achieve continuous improvement in safety performance.~~

5.11.4. An aerodrome operator's SMS defines how it intends to manage aerodrome safety as an integral part of its business management activities. The SMS should be integrated into the management system of an aerodrome operator's organization and become part of its culture – the way people do their jobs.

5.12. Key components

5.12.1. An SMS framework ~~should~~ shall include, as a minimum, four components and twelve elements as follows:

Safety policy and objectives

(1) Management commitment and responsibility

The aerodrome operator shall define its safety policy. The safety policy shall:

a) reflect organizational commitments regarding safety, including the promotion of a positive safety culture;

b) shall include a clear statement about the provision of the necessary resources for the implementation of the safety policy;
c) include the safety reporting procedures;
d) clearly indicate which types of operational behaviors are unacceptable related to the aerodrome operator's aviation activities and include the circumstances under which disciplinary action would not apply;
e) be signed by the accountable executive of the organization;
f) be communicated, with visible endorsement, throughout the organization; and
g) be periodically reviewed to ensure it remains relevant and appropriate to the organization.

Taking due account of its safety policy, the aerodrome operator shall define safety objectives. The safety objectives shall:

a) form the basis for safety performance monitoring and measurement;
b) reflect the aerodrome operator's commitment to maintain or continuously improve the overall effectiveness of the SMS;
c) be communicated throughout the organization; and
d) be periodically reviewed to ensure they remain relevant and appropriate to the service provider.

Note – Guidance on setting safety objectives is provided in the ICAO Safety Management Manual (SMM) *(Doc 9859).*

(2) Safety accountabilities

The aerodrome operator shall:

a) identify the accountable executive who, irrespective of other functions, has ultimate responsibility and accountability, on behalf of the certified aerodrome, for the implementation and maintenance of an effective SMS, and also for the compliance of the certified aerodrome and its operations with the STSs;
b) clearly define the lines of safety accountability throughout the organization, including a direct accountability for safety on the part of senior management;
c) identify responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organization;
d) document and communicate safety responsibilities, accountabilities and authorities throughout the organization; and
e) include a definition of the levels of management with authority to make decisions regarding safety risk tolerability.

(3) Appointment of key safety personnel

The certified aerodrome shall appoint a safety manager who is responsible for the implementation and maintenance of an effective SMS.

(4) Coordination of emergency response planning

The aerodrome operator shall ensure that the emergency response plan is properly coordinated with the emergency response plans of those organizations it must interface with during the provision of its services.

(5) SMS documentation

The aerodrome operator shall develop an SMS implementation plan, endorsed by senior management of the organization, that defines the organization's approach to the management of safety in a manner that meets the organization's safety objectives.
An aerodrome operator shall develop and maintain an SMS manual that describes its;

a) safety policy and objectives;
b) SMS requirements;
c) SMS processes and procedures;
d) accountabilities, responsibilities and authorities for SMS processes and procedures; and
e) SMS outputs.

As part of the SMS documentation, an aerodrome operator shall develop and maintain a safety management system manual.

Safety risk management

(6) Hazard identification

The aerodrome operator shall develop and maintain a formal process that ensures that hazards associated with aerodrome operations are identified. Hazard identification shall be based on a combination of reactive, proactive, and predictive methods of safety data collection.

(7) Safety risk assessment and mitigation

The aerodrome operator shall develop and maintain a formal process that ensures analysis, assessment and control of the safety risks associated with identified hazards.

Safety assurance

(8) Safety performance monitoring and measurement.

The aerodrome operator shall develop and maintain the means to verify the safety performance of the organization and to validate the effectiveness of safety risk

controls.

The safety performance of the organization shall be verified in reference to the safety performance indicators and safety performance targets of the SMS in support of the organziation's safety objectives.

(9) The management of change

The aerodrome operator shall develop and maintain a formal process to identify changes which may affect the level of safety risk associated with its operations and services and to identify and manage the safety risks that may arise from those changes.

(10) Continuous improvement of the SMS

The aerodrome operator shall monitor and assess the effectiveness of its SMS processes to maintain or continuously improve the overall performance of the SMS.

Safety promotion

(11) Training and education

The aerodrome operator shall develop and maintain a safety training program that ensures that personnel are trained and competent to perform their SMS duties. The scope of the safety training shall be appropriate to each individual's involvement in the SMS.

(12) Safety communication

The aerodrome operator shall develop and maintain formal means for safety communication that:

a) ensures that personnel are aware of the SMS to a degree commensurate with their positions;
b) conveys safety-critical information;
c) explains why particular safety actions are taken to improve safety; and
d) explains why safety procedures are introduced or changed.

~~**5.12.1.1.** Safety policies~~

~~1.1. Management commitment~~

~~1.2. Safety accountability and responsibilities~~

~~1.3. Appointment of key safety personnel~~

~~1.4. Coordination of emergency response planning~~

~~1.5. SMS documentation~~

2. Safety risk management

2.1. Hazard identification

2.2. Safety risk assessment and mitigation

3. Safety assurance

3.1. Safety performance monitoring and measurement

3.2. The management of change

3.3. Continuous improvement of the SMS

4. Safety promotion

4.1. Training and education

4.2. Safety communication

5.12.2. The SMS framework shall include:

1. clearly defined lines of responsibility and accountability throughout the aerodrome operator, including a direct accountability for safety on the part of senior management;

2. a description of the overall philosophies and principles of the aerodrome operator with regard to safety, referred to as the safety policy, signed by the accountable manager;

3. a formal process that ensures that hazards in operations are identified;

4. a formal process that ensures analysis, assessment and mitigation of the safety risks in aerodrome operations;

5. the means to verify the safety performance of the aerodrome operator's organisation in reference to the safety performance indicators and safety performance targets of the safety management system, and to validate the effectiveness of safety risk controls;

6. a formal process to:

i. identify changes within the aerodrome operator's organisation, management system, the aerodrome or its operation which may affect established processes, procedures and services;

ii. describe the arrangements to ensure safety performance before implementing changes; and

iii. eliminate or modify safety risk controls that are no longer needed or effective due to changes in the operational environment;

7. a formal process to review the management system, identify the causes of

~~substandard performance of the safety management system, determine the implications of such substandard performance in operations, and eliminate or mitigate such causes;~~

8. ~~a safety training programme that ensures that personnel involved in the operation, rescue and firefighting, maintenance and management of the aerodrome are trained and competent to perform the safety management system duties;~~

9. ~~formal means for safety communication that ensures that personnel are fully aware of the safety management system, conveys safety critical information, and explains why particular safety actions are taken and why safety procedures are introduced or changed;~~

10. ~~coordination of the safety management system with the aerodrome emergency response plan; and coordination of the aerodrome emergency response plan with the emergency response plans of those organisations it must interface with during the provision of aerodrome services; and~~

11. ~~a formal process to monitor compliance of the organisation with the relevant requirements.~~

Subpart C – Aerodrome accident/incident reporting and investigation procedures

5.13. Aerodrome occurrence reporting

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5.13.3. The definitions for occurrence, accident, serious incident and fatal or serious injury are as follows:

a. Occurrence – See definition under 1.7

b. Accident – See definition under section 1.7

c. Serious incident – See definition under section 1.7 Examples are:

1. A near collision requiring an avoidance maneuver to avoid a collision or an unsafe situation or where an avoidance action would have been appropriate.
2. A controlled flight into terrain only marginally avoided.
3. An aborted take-off on a closed or engaged runway.
4. A take-off from a closed or engaged runway with marginal separation from an obstacle.
5. A landing or attempted landing on a closed or engaged runway.

6. A take-off or landing incident such as undershooting, Overrun or running off the side of runways.
7. A major failure of any navigation aid when a runway is in use.

d. Serious injury – See definition under 1.7

5.13.4. An aerodrome operator shall report to the Authority immediately, when a fuel laboratory test report indicates that a fuel sample taken from the airport fuel storage tank does not meet the aviation fuel specifications agreed between the aerodrome operator and the airport fuel storage and hydrant system operator.

5.13.5. The owner or operator of an aerodrome in Seychelles shall notify the SCAA where the accident or serious incident occurs on or adjacent to his aerodrome.

5.13.6. Information to be provided in the reporting and notification of an occurrence, accident, serious incident or serious injury shall at least include, as far as possible, the following:

a) the date and local time of occurrence;

b) the exact location of the occurrence with reference to some easily defined geographical point;

c) detailed particulars of the parties involved, including the owner, operator, manufacturer, nationality, registration marks, serial numbers, assigned identities of aircraft and equipment;

d) a detailed description of the sequence of events leading up to the incident;

e) the physical characteristics, environment or circumstances of the area in which the incident occurred and an indication of the access difficulties or special requirements to reach the site;

~~f) the identification of the person sending the notice and where the incident occurred, the means by which the SCAA Investigator-in-charge may contact the latter;~~

g) in the case of an aircraft accident, the number of crew members, passengers or other persons respectively killed or seriously injured as a result of the accident; and

h) a description of the follow-up action being taken after the incident has occurred.

5.13.7. An aerodrome operator shall submit monthly safety data in a manner acceptable to the Authority for the following:

a) Aircraft related occurrences;
b) Foreign object debris (FOD) occurrences;
c) Wildlife occurrences;
d) RFFS response time;
e) Vehicles failing to give way to aircraft

5.14. Aerodrome occurrence records

5.14.4. An aerodrome operator shall establish and maintain Aerodrome Occurrence Reports for any accident, serious incident, serious injury or any occurrence or event that has a bearing on the safety of aerodrome operations.

5.14.5. Aerodrome Occurrence Reports ~~should~~ shall be used by an aerodrome operator to monitor and improve the level of operational safety, including reviews of safety standards required.

5.14.6. The aerodrome operator shall, when required by the Aerodrome Safety & Standards Inspectorate, ~~can require the aerodrome operator to~~ produce and provide information contained in the Aerodrome Occurrence Report relating to any safety occurrence or event.

5.15. Aerodrome accident/incident investigations

5.15.4. In the event of an accident or serious incident, an aerodrome operator shall carry out its own investigations. In addition, the aerodrome operator shall, when required by the Aerodrome Safety & Standards Inspectorate, carry out investigations for any other incidents and/or occurrences.

~~5.15.5. The investigations carried out by the aerodrome operator shall be in addition to any investigation carried out by the SCAA.~~

5.15.6. The investigator, or team of investigators, shall be technically competent and shall either possess or have access to the background information, so that the facts and events are interpreted accurately. The investigations shall be a search to understand how the mishap happened, why it occurred, including organizational contributing factors, and to recommend action to prevent a recurrence, and shall not be intended to apportion blame.

5.15.7. The lesson learnt derived from an aerodrome incident/accident investigation shall be disseminated to staff for provide feedback for safety improvement.

5.15.8. The aerodrome operator shall submit the aerodrome accident/incident investigation report to the Aerodrome Safety & Standards Inspectorate within one month of the occurrence of the aerodrome accident/incident. In the event that the full investigation report cannot be completed in one month, an interim report with immediate actions taken to address safety concerns shall be prepared and submitted, and a full report shall be submitted at such time as determined by the Aerodrome Safety & Standards Inspectorate. ~~The Aerodrome Safety & Standards Inspectorate may require the aerodrome operator to produce and provide information contained in the aerodrome accident/incident investigation report relating to any such event.~~

5.15.9. An aerodrome operator shall inspect his aerodrome, as circumstances require, to ensure safety as soon as practicable after any aircraft accident or incident.

…

CHAPTER 6 – AERODROME DATA

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6.7. Strength of pavements [Applicable until 27 November 2024]

6.7. Strength of pavements [Applicable as of 28 November 2024]

6.7.1. The bearing strength of a pavement shall be determined.

6.7.2. The bearing strength of a pavement intended for aircraft of apron (ramp) mass greater than 5 700 kg shall be made available using the aircraft classification ~~number~~ rating – pavement classification ~~number~~ rating (~~ACN- PCN~~ ACR-PCR) method by reporting all of the following information:

a. the pavement classification ~~number~~ rating (~~PCN~~ PCR) and numerical value;

b. pavement type of ~~ACN-PCN~~ ACR-PCR determination;

c. subgrade strength category;

d. maximum allowable tire pressure category or maximum allowable tire pressure value; and

e. evaluation method.

Note – ~~If necessary, PCNs may be published to an accuracy of one- tenth of a whole number~~ Guidance on reporting and publishing of PCRs is contained in the Aerodrome Design Manual (Doc 9157, Part 3).

6.7.3. The pavement classification ~~number~~ rating (~~PCN~~ PCR) reported shall indicate that an aircraft with an aircraft classification ~~number~~ rating (~~ACN~~ ACR) equal to or less than the reported ~~PCN~~ PCR can operate on the pavement subject to any limitation on the tire pressure, or aircraft all-up mass for specified aircraft type(s).

Note – Different ~~PCNs~~ PCRs may be reported if the strength of the pavement is subject to significant seasonal variation.

6.7.4. The ~~ACN~~ ACR of an aircraft shall be determined in accordance with the standard procedures associated with the ~~ACN-PCN~~ ACR-PCR method.

Note – The standard procedures for determining the ~~ACN~~ ACR of an aircraft are given in the ICAO Aerodrome Design Manual, Part 3. For convenience, ~~several aircraft types currently in use have been evaluated on rigid and flexible pavements~~

~~*found on the four subgrade categories in paragraph 6.2.6.6 b) below and the results tabulated in that manual*~~ *dedicated software is available on the ICAO website, for computing any aircraft ACRs at any mass on rigid and flexible pavements for the four standard subgrade strength categories detailed in 6.7.6 b) below*.

6.7.5. For the purposes of determining the ~~ACN~~ ACR, the behavior of a pavement shall be classified as equivalent to a rigid or flexible construction.

6.7.6. Information on pavement type for ~~ACN-PCN~~ ACR-PCR determination, subgrade strength category, maximum allowable tire pressure category and evaluation method shall be reported using the following codes:

a)	*Pavement type for ~~ACN-PCN~~ ACR-PCR determination:*	
		Code
	Rigid pavement	R
	Flexible pavement	F
Note – If the actual construction is composite or non-standard, include a note to that effect (See example 2 below).		
b)	*Subgrade strength category:*	
		Code
	High strength: ~~characterized by K = 150MN/m^3 and representing all K values above 120MN/m^3 for rigid pavements, and by CBR = 15 and representing all CBR values above 13 for flexible pavements.~~ characterized by E=200 MPa, and representing all E values equal to or above 150 MPa for rigid and flexible pavements	A
	Medium strength: ~~characterized by K = 80MN/m^3 and representing a range in K of 60 to 120MN/m^3 for rigid pavements, and by CBR = 10 and representing a range in CBR of 8 to 13 for flexible pavements~~. characterized by E=120 MPa and representing a range in E values equal to or above 100 MPa and strictly less than 150MPa, for rigid and flexible pavements.	B
	Low strength: ~~characterized by K = 40MN/m^3 and representing a range in K of 25 to 60MN/m^3 for rigid pavements, and by CBR = 6 and representing a range in CBR of 4 to 8 for flexible pavements.~~ characterized by E=80 MPa and representing a range in E values equal to or above 60 MPa and strictly less than 100 MPa, for rigid and flexible pavements	C
	Ultra low strength: ~~characterized by K = 20MN/m^3 and representing all K values below 25MN/m^3 for rigid~~	D

	~~*pavements, and by CBR = 3 and representing all CBR values below 4 for flexible pavements.*~~ *characterized by E=50 MPa and representing all E values strictly less than 60 MPa, for rigid and flexible pavements*	
c)	*Maximum allowable tire pressure category:*	
		Code
	High: no pressure limit	W
	Medium: pressure limited to 1.50 Mpa	X
	Low: pressure limited to 1.00 Mpa	Y
	Very low: pressure limited to 0.50 Mpa	Z
d)	*Evaluation method:*	
		Code
	Technical evaluation: representing a specific study of the pavement characteristics ~~and application of pavement behavior technology~~ and the types of aircraft which the pavement is intended to serve.	T
	Using aircraft experience: representing knowledge of the specific type and mass of aircraft satisfactorily being supported under regular use.	U

Note – The following examples illustrate how pavement strength data are reported under the ~~ACN-PCN~~ ACR-PCR method. Further guidance on this topic is contained in the Aerodrome Design Manual (Doc 9157), Part 3 - Pavements.

Example 1 – If the bearing strength of a rigid pavement, resting on a medium strength subgrade, has been assessed by technical evaluation to be ~~PCN 80~~ PCR 760 and there is not tire pressure limitation, then the reported information would be:

~~PCN 80~~ PCR 760/ R / B / W / T

Example 2 – If the bearing strength of a composite pavement, behaving like a flexible pavement and resting on a high strength subgrade, has been assessed using aircraft experience to be ~~PCN 50~~ PCR 550 and the maximum tire pressure allowable is ~~1.00~~ 1.25 MPa, then the reported information would be:

~~PCN 50~~ PCR 550/ F / A / Y / U

Note – Composite construction.

~~Example 3 – If the bearing strength of a flexible pavement, resting on a medium strength subgrade, has been assessed by technical evaluation to be PCN 40 and the maximum allowable tire pressure is 0.80 MPa, then the reported information~~

~~would be:~~

~~PCN 40 / F / B / 0.80 MPa / T~~

~~Example 4 – If a pavement is subject to a B747-400 all-up mass limitation of 390 000 kg, then the reported information should include the following note:~~
~~*Note – The reported PCN is subject to a B747-400 all-up mass limitation of 390 000 kg.*~~

6.7.7. **Recommendation -** Criteria should be established to regulate the use of a pavement by an aircraft with an ~~ACN~~ ACR higher than the ~~PCN~~ PCR reported for that pavement in accordance with ~~paragraphs~~ ~~6.2.6.2~~ 6.7.2. and 6.7.3. ~~6.2.6.3~~.

Note – ICAO Annex 14 Vol. I, Attachment A, Section 20 details a simple method for regulating overload operations while the ICAO Aerodrome Design Manual, Part 3 includes the descriptions of more detailed procedures for evaluation of pavement sand their suitability for restricted overload operations.

6.7.8. The bearing strength of a pavement intended for aircraft of apron (ramp) mass equal to or less than 5 700 kg shall be made available by reporting the following information:

a) maximum allowable aircraft mass; and
b) maximum allowable tire pressure.

Example: ~~4 000 kg/0.50~~ 4800kg/0.60 MPa.

…

6.10. Condition of the movement area and related facilities

6.10.1. Information on the condition of the movement area and the operational status of related facilities shall be provided to the Aeronautical Information Services, and similar information of operational significance to the air traffic service units, to enable those units to provide the necessary information to arriving and departing aircraft. The information shall be kept up to date and changes in conditions reported without delay.

Note – The nature, format and conditions of the information to be provided are specified in the PANS-AIM (Doc 10066) and the PANS-ATM (Doc 4444). Specific procedures pertaining to works in progress on the movement area and to the reporting of such works are specified in ASP PANS-Aerodromes.

6.10.2. The condition of the movement area and the operational status of related facilities shall be monitored and reports on matters of operational significance or affecting aircraft performance given, particularly in respect of the following:

a) construction or maintenance work;

b) rough or broken surfaces on a runway, taxiway or an apron;

c) water on a runway, a taxiway or an apron;

d) other temporary hazards, including parked aircraft;

e) failure or irregular operation of part or all of the aerodrome visual aids; and

f) failure of the normal or secondary power supply.

Note 1 – ~~As of 04 November 2021,~~ other contaminants may include mud, dust, sand, volcanic ash, oil and rubber. Procedures for monitoring and reporting the conditions of the movement area are included in ASP PANS-Aerodromes.

Note 2 - ~~As of 04 November 2021,~~ the Aeroplane Performance Manual (ICAO Doc 10064) provides guidance on aircraft performance calculation requirements regarding the description of runway surface conditions in 2.9.2 c), e) and f).

Note 3 - ~~As of 04 November 2021,~~ origin and evolution of data, assessment process and the procedures are prescribed in ASP PANS-Aerodromes. These procedures are intended to fulfil the requirements to achieve the desired level of safety for aeroplane operations prescribed by CAD-OPS P8, CAD-AIRW/10 and CAD-AIRW/11 and to provide the information fulfilling the syntax requirements for dissemination specified in STS-AIS/ACS and the PANS-ATM (Doc 4444).

~~6.10.3. Until 03 November 2021, to facilitate compliance with 6.10.1 and 6.10.2, inspections of the movement area shall be carried out each day at least once where the code number is 1 or 2 and at least twice where the code number is 3 or 4.~~

~~*Note – Guidance on carrying out daily inspections of the movement area is given in the ICAO Airport Services Manual, Part 8 and in the Manual of Surface Movement Guidance and Control Systems (SMGCS).*~~

6.10.3 ~~As of 4 November 2021,~~ to facilitate compliance with 6.10.1 and 6.10.2, the following inspections shall be carried out each day:

a. for the movement area, at least once where the aerodrome reference code number is 1 or 2 and at least twice where the aerodrome reference code number is 3 or 4; and

b. for the runway(s), inspections in addition to a. whenever the runway surface conditions may have changed significantly due to meteorological conditions.

Note 1 - Procedures on carrying out daily inspections of the movement area are given in ASP PANS-Aerodromes. Further guidance is available in the Airport Services Manual (Doc 9137), Part 8, in the Manual of Surface Movement Guidance

and Control Systems (SMGCS) (Doc 9476) and in the Advanced Surface Movement Guidance and Control Systems (A-SMGCS) Manual (Doc 9830).

Note 2 - The ASP PANS-Aerodromes contains clarifications on the scope of a significant change in the runway surface conditions.

6.10.4. Personnel assessing and reporting runway surface conditions required in 6.10.2 and 6.10.3 shall be trained and competent to perform their duties.

Note 1 – Guidance on training of personnel is given in ICAO Annex 14 Attachment A, Section 6 [applicable 04 November 2021].

Note 2 – Information on training for personnel assessing and reporting runway surface conditions is available in ASP PANS-Aerodromes.

~~**6.11. Water on a runway [applicable until 03 November 2021]**~~

~~6.11.1. **Recommendation** – Whenever water is present on a runway, a description of the runway surface conditions, including the possible assessment of water depth, where applicable, should be made available using the following terms:~~

~~DAMP~~	~~the surface shows a change of colour due to moisture.~~
~~WET~~	~~the surface is soaked but there is no stagnant water.~~
~~STANDING WATER~~	~~for aeroplane performance purposes, a runway where more than 25 per cent of the runway surface are (whether in isolated areas or not) within the required length and width being used is covered by water more than 3mm deep.~~

~~6.11.2. Information that a runway or portion thereof may be slippery when wet shall be made available.~~

~~*Note – The determination that a runway or portion thereof may be slippery when wet is not based solely on the friction measurement obtained using a continuous friction measuring device. Supplementary tools to undertake this assessment are described in the Airport Services Manual (Doc 9137), Part 2.*~~

~~6.11.3. Notification shall be given to aerodrome users when the friction level of a runway or portion thereof is less than that specified in paragraph 14.3.4.~~

~~*Note – Guidance on conducting a runway surface friction characteristics evaluation programme that includes determining and expressing the minimum friction level is provided in ICAO Annex 14, Vol. I, Attachment A, Section 7.*~~

~~6.11.4. Information on the minimum friction level specified in this STS for reporting slippery runway conditions and the type of friction measuring device used shall be made available.~~

~~6.11.5. **Recommendation** – When it is suspected that a runway may become slippery under unusual conditions, then additional measurements should be made when such conditions occur, and information on the runway surface friction characteristics made available when these additional measurements shows that the runway or a portion thereof has become slippery.~~

~~6.11.6. Not used.~~

~~6.11.7. Not used.~~

6.11.8. ~~Not used~~.

6.11 Runway surface condition(s) for use in the runway condition report ~~[applicable 04 November 2021]~~

…

CHAPTER 7 – PHYSICAL CHARACTERISTICS

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7.13 Holding bays, runway-holding positions, intermediate holding positions and road-holding positions

…

Location

7.13.6 The distance between a holding bay, runway-holding position established at a taxiway/runway intersection or road-holding position and the centre line of a runway shall be in accordance with Table 7-2 ~~of this Manual~~ and, in the case of a precision approach runway, such that a holding aircraft or vehicle will not interfere with the operation of radio navigation aids or penetrate the inner transitional surface.

Note – Guidance for the positioning of runway-holding positions is given in ICAO Aerodrome Design Manual (Doc 9157), Part 2.

…

CHAPTER 13 – AERODROME OPERATIONAL SERVICES, EQUIPMENT AND INSTALLATIONS

…

Subpart B – Provision of emergency services

13.2 Aerodrome emergency planning

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13.2.3. The plan shall coordinate the response or participation of all existing agencies which, in the opinion of the ~~Aerodrome Safety and Standards Inspectorate~~ aerodrome operator, could be of assistance in responding to an emergency.

Note 1 — Examples of agencies are:

- *on the aerodrome: air traffic control unit, rescue and firefighting services, aerodrome administration, medical and ambulance services, aircraft operators, security services, and police;*
- *off the aerodrome: fire departments, police, health authorities (including medical, ambulance, hospitals and public health services), military, and harbour patrol or coast guard.*

Note 2 – Public health services include planning to minimize adverse effects to the community from health-related events and deal with population health issues rather than provision of health services to individuals.

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13.3. Rescue and firefighting

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13.3.1. Rescue and firefighting equipment and services shall be provided at an aerodrome when serving commercial air transport operations.

…

13.3.47. The aerodrome operator shall ensure that rescue and firefighting personnel potentially required to act in aviation emergencies demonstrate their physical and medical fitness to execute their functions satisfactorily, taking into account the type of activity.

Note - The key fitness components for RFF are generally aerobic fitness, anaerobic fitness, flexibility and medical fitness. Optimum physical fitness and medical fitness for RFF personnel would mean that a firefighter is able to carry out RFF activities safely, successfully and without undue fatigue.

…

13.14. Aviation fuel quality

Note – The aerodrome operator may satisfy itself on the provisions below either by itself or through arrangements with third parties. Any arrangements with third parties must be documented.

13.14.1. The aerodrome operator shall satisfy themselves that the aviation fuel provided at its aerodrome is

a) of the fuel specifications as agreed between the aerodrome operator and the

airport fuel storage and hydrant system operator/into-plane service provider; and

b) uncontaminated.

13.14.2. The aerodrome operator shall coordinate with the airport fuel storage and hydrant system operator or into-plane service provider to ensure that aviation fuel installations on the aerodrome are

a) commissioned prior to operation; and
b) properly maintained.

13.14.3. The aerodrome operator shall satisfy themselves that an organization that carries out aircraft refueling or maintains the aviation fuel installation has the capability and adequate resources including appropriately trained staff and takes necessary precautions for prevention of fire.

13.14.4. The aerodrome operator shall coordinate with the airport fuel storage and hydrant system operator to ensure that fuel quality checks are conducted, and the fuel quality satisfies aviation fuel industry standards prior to operating any repaired or modified main hydrant pipeline fuel installations in the airside.

…

CHAPTER 14 – AERODROME MAINTENANCE

…

Subpart B – Provision of aerodrome maintenance

…

14.3. Pavements

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14.3.3. A paved runway shall be maintained in a condition so as to provide surface friction characteristics at or above the minimum friction level specified in Table 14-1.

Note - Assessment, Measurement and Reporting of Runway Surface Conditions *(Cir 329) contains further information on this subject*.

14.3.4. Runway surface friction characteristics for maintenance purposes shall be periodically measured with a continuous friction measuring device using self-wetting features and documented. The frequency of these measurements shall be sufficient to determine the trend of the surface friction characteristics of the runway.

Note 1 – Guidance on evaluating the runway surface friction characteristics is provided in Assessment, Measurement and Reporting of Runway Surface Conditions *(Cir 329).*

Note 2 - The objective of 14.3.3 to 14.3.7 and 14.3.9 is to ensure that the surface

friction characteristics for the entire runway remain at or above a minimum friction level specified in Table 14-1.

14.3.5. When runway surface friction measurements are made for maintenance purposes using a self-wetting continuous friction measuring device, the performance of the device shall meet the criteria stated in ICAO Airport Service Manual (Doc 9137), Part 2.

14.3.6. Personnel measuring runway surface friction required in 14.3.5 shall be trained to fulfil their duties.

~~**Runway friction measurement**~~

~~14.3.3. Measurements of the friction characteristics of a runway surface shall be made periodically with a continuous friction measuring device using self-wetting features.~~

~~Determination and reporting of information regarding runway friction characteristics, shall be done annually (i.e.) a period of 12 months.~~

~~*Note — Guidance on evaluating the friction characteristics of a runway is provided in ICAO Annex 14 Vol. I, Attachment A, Section 7. Additional guidance is included in the ICAO Airport Services Manual, Part 2.*~~

~~14.3.4. An aerodrome operator shall specify two friction levels as follows:~~

~~a) a maintenance friction level below which corrective maintenance action should be initiated; and~~

~~b) a minimum friction level below which information that a runway may be slippery when wet should be made available.~~

~~14.3.5. An aerodrome operator shall, furthermore, establish criteria for the friction characteristics of new or resurfaced runway surface.~~

14.3.6. ~~**Recommendation** — An aerodrome operator should comply with the guidelines provided in Table 14-1 on establishing the design objectives for new runway surfaces and maintenance planning and minimum friction levels for runway surfaces in use.~~

14.3.7. Corrective maintenance action shall be taken ~~when~~ to prevent the runway surface friction characteristics for either the entire runway or a portion thereof from falling below a minimum friction level specified in Table 14-1.

Note — A portion of runway in the order of 100 m long may be considered significant for maintenance or reporting action.

~~14.3.8. **Recommendation** — Corrective maintenance action should be considered when the friction characteristics for either the entire runway or a portion thereof are below a~~

~~maintenance planning level specified in Table 14-1l.~~

Table 14-1 – Guidelines for establishing the design objective, maintenance planning level and minimum friction levels of runways in use

Test equipment	Test tire		Test speed (km/h)	Test water depth (mm)	Design objective for new surface	Maintenance planning level	Minimum friction level
	Type	Pressure (kPa)					
(1)	(2)		(3)	(4)	(5)	(6)	(7)
Mu-meter Trailer	A	70	65	1.0	0.72	0.52	0.42
	A	70	95	1.0	0.66	0.38	0.26
Skiddometer Trailer	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.47	0.34
Surface Friction Tester Vehicle	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.47	0.34
Runway Friction Tester Vehicle	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.54	0.41
TATRA Friction Tester Vehicle	B	210	65	1.0	0.76	0.57	0.48
	B	210	95	1.0	0.67	0.52	0.42
GRIPTESTER Trailer	C	140	65	1.0	0.74	0.53	0.43
	C	140	95	1.0	0.64	0.36	0.24

14.3.9. **Recommendation** — ~~When there is reason to believe that the drainage characteristics of a runway, or portions thereof, are poor due to slopes or depressions, then the runway friction characteristics should be assessed under natural or simulated conditions that are representative of local rain and corrective maintenance action should be taken as necessary~~ The runway surface should be visually assessed, as necessary, under natural or simulated rain conditions for ponding or poor drainage and where required, corrective maintenance action taken.

14.3.10. **Recommendation —** When a taxiway is used by turbine-engine aeroplanes, the surface of the taxiway shoulders should be maintained so as to be free of any loose stones or other objects that could be ingested by the aeroplane engines.
Note — Guidance on this subject is given in the ICAO Aerodrome Design Manual (Doc 9157), Part 2.

14.4. Removal of contaminants

14.4.3. ~~The surface of a paved runway shall be maintained in a condition so as to provide good friction characteristics and low rolling resistance.~~ Standing water, mud, dust, sand, oil, rubber deposits and other contaminants shall be removed from the surface of runway in use as rapidly and completely as possible to minimize accumulation.

14.4.4. Intentionally left blank.
14.4.5. Intentionally left blank.
14.4.6. Intentionally left blank.
14.4.7. Intentionally left blank.

14.4.8. Chemicals which may have harmful effects on aircraft or pavements or chemicals which may have toxic effects on the aerodrome environment, shall not be used.

…

APPENDIX E

PARTICULARS TO BE INCLUDED IN AN AERODROME MANUAL

PART 1 – GENERAL

General information, including the following:

a) table of contents;

b) declaration of compliance signed by the accountable executive;

c) a statement signed by the accountable executive that the aerodrome manual contains operational instructions that are to be complied with by the relevant personnel;

d) a list and brief description of the various parts, their contents, applicability, and use;

e) explanations, abbreviations, and definitions of terms needed for the use of the manual;

f) system of amendment and revision which should include:

- details of the person(s) responsible for the issuance and insertion of amendments and revisions;
- a record of amendments and revisions with insertion dates, and effective dates;
- a statement that handwritten amendments and revisions are not permitted, except in situations requiring immediate amendment, or revision in the interest of safety;
- a description of the system for the annotation of pages, or paragraphs and their effective dates;
- a list of effective pages or paragraphs;
- annotation of changes (in the text and, as far as practicable, on charts and diagrams);

- temporary revisions; and

- description of the distribution system and a distribution list for the aerodrome manual, its amendments, and revisions.

g) purpose and scope of the Aerodrome Manual;

h) the legal requirement for an Aerodrome Certificate and an Aerodrome Manual as prescribed in the national regulations;

i) conditions for use of the aerodrome – a statement to indicate that the aerodrome shall at all times when it is available for the take-off and landing of aircraft, be so available to all persons on equal terms and conditions;

j) the available aeronautical information services and procedures for timely and accurate effecting promulgation of AIP Amendment, AIP Supplement or NOTAM;

k) the system for recording aircraft movements; ~~and~~

l) a description of the intended operations, including;

1. the critical aeroplanes the aerodrome is intended to serve;
2. the category of runway(s) provided (non-instrument, instrument including non-precision and precision);
3. the different runways and their associated levels of service;
4. the nature of aviation activities (commercial, passenger, air transport, cargo, aerial work, general aviation);
5. the type of traffic permitted to use the aerodrome (international/national, IFR/VFR, scheduled/nonscheduled); and
6. the minimum RVR that aerodrome operations can be permitted;

m) description of any cases of exemptions or derogations and operating limitations, including details of their validity and references to the related documents (including any safety assessment); and

n) obligations of the aerodrome operator, rights of the SCAA and guidance to staff on how to facilitate audits/inspections by SCAA personnel.

PART 2 – PARTICULARS OF THE AERODROME SITE

General information, including the following:

a) a plan(s) of the aerodrome showing the main aerodrome facilities for the operation of the aerodrome including, particularly, the location of each wind direction indicator, aerodrome reference point, layout of runways, taxiways and aprons, aerodrome visual and non-visual aids;

b) a plan of the aerodrome showing the aerodrome boundaries;

c) a plan(s) showing the distance of the aerodrome from the city or other populous area,

and the location of any aerodrome facilities and equipment outside the boundaries of the aerodrome; and

d) particulars of the title of the aerodrome site. If the boundaries of the aerodrome are not defined in the title documents particulars of the title to, or interest in, the property on which the aerodrome is located and a plan showing the boundaries and position of the aerodrome.

PART 3 – PARTICULARS OF THE AERODROME REQUIRED TO BE REPORTED TO THE AERONAUTICAL INFORMATION SERVICE (AIS)

3.1 GENERAL INFORMATION

a) the name of the aerodrome;

b) the location of the aerodrome;

c) the geographical coordinates of the aerodrome reference point determined in terms of the World Geodetic System – 1984 (WGS-84) reference datum;

d) the aerodrome elevation and geoid undulation;

e) the elevation of each threshold and geoid undulation, the elevation of the runway end and any significant high and low points along the runway, and the highest elevation of the touchdown zone of a precision approach runway;

f) the aerodrome reference temperature;

g) details of the aerodrome beacon; and

h) the name of the aerodrome operator and the address and telephone number at which the aerodrome operator may be contacted at all times.

3.2 AERODROME DIMENSIONS AND RELATED INFORMATION

General information, including the following:

a) runway – true bearing, designation number, length, width, displaced threshold location, slope, surface type, type of runway and, for a precision approach runway, the existence of an obstacle free zone;

b) length, width and surface type of strip, runway end safety areas, stopways;

c) length, width and surface type of taxiways;

d) apron surface type and aircraft stands;

e) clearway length and ground profile;

f) visual aids for approach procedures, *viz*, approach lighting type and visual approach

slope indicator system (PAPI/APAPI and T-VASIS/AT-VASIS); marking and lighting of runways, taxiways, and aprons; other visual guidance and control aids on taxiways (including runway holding positions, intermediate holding positions and stop bars) and aprons, location and type of visual docking guidance system; availability of standby power for lighting.

g) the location and radio frequency of VOR aerodrome checkpoints;

h) the location and designation of standard taxi routes;

i) the geographical coordinates of each threshold;

j) the geographical coordinates of appropriate taxiway centre line points;

k) the geographical coordinates of each aircraft stand;

l) the geographical coordinates and the top elevation of significant obstacles in the approach and take-off areas, in the circling area and in the vicinity of the aerodrome. (This information may best be shown in the form of charts such as those required for the preparation of aeronautical information publications, as specified in Annexes 4 and 15 to the Convention);

m) pavement surface type and bearing strength using the Aircraft Classification Number – Pavement Classification Number (CAN-PCN) method;

n) one or more pre-flight altimeter check locations established on and apron and their elevation;

o) declared distances: take-off run available (TORA), take-off distance available (TODA), accelerate-stop distance available (ASDA), landing distance available (LDA);

p) disabled aircraft removal plan: the telephone/telex/facsimile numbers and e- mail address of the aerodrome coordinator for the removal of a disabled aircraft on or adjacent to the movement area, information on the capability to remove a disabled aircraft, expressed in terms of the largest type of aircraft which the aerodrome is equipped to remove; ~~and~~

q) rescue and fire-fighting: the level of protection provided, expressed in terms of the category of the rescue and fire-fighting services, which should be in accordance with the longest aeroplane normally using the aerodrome and the type and amounts of extinguishing agents normally available at the aerodrome;

r) exemptions or derogations from the applicable requirements and limitations.

Note – The accuracy of the information in Part 3 is critical to aircraft safety. Information requiring engineering survey and assessment should be gathered or verified by qualified technical persons.

PART 4 – PARTICULARS OF THE AERODROME OPERATING PROCEDURES AND SAFETY MEASURES

4.1 AERODROME REPORTING

Particulars of the procedures for reporting any changes to the aerodrome information set out in the AIP and procedures for requesting the issue of NOTAMS, including the following:

a) arrangement for reporting any changes to the SCAA and recording the reporting of changes during and outside the normal hours of aerodrome operations;

b) the names and roles of persons responsible for notifying the changes, and their telephone numbers during and outside the normal hours of aerodrome operations; and

c) the address and telephone numbers, as provided by the SCAA, of the place where changes are to be reported to the SCAA.

4.2 ACCESS TO THE AERODROME MOVEMENT AREA

Particulars of the procedures that have been developed and are to be followed in coordination with the agency responsible for preventing unlawful interferences in civil aviation at the aerodrome and for preventing unauthorized entry of persons, vehicles, equipment, animals or other things into the *movement area*, including the following:

a) the role of the aerodrome operator, the aircraft operator, aerodrome fixed- base operators, the aerodrome security entity, the SCAA and other government departments, as applicable; and

b) the names and roles of the personnel responsible for controlling access to the aerodrome, and the telephone numbers for contacting them during and after working hours.

4.3 AERODROME EMERGENCY PLAN

Particulars of the aerodrome emergency plan, including the following:

a) plans for dealing with emergencies occurring at the aerodrome or in its vicinity, including the malfunction of aircraft in flight; structural fires; sabotage, including bomb threats (aircraft or structure); unlawful seizure of aircraft; and incidents on the airport covering “during the emergency” and “after the emergency” considerations;

b) details of test for aerodrome facilities and equipment to be used in emergencies, including the frequency of those tests;

c) details of exercises to test emergency plans, including the frequency of those exercises;

d) a list of organizations, agencies and persons of authority, both on- and off- airport, for site roles; their telephone and facsimile numbers, e-mail and SITA addresses and the

radio frequencies of their offices;

e) the establishment of an aerodrome emergency committee to organize training and other preparations for dealing with emergencies; and

f) the appointment of an on-scene commander for the overall emergency operation.

4.4 RESCUE AND FIRE-FIGHTING

Particulars of the facilities, equipment, personnel and procedures for meeting the rescue and fire-fighting requirements, including the names and roles of the persons responsible for dealing with the rescue and fire-fighting services at the aerodrome.

Note – This subject should also be covered in appropriate detail in the aerodrome emergency plan.

4.5 INSPECTION OF THE AERODROME MOVEMENT AREA AND OBSTACLE LIMITATION SURFACE BY THE AERODROME OPERATOR

Particulars of the procedures for the inspection of the aerodrome movement area and obstacle limitation surfaces, including the following:

a) arrangement for carrying out inspections, including runway friction and water-depth measurements on runways and taxiways, during and outside the normal hours of aerodrome operations;

b) arrangement and means of communicating with the aerodrome air traffic control unit during an inspection;

c) arrangements for keeping an inspection logbook, and the location of the logbook;

d) details of inspection intervals and times;

e) inspection checklist;

f) arrangement for reporting the results of inspections and for taking prompt follow-up actions to ensure correction of unsafe conditions; and

g) the names and roles of persons responsible for carrying out inspections, and their telephone number during and after working hours.

4.6 VISUAL AIDS AND AERODROME ELECTRICAL SYSTEMS

Particulars of the procedures for the inspection and maintenance of aeronautical lights (including obstacle lighting), signs, markers and aerodrome electrical systems, including the following:

a) arrangement for carrying out inspections during and outside the normal hours of aerodrome operation, and the checklist for such inspection;

b) arrangements for recording the results of inspections and for taking follow- up action to correct deficiencies;

c) arrangements for carrying out routine maintenance and emergency maintenance;

d) arrangements for secondary power supplies, if any, and, if applicable, the particulars of any other method of dealing with partial or total system failure; and

e) the names and roles of the persons responsible for the inspection and maintenance of the lighting, and the telephone numbers for contacting those persons during and after working hours.

4.7 MAINTENANCE OF THE MOVEMENT AREA

Particulars of the facilities and procedures for the maintenance of the movement area, including:

a) arrangements for maintaining the paved areas;

b) arrangements for maintaining the unpaved runways and taxiways;

c) arrangements for maintaining the runway and taxiway strips; and

d) arrangements for the maintenance of aerodrome drainage.

4.8 AERODROME WORK SAFETY

Particulars of the procedures for planning and carrying out construction and maintenance work safely (including work that may have to be carried out at short notice) on or in the vicinity of the movement area which may extend above an obstacle limitation surface, including the following:

a) arrangements for communicating with the aerodrome air traffic control unit during the progress of such work;

b) the names, telephone numbers and roles of the persons and organizations responsible for planning and carrying out the work, and arrangements for contacting those persons and organizations at all times;

c) the names and telephone numbers, during and after working hours, of the aerodrome fixed-based operators, ground handling agents and aircraft operators who are to be notified of the work.

d) a distribution list for work plans, if required.

4.9 APRON MANAGEMENT

Particulars of the apron management procedures, including the following:

a) arrangements between air traffic control and the apron management units;

b) arrangements for allocating aircraft parking positions;

c) arrangements for initiating engine start and ensuring clearance of aircraft push-back;

d) marshaling service; and

e) leader (follow-me van) service.

4.10 APRON SAFETY MANAGEMENT

Procedures to ensure apron safety, including:

a) protection from jet blasts;

b) enforcement of safety precautions during aircraft refuelling operations including specifying the type and size of fire extinguishers at suitable intervals along the length of the apron;

c) apron sweeping;

d) apron cleaning;

e) arrangements for reporting incidents and accidents on an apron; ~~and~~

f) arrangements for auditing the safety compliance of all personnel working on the apron;

g) management of safety of ground handling operations which include, but are not limited to the following:

1. operation of ground support equipment associated with aircraft handling and loading;
2. aircraft fuelling;
3. aircraft pushback;
4. aircraft powerback;
5. aircraft towing;
2. aircraft power-in arrival and power-out departure; and
3. aircraft marshalling.

4.11 AIRSIDE VEHICLE CONTROL

Particulars of the procedure for the control of surface vehicles on or in the vicinity of the movement area, including the following:

a) details of the application traffic rules (including speed limits and the means of enforcing the rules); and

b) the method of issuing driving permits for operating vehicles in the movement area.

4.12 WILDLIFE HAZARD MANAGEMENT

Particulars of the procedures to deal with the danger posed to aircraft operations by the presence of bird or mammals in the aerodrome flight pattern or movement area, including the following:

a) arrangements for assessing wildlife hazards;

b) arrangements for implementing wildlife control programs; and

c) the names and roles of the persons responsible for dealing with wildlife hazards, and their telephone numbers during and after working hours.

4.13 OBSTACLE CONTROL

Particulars setting out the procedures for:

a) monitoring the obstacle limitation surfaces and Type A Chart for obstacle in the take-off surface;

b) controlling obstacles within the authority of the operator;

c) monitoring the height of buildings or structures within the boundaries of the obstacle limitation surfaces;

d) controlling new developments in the vicinity of aerodromes; and

e) notifying the CAA of the nature and location of obstacles and any subsequent addition or removal of obstacles for action as necessary, including amendment of the AIS publications.

4.14 REMOVAL OF DISABLED AIRCRAFT

Particulars of the procedures for removing a disabled aircraft on or adjacent to the movement area, including the following:

a) the roles of the aerodrome operator and the holder of the aircraft certificate of registration;

b) arrangements for notifying the holder of the certificate of registration;

c) arrangements for liaising with the aerodrome air traffic control unit;

d) arrangements for obtaining equipment and personnel to remove the disabled aircraft; and

e) the names, role and telephone numbers of persons responsible for arranging for the removal of disabled aircraft.

4.15 HANDLING OF HAZARDOUS MATERIALS

Particulars of the procedures for the safe handling and storage of hazardous material on the aerodrome, including the following:

a) arrangements for special areas on the aerodrome to be set up for the storage of inflammable liquids (including aviation fuels) and any other hazardous materials; and

b) the method to be followed for the delivery, storage, dispensing and handling of hazardous materials.

Note – Hazardous materials include inflammable liquids and solid, corrosive liquids, compressed gases and magnetized or radioactive materials. Arrangements for dealing with the accidental spillage of hazardous materials should be included in the aerodrome emergency plan

4.16 LOW-VISIBILITY OPERATIONS

Particulars of procedures to be introduced for low-visibility operations, including the measurement and reporting of runway visual range as and when required, and the names and telephone numbers, during and after working hours, of the persons responsible for measuring the runway visual range.

4.17 PROTECTION OF SITES FOR RADAR AND NAVIGATIONAL AIDS

Particulars of the procedures for the protection of sites for radar and radio navigational aids located on the aerodrome to ensure that their performance will not be degraded, including the following:

a) arrangements for the control of activities in the vicinity of radar and navaids installations;

b) arrangements for ground maintenance in the vicinity of these installations; and

c) arrangements for the supply and installation of signs warning hazardous microwave radiation.

4.18 RUNWAY INCURSION PREVENTION

Particulars of the facilities, equipment and procedures in place to prevent runway incursion, taking account of different traffic intensities and visibility conditions, including the following:

a) integration of facilities, equipment, markings, lights and signs as a whole in the runway incursion prevention plan;
b) management of the related as-built drawings;
c) maintenance of the facilities, equipment, markings, lights and signs to ensure reliability and availability.

4.19 HAZARDOUS METEOROLOGICAL CONDITIONS

Particulars of the procedures to deal with hazardous meteorological conditions, include the following:

a) the role of the aerodrome operator, the aircraft operator, the aerodrome air traffic control unit, the ground handling service providers and other relevant stakeholders, as applicable; and
b) b) the names and roles of the personnel responsible for dealing with hazardous meteorological conditions, and the telephone numbers for contacting them during and after working hours.

4.20 AVIATION FUEL QUALITY AT AERODROMES

Particulars of the procedures to deal with aviation fuel quality at aerodromes.

Note 1 – In writing the procedures for each category, clear and precise information should be included on:

- *when, or in what circumstances, an operating procedure is to be activated*
- *how an operating procedure is to be activated;*
- *actions to be taken;*
- *the persons who are to carry out the actions; and*
- *the equipment necessary for carrying out the actions, and access to such equipment.*

Note 2 – If any of the procedures specified above are not relevant or applicable, the reason should be given.

PART 5 – DETAILS OF THE AERODROME ADMINISTRATION AND SAFETY MANAGEMENT SYSTEM

AERODROME ADMINISTRATION

Particulars of the aerodrome administration, including the following:

a) an aerodrome organizational chart showing the names and positions of key personnel, including their responsibilities;

b) the name, position and telephone number of the person who has overall responsibility for aerodrome safety; ~~and~~

c) airport committees;

d) particulars of staff training and competency, including the specifications of staff qualifications and experience, training and programme for upgrading of skills provided to staff on safety-related duties, and where necessary, the certification system for testing their competency; and

e) responsibilities attributed to other aerodrome stakeholders.

SAFETY MANAGEMENT SYSTEM (SMS)

Particulars of the safety management system established for ensuring compliance with all safety requirements and achieving continuous improvement in safety performance, the essential features being:

a) the safety policy, insofar as applicable, on the safety management process and its relation to the operational and maintenance process;

b) the structure or organization of the SMS, including staffing and the assignment of individual and group responsibilities for safety issues;

c) SMS strategy and planning, such as setting safety performance target, allocating priorities for implementing safety initiatives and providing a framework for controlling the risks to as low a level as is reasonably practicable keeping always in view the requirements of the ~~Standards and Recommended Practices in Volume I of Annex 14 to the Convention on International Civil Aviation, and the national regulations, standards, rules or orders~~ Civil Aviation (Safety) Regulations, 2017, Seychelles Technical Standards – Aerodromes, and other publications by the SCAA.

d) SMS implementation, including facilities, methods and procedures for the effective communication of safety messages and the enforcement of safety requirements;

e) a system for the implementation of, and action on, critical safety areas which require a higher level of safety management integrity (safety measures programs);

f) measures for safety promotion and accident prevention and a system for risk control involving analysis and handling of accidents, incidents, complaints, defects, faults, discrepancies and failures, and continuing safety monitoring;

g) the internal safety audit and review system detailing the systems and programs for quality control of safety;

h) the system for documenting all safety-related airport facilities as well as airport

operational and maintenance records, including information on the design and construction of aircraft pavements and aerodrome lighting. The system should enable easy retrieval of record including charts

i) staff training and competency, including the review and evaluation of the adequacy of training provided to staff on safety-related duties and of the certification system for testing their competency; and

j) the incorporation and enforcement of safety-related clauses in the contracts for construction work at the aerodrome.

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~~APPENDIX H~~

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~~APPENDIX I~~
