



**Notice of Proposed Rule Making
NPRM 16-22
1 December 2016**

**Part 100
Safety Management Systems**

**Docket CAR/16/100/01
2016-2017 Rules Review**

Background to the Civil Aviation Rules

The Civil Aviation Rules establish the minimum regulatory safety boundary for participants to gain entry into, operate within, and exit the Papua New Guinea civil aviation system. The Rules are structured in a manner similar to the Civil Aviation Rules of New Zealand and the Federal Aviation Regulations of the USA. Where practicable the Rules also align with the regulatory code of the Civil Aviation Safety Authority of Australia.

Rules are divided into Parts and each Part contains a series of individual rules which relate to a particular aviation activity. Advisory Circulars accompany many rule Parts and contain information about standards, practices and procedures that the Director has established to be an Acceptable Means of Compliance (AMC) with the associated rule. An Advisory Circular may also contain guidance material (GM) to facilitate compliance with the rule requirements.

The objective of the Civil Aviation Rules system is to strike a balance of responsibility between, on the one hand, the State and regulatory authority, the Civil Aviation Safety Authority of PNG (CASA PNG) and, on the other hand those who provide services and exercise privileges in the civil aviation system. This balance must enable the State and regulatory authority to set standards for, and monitor performance of aviation participants whilst providing the maximum flexibility for the participants to develop their own means of compliance within the safety boundary.

Section 45 of the Civil Aviation Act 2000 (referred to hereafter as the Act) prescribes general requirements for participants in the civil aviation system and requires, amongst other things, participants to carry out their activities safely and in accordance with the relevant prescribed safety standards and practices.

Section 69 of the Act allows the Minister to make ordinary rules for any of the following purposes:

- The implementation of Papua New Guinea's obligations under the Convention
- To provide for safe, sustainable, effective and efficient aviation services
- To provision of aviation metrological services, search and rescue services and civil aviation security programs and services
- Assisting aviation safety and security, including but not limited to personal security
- Assisting economic development
- Ensuring environmental sustainability

1. Purpose of this NPRM

The purpose of this Notice of Proposed Rulemaking (NPRM) is to put forward for consideration the proposed amendments to Part 100 of the Civil Aviation Rules (CAR).

2. Background to the Proposal

All service providers within the PNG Civil Aviation system will have a safety management system (SMS) within their business management system by the end of February 2017. International best practice requires at acceptable level of safety performance and hence the changes proposed herein are to align CAR Part 100 within this framework. The industry has been engaged in a number of safety and security conferences, workshops and specific training in SMS has been completed to establish the context of an acceptable level of safety performance. This NPRM formalises the concept within the CAR and establishes the required and supporting definition.

3. Costs associated with this NPRM

There is no cost associated with this amendment.

4. Summary of changes

CAR Part 100 is being amended to align definitions with industry best practice and to include detailed safety objectives in so far as it relates to an acceptable level of safety performance in each aviation sector. A hazard log requirement is included in risk management. Finally minor cross-referencing and editorial errors corrected.

5. Legislative Analysis

The Minister may make ordinary rules under sections 69, 70, 71 and 72 of the Civil Aviation Act 2000, for various purposes including implementing Papua New Guinea's obligations under the Convention on International Civil Aviation, assisting aviation safety and security, and any matter contemplated under the Act.

These proposed rules are made pursuant to:

- (a) Section 69(1)(a) which provides for the Minister to make rules for the implementation of Papua New Guinea's obligations under the Convention;
- (b) Section 72(a) which provides for the Minister to make rule for the designation, classification and certification of-

(1) Air services:

(2) Aerodrome operators:

- (3) Aviation security providers:
- (4) Aviation training organizations”
- (5) Aircraft design, manufacture, maintenance and supply organizations:
- (6) Air traffic services;
- (7) Aviation meteorological services:
- (8) Aeronautical communication services:
- (9) Aeronautical procedures.

The proposed amendment of Part 100 complies with the requirements of the Civil Aviation Act and does not contravene the Constitution, the Aerodrome (Business Concession) Act, Civil Aviation (Air Craft Operator Liability) Act, Civil Aviation (Aircraft Charges) Act, Airport Departure Tax Act, the Explosive Act, Firearms Act, Customs Act, Plant and Disease Control Act and the Environmental Act.

The proposed Rule has been checked for language and compliance with the legal conventions of Papua New Guinea.

6. Submissions on the NPRM

6.1 Submissions are invited

Interested persons are invited to participate in the making of the proposed rule amendment by submitting written data, views, or comments. All submissions will be considered before final action on the proposed rule amendment is taken. If there is a need to make any significant change to the rule requirements in the proposal as a result of the submissions received, then interested persons may be invited to make further submissions.

6.2 Examination of submissions

All submissions will be available in the rules docket for examination by interested persons both before and after the closing date for submissions. A consultation summary will be published with final rule.

Submissions may be examined by application to the Docket Clerk at the Civil Aviation Safety Authority between 8:30 am and 3:30 pm, on weekdays, except statutory holidays.

6.3 Disclosure

Submitters should note that any information attached to submissions will become part of the docket file and will be available to the public for examination at the Civil Aviation Safety Authority offices.

Submitters should state clearly if there is any information in their submission that is commercially sensitive or for some other reason the submitter does not want the information to be released to other interested parties.

6.4 How to make submission

Submissions may be sent by the following methods:

By Mail: Docket Clerk (NPRM 16-22)
Civil Aviation Safety Authority
PO Box 1941
BOROKO
National Capital District

Delivered: Docket Clerk (NPRM 16-22)
Civil Aviation Safety Authority
Morea-Tobo Road
Six Mile, Jacksons Airport
Port Moresby NCD

By Fax: Docket Clerk (NPRM 16-22)
3251789 / 325 1919

By Email: Docket Clerk (NPRM 16-22)
rules@casapng.gov.pg

6.5 Final date for submissions

Comments must be received before **4:00pm, Friday 31st of March 2017.**

6.6 Further information

For further information contact:

Manager - Legal Services
CASA PNG
anambau@casapng.gov.pg

Ph: 325 7320

Mob: 769 80173

Subpart A — General

100.1 Purpose

(a) This Part prescribes rules for the safety management system and the quality management required to be established by applicants for certificates issued under the following Parts:

- (1) Part 109 - Regulated Air Cargo Agents – Certification.
- (2) Part 119 – Air Operator Certification.
- (3) Part 139 – Aerodrome – Certification and Operation.
- (4) Part 140 – Aviation Security Service Organisations – Certification.
- (5) Part 141 – Aviation Training Organisations – Certification and Operation.
- ~~(6)~~ Part 144 – Supply Organisations – Certification.
- (7) Part 145 – Aircraft Maintenance Organisations – Certification.
- (8) Part 146 – Aircraft Design Organisations – Certification.
- (9) Part 148 – Aircraft Manufacturing Organisations – Certification.
- (10) Part 171 – Aeronautical Telecommunication Service Organisations – Certification.
- ~~(11)~~ Part 172 – Air Traffic Service Organisations – Certification.
- (12) Part 173 – Air Navigation Service Organisations – Certification.
- (13) Part 174 – Aviation Meteorological Service Organisations – Certification.
- (14) Part 175 – Aeronautical Information service Organisations – Certification.

100.3 Definitions

~~For the purpose of applying this Part, **organisational certificate** means a certificate issued under the Parts listed under paragraph (a).~~

<u>Hazard Log</u>	<u>A record of all identified hazards showing all mitigating actions and current status.</u>
Organisational Certificate	A certificate issued under the Parts listed <u>under this</u> rule.
<u>Risk</u>	<u>The predicted probability and severity of the consequences or outcomes of a hazard.</u>
<u>Safety</u>	<u>The state in which risks associated with aviation activities related to, or in direct support of the operation of aircraft are reduced and controlled to an acceptable level.</u>
<u>Safety Performance</u>	<u>An organisational certificate holder’s safety achievement as defined by its safety performance targets and safety performance indicators.</u>
<u>Safety Performance Indicator</u>	<u>A data-based parameter used for monitoring and assessing safety.</u>

Safety Performance Target

The planned or intended objective for safety performance indicator(s) over a given period.

Safety Management System

A systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.

Subpart B — Safety Management System

100.51 Establishment of a safety management system

An applicant for the grant of an organisational certificate must establish a safety management system to systematically manage safety through a continuing process of hazard identification and risk management.

100.53 Safety policy

(a) An applicant for the grant of an organisational certificate must establish and maintain a documented safety policy for the organisation.

(b) The safety policy required by paragraph (a) must include details of the management commitment to, and responsibility for, safety risk management.

100.55 Safety objectives

(a) An applicant for the grant of an organisational certificate must establish documented safety objectives that are consistent with the organisation's safety policy.

(b) The safety objectives shall be defined by the applicant and be inclusive of:

(i) Safety performance indicator(s); and

(ii) Safety performance target(s).

100.57 Roles, responsibilities and authorities

(a) An applicant for the grant of an organisational certificate must—

- (1) define the organisation's structure and lines of reporting by means of an organisational chart or similar; and
- (2) document the role, responsibilities and authorities of each position in the organisation by means of a position description or similar; and
- (3) identify key safety positions in the organisation and establish qualification and experience standards for appointment of personnel to those positions; and
- (4) appoint a safety group assigned responsibility for oversight of safety related issues.

(b) For managers, the position description or similar required by paragraph (a)(2) must include safety accountabilities, including where applicable, participation in the emergency response plan.

100.59 Hazard identification

(a) An applicant for the grant of an organisational certificate must establish and maintain documented procedures for the identification and reporting of hazards to safety.

(b) The procedures required by (a) must include provisions for—

- (1) regular systematic appraisals to assess the level of safety in the operation and to identify safety improvements; and
 - (2) employee reporting of potential safety risks which the person becomes aware of.
- (c) The procedure required by paragraph (b)(2) must include an obligation for the senior person responsible for the safety management system to reply in writing to every employee who submits a report concerning a safety concern.

100.61 Risk management

- (a) An applicant for the grant of an organisational certificate must establish and maintain documented procedures for risk management in the organisation.
- (b) The procedures required by paragraph (a) must include:
- (1) identification of the key personnel to be involved in the risk management process; and
 - (2) a process for assessing the level of risk in the operation; and
 - (3) identification and application of risk mitigators; and
 - (4) arrangements for followup on the effectiveness of mitigators; and
 - (5) hazard log

100.63 Interfaces

- (a) An applicant for the grant of an organisational certificate must establish and maintain documented procedures for managing the interfaces between the applicant's organisation and relevant third parties.
- (b) The procedures required by paragraph (a) must—
- (1) identify external service providers; and
 - (2) define the boundaries of each interface arrangement; and
 - (3) identify the means by which each interface is reviewed; and
 - (4) identify the scope of data or service provided across the interface; and
 - (5) include procedures for identifying potential hazards and applying mitigators across the interface arrangement.

100.65 Change management

- (a) An applicant for the grant of an organisational certificate must establish and maintain documented procedures for managing changes to the certificate holder's organisation and operation.
- (b) The procedures required by paragraph (a) must—
- (1) define the operation in sufficient detail to provide a baseline for evaluating change; and
 - (2) include processes for identifying changes to the organisation and to the operation; and
 - (3) procedures for applying risk analysis and risk mitigation to changes; and
 - (4) describe the safety management arrangements for implementing changes and on-going

safety monitoring; and

- (5) identify the means by which all person affected by a change are notified during the development and implementation of the change.

100.67 Internal communication and consultation

(a) An applicant for the grant of an organisational certificate must establish—

- (1) documented procedures for communicating to all bases of operation and all personnel, information and feedback about the following:
 - (i) safety issues:
 - (ii) hazard reports:
 - (iii) corrective and preventive actions:
 - (iv) the performance of the safety management system:
 - (v) safety systems training:
 - (vi) safety promotion.
- (2) procedures for personnel to report, notify or bring to management's attention any information, concern, advice, or suggestion in regard to any safety matter.
- (3) an accident prevention programme.

(b) The procedures required by paragraph (a)(2) must include a confidential reporting system with appropriate protections.

100.69 Accident and incident recording, reporting and investigation

(a) An applicant for the grant of an organisational certificate which includes in the scope of the certificate aircraft or operation of aircraft must establish procedures for recording, reporting investigating and analysing accidents, serious incidents and incidents.

(b) The procedures required by paragraph (a) must—

- (1) include the obligations of the certificate holder to comply with the requirements of Part 12; and
- (2) have the objective of improving the level of safety; and
- (3) provide for confidential reporting.

100.71 Emergency response procedures

(a) An applicant for the grant of a certificate under Part 119, Part 139 or Part 140 must establish and maintain documented procedures to:

- (1) identify potential accident, incident and emergency situations arising from the operation authorised by the scope of the certificate; and
- (2) respond to those accidents, incidents and emergencies.
- (3) for international operations, provide for the due response from appropriate authorities in sovereign States.

100.73 Safety management system training

- (a) An applicant for the grant of an organisational certificate must establish and maintain documented procedures for training personnel on the safety management system.
- (b) The procedures required by paragraph (a) must include induction training for personnel joining the organisation and recurrency training for all staff at regular intervals, appropriate to the size and nature of the organisation.
- (c) The induction training required under paragraph (b) must provide—
- (1) all staff with a knowledge and understanding of the safety policy of the organisation; and
 - (2) managers and supervisors with a knowledge of the objectives of the safety system.
- (d) The induction training required by paragraph (c) must be provided at a level consistent with the person's role in the organisation.
- (e) The senior person responsible for the safety management system must ensure recurrency training is planned, properly resourced and sufficiently comprehensive for the role of the personnel being trained.

100.75 Flight data analysis programme

- (a) An applicant for the grant of an air operator certificate under Part 119 for the operation of an aircraft with a maximum takeoff-weight exceeding 27,000 kg must establish a flight data analysis programme.
- (b) The flight data analysis programme required by paragraph (a) must—
- (1) regularly record and analyse the operational flight data of individual and aggregated operations:
 - (2) be integrated into the safety performance monitoring and measuring processes required by rule ~~101.77~~ 100.77;
 - (3) be provided by—
 - (i) the holder of the air operator certificate; or
 - (ii) an external service provider if the Director is satisfied that the effectiveness of the programme is not compromised:
 - (4) ensure that—
 - (i) the identity of a person who reports data to the programme is protected from disclosure except with the person's written consent or by court order; and
 - (ii) no ~~punitive~~ punitive action may be taken by the holder of the air operator certificate against a person who reports data.

100.77 Safety performance monitoring and measurement

- (a) An applicant for the grant of an organisational certificate must establish processes for monitoring and measuring safety performance in regard to the following:
- (1) safety objectives required by rule 100.55 (a) and (b):

- (2) operation of the safety group required by rule 100.57(a)(4):
- (3) hazard identification and reporting required by rule 100.59:
- (4) risk assessments carried out under rule 100.61:
- (5) management of interfaces under rule 100.63:
- (6) change management in accordance rule 100.65:
- (7) the communication requirements of rule 100.67:
- (8) accident and incident investigating and reporting under rule 100.69:
- (9) training requirements of rule 100.73.
- (10) if applicable, the flight data analysis programme required by rule 100.75.

(b) The monitoring and measurement required by paragraph (a) must be used by the safety group appointed under rule ~~100.107(a)(4)~~ 100.57(a)(4) to ensure continuous improvement of the safety management system.

Subpart C — Quality Management System

100.101 Establishment of a quality management system

- (a) An applicant for the grant of an organisational certificate must establish a quality management system to systematically assess the level of compliance with this Part and any other applicable Part.
- (b) The quality management system required by paragraph (a) must include the following:
 - (1) a documented audit programme:
 - (2) procedures for—
 - (i) the conduct of audits:
 - (ii) management review:
 - (iii) continuous improvement, including error and non-compliant analysis:
 - (iv) document control:
 - (v) record control:
 - (vi) communicating quality information to staff.

100.103 Audits

- (a) An applicant for the grant of an organisational certificate must establish and maintain—
 - (1) a programme which demonstrates that every aspect of the organisation and the operations the organisation is authorised to conduct are audited; and
 - (2) except as provided for in rule 100.103(c), a schedule that ensures the audit programme is accomplished every 12 months; and
 - (3) procedures for—
 - (i) appointing auditors, including auditor qualifications and training standards

- (ii) conducting internal audits; and
- (iii) auditing suppliers; and
- (iv) processing audit findings and corrective and preventive actions; and

(b) The applicant's procedures required under paragraph (a)(3)(i) must include the requirement that an internal audit must be conducted by an employee or a person engaged for the purpose, who is familiar with the activities being conducted but who is not directly involved in the area being audited.

(c) A holder of an organisational certificate may reduce the frequency of elements of the audit programme if—

- (1) using the processes required by rule 100.61(b)(2), an analysis of compliance data shows that extension beyond the 12 month frequency required by rule 100.103(a)(2) is not likely to result in an increased risk of non-compliance; and
- (2) the air operator's exposition contains a procedure for—
 - (i) extending the period between audits;
 - (ii) monitoring the level of compliance after an extension has been granted.

100.105 Management review

An applicant for the grant of an organisational certificate must establish a management review process that requires the chief executive and the senior persons to review the effectiveness of the quality management system at regular intervals but not less than once per year.

100.107 Continuous improvement

(a) An applicant for the grant of an organisational certificate must establish plans and management procedures to ensure the continuous improvement of the quality management system.

(b) The plans and management procedures required under paragraph (a) must include the following:

- (1) establishment, monitoring and reporting of quality indicators:
- (2) monitoring of audit results:
- (3) followup of corrective actions:
- (4) followup of preventive actions:
- (5) management reviews:
- (6) identification and analysis of the root causes of non-compliances with the Civil Aviation Act and the Civil Aviation Rules:
- (7) where applicable, quality improvement projects.

100.109 Error and non-compliance management procedures

(a) For the purpose of applying rule 100.107(b)(6) no blame is to be attributed to a person for an error or instance of non-compliance where there is no proof of the person's negligence, recklessness or malicious intent.

(b) An applicant for the grant of an organisational certificate must apply error and non-compliance management procedures under a just culture and provide training to all staff on the application of just

culture.

100.111 Document control

- (a) An applicant for the grant of an organisational certificate must establish procedures for the control of documents.
- (b) The document control procedures required by paragraph (a) must ensure all documents are—
 - (1) authorised for use by a person entitled to grant such authorisation; and
 - (2) regularly reviewed and updated; and
 - (3) readily available to personnel to whom the documents apply.
- (c) For the purpose of this rule, **document** means any manual, procedural note, instruction, worksheet, list or checklist, in any form, that is required to be used by personnel within the organisation to ensure functions are performed in a consistently safe manner and in compliance with the requirements of the quality management system.

100.113 Record control

- (a) An applicant for the grant of an organisational certificate must establish procedures for the control of records.
- (b) The record control procedures required by paragraph (a) must ensure all records are—
 - (1) maintained in a form that provides consistent evidence of compliance with the requirements of this and any other applicable Part; and
 - (2) completed accurately and fully; and
 - (3) retained for the period required by the applicable rule.
- (c) For the purpose of this rule, a **record** is a means of providing permanent evidence that the requirements of the Civil Aviation rules and the operator's exposition have been complied with and required activities have been carried out.