



Civil Aviation Safety Authority of
Papua New Guinea

Advisory Circular

AC100-1E

SMS Inspector Competency Guidance and Training Programme

Initial Issue

01 July 2026

GENERAL

Civil Aviation Authority Advisory Circulars (AC) contain information about standards, practices and procedures that the Director has found to be an Acceptable Means of Compliance (AMC) with the associated rule.

An AMC is not intended to be the only means of compliance with a rule, and consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices or procedures are found to be acceptable, they will be added to the appropriate Advisory Circular.

This Advisory Circular also includes Explanatory Material (EM) where it has been shown that further explanation is required. Explanatory Material must not be regarded as an acceptable means of compliance.

PURPOSE

This Advisory Circular provides methods, acceptable to the Director, for showing compliance with the Safety Management System requirements of Part 100 and explanatory material to assist in showing compliance.

RELATED CAR

This AC relates specifically to Civil Aviation Rule 100 Subpart B – Safety Management Systems.

CHANGE NOTICE

There was no previous issue of this AC, consequently no change is in effect.

TABLE OF CONTENTS

1.	EM100.73 SMS Inspector Training	3
1.1	EM 100.73 Introduction	3
2.	EM100.73 What is a Competency?	3
2.1	EM100.73 What is a competency	3
3.	EM100.73 Why Organisations need Competencies?	4
3.1	EM100.73 Meeting Organisational goals	4
4.	EM100.73 Recommended SMS Competencies and Observable Behaviours	5
4.1	EM100.73 Core SMS Competencies -Systems Thinking (ST) and Risk Management (RM)	5
5.	EM100.73 Implementation	7
5.1	EM100.73 Implementation	7
6.	EM100.73 SMS Training Programme Outline	7
6.1	EM100.73 SMS Training Programme scope and outline	7
	APPENDICES	8
	EM100.73 SMS Training Programme scope and outline	8
	AMC 100.73 Appendix A – Overview of Training program outline	8
A.1	AMC100.73 Overview of Training Programme outline	8
A.2	AMC100.73 Learning Objectives for Training Programme sections	8
A.3	AMC100.73 Section 1 – Safety Management Concepts	8
A.4	AMC100.73 Section 2 – Regulatory Framework	8
A.5	AMC100.73 Section 3 – SMS Components	9
A.6	AMC100.73 Section 3 – SMS Evaluation	9
	AMC 100.73 Appendix B – Example of a detailed SMS training program outline	10
B.1	AMC100.73 Section 1 - Safety Management Concepts	10
B.2	AMC100.73 Section 2 - Regulatory Framework	14
B.3	AMC100.73 Section 3 – SMS Component 1 (Safety Policy, Objectives)	15
B.4	AMC100.73 Section 3 – SMS Component 2 (Safety Risk Management)	17
B.5	AMC100.73 Section 3 – SMS Component 3 (Safety Assurance)	20
B.6	AMC100.73 Section 3 – SMS Component 4 (Safety Promotion)	24
B.6	AMC100.73 Section 4 – SMS Evaluation	24
	EM 100.73 Appendix C – ICAO CASI (CIVIL AVIATION INSPECTOR) COMPETENCY FRAMEWORK ..	28
C.1	AMC100.73 ICAO CIVIL AVIATION INSPECTOR COMPETENCY FRAMEWORK	28
	EM 100.73 Appendix D – SMS Inspector competency evaluation tool	33
D.1	AMC100.73 Introduction	33
D.2	AMC100.73 Background and Purpose	33
D.3	AMC100.73 Design Considerations	33
D.4	AMC100.73 When to use the Tool?	34
D.5	AMC100.73 Objectives of the Competency Assessment	34

1. EM100.73 SMS Inspector Training

1.1 EM 100.73 Introduction

- 1.1.1 CASA and industry workforces include highly skilled positions with significant technical and educational requirements. As Safety Management System (SMS) implementation progresses, Industry may want to define SMS-related competencies for their inspector workforce, which will ensure that personnel requirements are aligned with the SMS and employees have the requisite skills and knowledge to perform SMS oversight¹ effectively.

This document provides Safety Management International Collaboration Group (SM ICG) recommended SMS competencies for inspectors tasked with accomplishing oversight activities and an SMS Inspector Competency Training Programme Outline.

The SM ICG [“Guide to Safety Management System Inspector Competency Assessment Tool”](#) document contains information on a tool for Civil Aviation Authorities (CAAs) to evaluate individual inspectors’ level of SMS competency to perform SMS certification and oversight effectively. It also contains a link to the SM ICG [“SMS Inspector Competency Assessment Tool”](#) that can be downloaded from SKYbrary.

An SMS Inspector² should already possess the basic inspector competencies outlined in ICAO Doc 10070, *Manual on the Competencies of Civil Aviation Safety Inspectors (CASI)*. SMS-specific observable behaviours are additive to these basic inspector competencies. ICAO defines observable behaviours as single, role-related behaviours that can be observed and may or may not be measurable. This document does not establish metrics for performance standards.

Although this document focuses on specific SMS competencies, regulators should also consider how these competencies fit into their overall authority level competencies. It is not recommended or intended for regulators to have multiple sets of competencies that could be inconsistent or divergent from each other.

- 1.1.2 Aviation organisations need trained and competent personnel. Competency goes beyond the simple completion of a course or even a skills check. It includes confirmation that the practiced behaviours match the intended outcomes of the initial training. It is also fair to say that one size does not fit all, so training programs should meet the needs and complexity of your organisation. How much safety training each employee receives should depend on their involvement in the SMS. PNG Advisory Circular AC 100-1E provides further guidance on SMS Inspector competency and Training Programme outline.
- 1.1.3 You also need to establish processes and procedures that facilitate effective two-way communication throughout all levels of your organisation. This includes a clear strategic safety management direction

2. EM100.73 What is a Competency?

2.1 EM100.73 What is a competency

- 2.1.1 A competency is a measurable dimension of human performance that integrates **knowledge, skills, and attitudes** required to perform a task effectively.

Competencies are demonstrated through **observable behaviours (OBs)**.

A competency framework is a structure that identifies and defines each individual competency required to work in an organisation or part of an organisation. Competency frameworks are normally structured by subject areas and roles in an organisation.

A competency framework:

- Defines the behaviours expected of personnel

¹ Note: The term “SMS oversight” in this document is intended to cover:

- Initial SMS approval/certification/authorization,
- Surveillance of regulated organisations to verify that they continue to meet the applicable requirements, and
- Industry SMS Managers self-evaluating the performance of SMS within their organisations.

² Note: The term “SMS Inspector” in this document refers to CASA personnel authorized to carry out SMS oversight of regulated organisations and also to Industry SMS Managers who implement SMS daily within their organisations.

- Supports recruitment, training, and performance management
 - Ensures consistency in oversight and organisational safety performance
- 2.1.2 ICAO defines competency as a dimension of human performance that is used to reliably predict successful performance on the job. A competency is manifested and observed through behaviours that mobilize the relevant knowledge, skills, and attitudes to carry out activities or tasks under specified conditions.
- 2.1.3 In essence, competencies are the integrated knowledge, skills, and attitudes that people need to perform a job effectively. By having a defined set of competencies for each role, the organisation shows employees the kind of behaviours it values and those it requires to help achieve its objectives.

3. EM100.73 Why Organisations need Competencies?

3.1 EM100.73 Meeting Organisational goals

3.1.1 As SMS implementation progresses, organisations must:

- Identify SMS-related goals
- Establish corresponding competencies aligned with those goals
- Assess the skills of their current workforce against those competencies
- identify any gaps that need to be filled through training and development

Competency-based systems enable organisations to:

- Select and develop personnel effectively
- Ensure inspectors demonstrate the expertise required for SMS oversight
- Identify gaps in knowledge or skills
- Support targeted training and professional development
- Strengthen safety performance and organisational capability

3.1.2 Defining which SMS-related competencies are necessary for success can help to:

- Recruit and select new staff more effectively,
- Ensure that employees demonstrate sufficient expertise,
- Evaluate safety performance more effectively,
- Identify skill and competency gaps more efficiently,
- Provide more customized training and professional development, and
- Plan for succession.

3.1.3 By using a competency framework as outlined in ICAO Doc 10070 and concentrating on key competencies and observable behaviours, regulators can define the set of practices needed for effective inspection and oversight of an SMS. By collecting and combining competency information, they can create a standardized approach to inspection that is clear and accessible to everyone in the organisation.

The framework is designed to outline specifically what SMS inspectors and managers need to do to be effective in their SMS-related roles, and to clearly establish how their roles relate to effective inspection and oversight. The SMS-specific observable behaviours can be used as a basis for developing and delivering needed training to both CASA inspectors and Industry SMS Managers.

4. EM100.73 Recommended SMS Competencies and Observable Behaviours

4.1 EM100.73 Core SMS Competencies -Systems Thinking (ST) and Risk Management (RM)

- 4.1.1 ICAO Doc 10070 outlines a CASI competency framework that details nine basic or core inspector competencies. This section identifies observable behaviours over and above the basic framework that are specific to an SMS competency.

The SM ICG developed and agreed on the observable behaviours identified in this section, intended to be a common set of behaviours for SMS oversight and evaluation. Organisations may choose to create additional competencies with more specifics about how the safety management knowledge, skills, and attitudes apply to their organisation's context.

- 4.1.2 Thus, starting from the ICAO CASI Competency Framework, the competencies that a SMS Inspector should develop and demonstrate are:

1. Systems Thinking	Understands and determines how the various components of management systems interact and affect the overall system safety performance.
2. Risk Management	Demonstrates an effective approach to the oversight of a stakeholder considering its business model, risk profile, and its availability of resources.
3. Ethics and Values	Demonstrates integrity, transparency, openness, respect, and fairness and considers the consequences when making a decision or taking action. Acts consistently in accordance with fundamental values of the Civil Aviation Authority.
4. Communication	Effectively conveys, receives, and understands information in oral, written, and non-verbal modes.
5. Problem-Solving and decision-making	Solves issues of varied levels of complexity, ambiguity, and risk. Makes timely decisions that take into account relevant facts, tasks, goals, constraints, risks, and conflicting points of view.
6. Initiative	Identifies and addresses issues independently, proactively, and persistently to achieve objectives.
7. Technical Expertise	Applies and improves technical knowledge and skills to perform safety oversight duties in a specific aviation discipline.
8. Leadership Teamwork	Collaborates up, down, and across the organisation to foster and promote a clear vision and common goals. Energizes others to achieve the goals and positive results.
9. Critical Thinking	Analyses information in order to consistently achieve desired outcomes.

- 4.1.3 Systems thinking and risk management require SMS-specific training.

The SM ICG adapted **observable behaviours** for these competencies follow. For the remaining competencies, the observable behaviours are shown in **Appendix C**.

For SMS oversight, two competencies require additional SMS-specific emphasis:

Systems Thinking

Ability to understand how organisational systems, processes, and behaviours interact to influence safety performance.

Risk Management

Ability to evaluate how organisations identify hazards, assess risk, and implement mitigation strategies.

Additional competencies relevant to SMS oversight include:

- Ethics and Values

- Communication
- Problem Solving and Decision Making
- Initiative
- Technical Expertise
- Leadership and Teamwork
- Critical Thinking

The SMS-specific observable behaviours associated with Systems Thinking and Risk Management are adopted from SM ICG guidance.

Competency: SYSTEMS THINKING	
Description	Understands and determines how the various components of management systems interact and affect the overall system safety performance.
Observable Behaviours	ST1. Accurately evaluates the inter-relationship between policies, processes and procedures of the stakeholder's systems, particularly the SMS and SSP. ST2. Accurately evaluates the inter-relationship between various systems, including SMS, quality, and compliance of the stakeholder, recognizing how these components interact and interface, while maintaining an objective, non-punitive, and no-blame approach. ST3. Determines the effectiveness of the implementation of continuous improvement, reactive and proactive processes. ST4. Recognizes the essential components of a functional SMS and their interoperability, cultural aspects, human and organisational factors, and the confidentiality of safety information (particularly the reporting system). ST5. Determines whether the stakeholder's management systems are appropriate for the types of certificates, size and scope/complexity of the operation. ST6. Accurately assesses how different management systems interact with one another across various stakeholders, including interfaces and human and organizational factors. ST7. Uses the appropriate set of metrics to measure and monitor regulatory and organisational safety performance. ST8. Interprets findings from analysis of performance data within the organisational safety performance framework and indicators system. ST9. Assesses the achievement of safety performance objectives using risk management and compliance monitoring principles, considering organizational capability and maturity. ST10. Understands the impact of the regulatory framework on the safety issues and challenges of the stakeholder. ST11. Accurately determines whether the root cause(s) of deficiencies results from a single-point or systemic failure(s). ST12. Assesses the difference between compliance- and performance-based oversight.

Competency: RISK MANAGEMENT	
Description	Demonstrates an effective approach to the oversight of a stakeholder considering its business model, risk profile, and its availability of resources.
Observable Behaviours	RM1. Evaluates the appropriateness of risk assessments performed by stakeholders and actions taken to manage hazards to an acceptable level, including change management processes, and considering human performance aspects and organisational factors. RM2. Identifies whether strategic decisions consider risk assessment principles and results. RM3. Recognizes the role of human and organisational factors.

	RM4. Understands the relationship between Safety Risk Management and Safety Assurance processes, and evaluates risk mitigation actions and proposed system changes. RM5. Recognizes business practices or organisational cultures that are potential indicators of increased levels of risk, considering the influence of human performance and limitations. RM6. Applies appropriate certification requirements and surveillance techniques according to changing levels of risk, analysing critically the organisations safety performance. RM7. Identifies if appropriate remedial or enforcement action is required to address an issue at its root cause. RM8. Ensures that stakeholders implement remedial measures associated with safety issues or proposed changes.
--	--

5. EM100.73 Implementation

5.1 EM100.73 Implementation

5.1.1 Effective implementation of SMS inspector competencies requires:

- Clear communication of competency expectations
- Integration of SMS competencies into organisational competency frameworks
- Processes for periodic review and update of competencies
- Training programmes aligned with competency requirements

5.1.2 As organisations finalize competencies, communication is vital. To help get buy-in from employees at all levels of the organisation, it is important to explain why the competencies have been developed, how they will be used, and the process that will be used to update them.

6. EM100.73 SMS Training Programme Outline

6.1 EM100.73 SMS Training Programme scope and outline

6.1.1 The Training Programme Outline in this Advisory Circular focuses on developing competencies of a CASA SMS Inspector or Industry SMS Manager.

6.1.2 The Training Programme Outline assumes that the person has already developed the initial CASI competencies listed in **Appendix C**. Therefore, the Training Programme Outline focuses on **SYSTEMS THINKING** and **RISK MANAGEMENT** competencies as described in Section 4.

6.1.3 The scope of the Training Programme Outline includes prerequisites, learning objectives, topics to be covered, and resources for developing training that will help build these SMS competencies.

The scope of this document does not include lesson plans or methods for assessing inspector SMS competencies. The SM ICG “Guide to the Safety Management System Inspector Competency Assessment Tool” along with the SM ICG “SMS Inspector Competency Assessment Tool” can be used to assess SMS Inspector competency.

APPENDICES

EM100.73 SMS Training Programme scope and outline

There are four appendices to this document. They are:

- **Appendix A: Overview of Training Programme Outline:** Gives an overview of learning objectives for training programme sections.
- **Appendix B: Detailed Training Programme Outline:** Details key learning points and resources to support each learning objective. These resources may be used to develop lesson plans for an SMS training programme. Note: The resources cited in Appendix B are not exhaustive.
- **Appendix C: The ICAO CASI (Civil Aviation Safety Inspector) Competency Framework:** Provides the competency framework for the SMS Inspector, reproduced from ICAO Doc 10070, with a reorganisation that places systemic thinking and risk management competencies at the beginning.
- **Appendix D: SMS Inspector OJT Competency Evaluation Tool:** CASA provides a tool for the evaluation of SMS personnel competency and guidance on its use on its website.

AMC 100.73 Appendix A – Overview of Training program outline

A.1 AMC100.73 Overview of Training Programme outline

A.1.1 The Training Programme Outline for Inspector SMS Competency consists of four sections in order of progression:

- Safety Management Concepts
- Regulatory Framework
- SMS Components
 - Safety Policy and Objectives
 - Safety Risk Management
 - Safety Assurance
 - Safety Promotion
- SMS Evaluation

A.2 AMC100.73 Learning Objectives for Training Programme sections

A.2.1 The Training Programme Outline is designed to develop and improve competencies. The learning objectives are connected to the Observable behaviours indicated in parentheses.

A.3 AMC100.73 Section 1 – Safety Management Concepts

A.3.1 Safety Management Concepts

1. To explain what a management system is (ST1, ST2)
2. To identify how safety is integrated into an organisation's management system (ST1, ST2, ST4)
3. To recognize the potential safety impacts of interfaces between an organisation's SMS and other organisations (ST2, ST6, RM7)
4. To recognize the potential safety impacts of interfaces between systems within an organisation (ST2, ST6, ST11, RM3)
5. To recognize risks to safety related to human and organisational factors (ST4, ST6, RM4, RM8)
6. To recognize the impact of an organisation's safety culture on its safety performance (ST4, ST9, RM4)

A.4 AMC100.73 Section 2 – Regulatory Framework

A.4.1 Regulatory Framework

1. To describe and explain the intent of the applicable international standards, State legislation, and regulations related to aviation safety management (ST1, ST4, ST10)

2. To recognize the relationship of the State Safety Programme (SSP) with SMS requirements (ST1)
3. To apply State policies and procedures with respect to SMS (ST1, ST10, RM1, RM3, RM5)
4. To explain the principles of prescriptive and performance-based requirements and oversight (ST1, ST12, RM5)

A.5 AMC100.73 Section 3 – SMS Components

A.5.1 Component 1: Safety Policy and Objectives

1. To distinguish the accountability and responsibilities of the Accountable Executive, management, and key safety personnel (ST4)
2. To discern how management commitment to an organisation's SMS is reflected in the safety policy and evidenced by their actions throughout the organisation (RM2, RM4, RM5)
3. To identify how organisations set and measure safety objectives (ST7, ST9)
4. To validate an organisation's emergency response plan coordination process (ST4, ST5)
5. To evaluate an organisation's SMS documentation system (ST1, ST2, ST4, ST5)

A.5.2 Component 2: Safety Risk Management

1. To evaluate an organisation's safety reporting system and investigation process (ST1, ST11)
2. To assess an organisation's hazard identification processes (RM3, RM4)
3. To assess the effectiveness of an organisation's risk management process (RM6, RM1, RM7, RM8)

A.5.3 Component 3: Safety Assurance

1. To analyse an organisation's means to measure safety performance (ST7, ST8, RM1)
2. To evaluate how an organisation assesses its safety performance compared with its safety objectives (ST7, ST9)
3. To assess an organisation's change management process (RM2, RM6, RM7)
4. To explain the relationship between quality assurance and safety assurance (ST1, ST2, ST8, ST11)
5. To evaluate how an organisation assesses the effectiveness of its SMS, to continuously improve the SMS (ST3, ST7, RM5)

A.5.4 Component 4: Safety Promotion

1. To evaluate an organisation's safety communication, training, and education processes (ST1, ST5)

A.6 AMC100.73 Section 3 – SMS Evaluation

A.6.1 SMS Evaluation

1. To recognize different approaches to implementing and achieving an effective SMS (ST5, ST12)
2. To plan an assessment of an organisation's SMS (RM1, RM5)
3. To obtain objective evidence where possible and exercise judgment when necessary to reach conclusions about an organisation's SMS (ST1, ST2, ST6, ST9, ST12 RM2, RM4, RM1)
4. To explain the allowable use and control of information obtained from an organisation's SMS (ST4, ST6)
5. To identify systemic deficiencies in an organisation (ST10, ST11)
To assess the effectiveness of an SMS and discern whether the SMS is appropriate for the size and complexity of the organisation (ST1, ST2, ST4, ST5, ST9, ST12, RM1, RM6, RM1)

AMC 100.73 Appendix B – Example of a detailed SMS training program outline

B.1 AMC100.73 Section 1 - Safety Management Concepts

B.1.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
1.1	To explain what a management system is	Definition of management systems typically include: • Organisational structure • Framework for establishing accountability— responsibility and authority • Processes for setting goals and determining requirements • Processes for delivery of the organisation's products/services • A means of controlling and assuring attainment of the requirements (including corrective action processes) • Processes for communicating and assuring necessary competencies	ISO 9000-2015 definition TCCA slide defining Safety and Security Management Systems: ISO Management System Standards	ST1, ST2
1.2	To identify how safety is integrated into an organisation's management system	-Purpose of SMS -Integration of management processes (Plan-Do-Check-Act cycle) with technical and safety processes -Application of safety management to operational/ technical functions of the organisation	ICAO SMM: 8.4.7, 9.7.5 , "Integration of Management Systems" SM ICG The Senior Manager's Role in SMS	ST1, ST2, ST4

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
1.3	To recognize the potential safety impacts of interfaces between an organisation's SMS and other organisations	-Interfaces—and potential impacts—between other organisations -Communication and agreements between organisations such as access to reporting systems and joint risk assessments -Identification of hazards from external sources Risk acceptance (transfer, sharing, avoidance) -Safety assurance of contractors and other organisations	ICAO SMM: 1.3.3, 2.5.2.12-2.5.2.13, 4.1.6 SM ICG SMS Integration: Points to Consider CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 2: Safety Policy and Objectives (p.10) FAA ATO SMS Manual/Dec 2022: 2.1 Introduction to Managing System Safety  2.1 Intro to Managing System Safety.JPG Helicopter Maintenance Magazine, August 2013: "The Importance of an Integrated Quality Management System (QMS) and Safety Management System (SMS) in Aviation Operations"	ST2, ST6, RM7
1.4	To recognize the potential safety impacts of interfaces between systems within an organisation	-Interfaces—and potential impacts—between systems within an organization -Systems include functional area systems and those related to organisation management systems (e.g., Quality Management System [QMS], Occupational Health and Safety Management System, Security Management System) -Different certificates/privileges held by one organisation (e.g., Air Traffic Organisation [ATO], Approved Maintenance Organisation [AMO], air operator) -Accident causation models of safety events (cross-domain interactions)	SM ICG SMS Integration: Points to Consider NZCAA AC 100-1, Safety Management: 1.6, "SMS Integration with other Management Systems" ICAO SMM: 9.7.1, "System description," 9.7.2, "Interface management," 9.7.3, "Identification of SMS interfaces," 9.7.5, "Integration of Management Systems" FAA ATO SMS Manual/Dec 2022: 2.1, "Introduction to Managing System Safety"  2.1 Intro to Managing System Safety.JPG Case study on cross-domain interactions in accident causation: A STAMP Analysis of the LEX COMAIR 5191 Accident	ST2, ST6, ST11, RM3
1.5	To recognize human and organisational factors/related risks to safety	High-level key aspects of human and organisational factors considerations: • Communications	ICAO SMM: Paragraph 2.1.4, 2.2, "Humans in the System" ICAO DOC 10151,	ST4, ST6,

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
		- Leadership - Human performance models (e.g., SHELL, 5M) - Situational awareness - Decision-making - Fatigue and fatigue risk management - Human error and error management - Workload and task design (Note: This is not an HF course; thus, it only refers to key concepts.)	Manual on Human Performance for Regulators CASA SMS for Aviation – A Practical Guide (3rd Edition) Booklet 6: Human Factors CASA Safety Behaviours: Human Factors Resource Guide for Engineers: - Chapter 1, "Introduction"; Chapter 3, "Human performance and its limitations"; Chapter 12, "Human factors within an organization"  safety-behaviours-human-factors-engineer CASA Integration of Human Factors into SMS  CASA HF into SMS.pdf FSF Operator's Guide to Human Factors in Aviation: Human Factors Strategy UK CAA CAP 716 Aviation Maintenance Human Factors (EASA Part 145) TCCA Human Performance Factors for Elementary Work and Servicing FAA ATO SMS Manual Dec 2022: 2.6, "The Human Element's Effect on Safety"  SMS Manual 2.6 Human Element.JPG FAA Human Factors Acquisition Job Aid  Human Factors in FAA Acquisition Job A Human Factors Analysis and Classification System (HFACS) ICAO Human Factors Guidelines for Aircraft	RM4, RM8

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
			Maintenance Manual (Doc. 9824)	
1.6	To recognize the impact of an organisation's safety culture on its safety performance	-Definition of safety culture and its components: risk, just, reporting, learning, informed, and flexible cultures and their impact on personnel behaviours at various levels of the organization -Different types of national, ethnic, and professional cultures and how they may affect the safety culture of an organization -Importance of the safety policy and safety leadership to foster a positive safety culture -Importance of an open reporting environment and its impact on the effectiveness of a management system -Possible reduction of reporting due to sanctions applied by authorities against the organisation based on reported data Benefits of a Just Culture: • Increased safety reporting • Trust building • More effective safety and operational management. Punishment vs. Learning • Definition of the boundary between 'Acceptable Behaviour' and 'Unacceptable Behaviour' • Identification of processes and policies that support a just culture	CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 4: Safety Assurance (p. 29–32) Euro control Just Culture Policy  Just Culture Model Policy EUROCONTRO CANSO Standard of Excellence in Safety Management Systems (Appendix A, Section 1, pp. 18-20, "Development of a Positive and Proactive Safety Culture")  CANSO Standard of Excellence in Safety M FAA ATO SMS Manual Dec 2022: 1.4.1, "Safety Culture and Promotion in the ATO"  1.4.1 Safety Culture.JPG ICAO SMM: 3.1, "Safety Culture SM ICG Industry Safety Culture Evaluation Tool and Guidance SM ICG Organizational Culture Self-Assessment Tool and Guidance for Regulatory Authorities	ST4, ST9, RM4

B.2 AMC100.73 Section 2 - Regulatory Framework

B.2.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
2.1	To describe and explain the intent of the applicable international standards, State legislation, and regulations related to aviation safety management	-ICAO Annex 19 Standards and Recommended Practices (SARPs) -CAR Part 100 (and standards, if applicable) -SMS applicability (Which organisations does it apply to?) -Effective dates -National guidance material for SMS -Acceptable means of compliance guidance	ICAO Annex 19 CAR Part 100	ST1, ST4, ST10
2.2	To recognize the relationship of the State Safety Programme (SSP) with SMS requirements	-Relationship between SSP and SMS -The interaction between an organisation's SMS and the SSP	ICAO Annex 19 and PNG SSP CAR Part 100	ST1
2.3	To apply State policies and procedures with respect to SMS	-National SMS policy(ies) and procedures (acceptance/certification, oversight/surveillance, etc.) -National enforcement policies and how they may differ in respect to SMS -State's approach to SMS implementation (use of implementation plans and timescales for implementation)	State SMS policies and procedures PNG SSP	ST1, ST10, RM1, RM3, RM5
2.4	To explain the principles of prescriptive and performance-based requirements and oversight	-Principles of prescriptive requirements and performance-based requirements -Verification of compliance using prescriptive and performance-based requirements	ICAO SMM: 8.3.5.2, "Prescriptive and Performance-Based Regulations" TCCA slide explaining types of regulations:  Slide on types of regulations.ppt SM ICG SMS Evaluation Tool	ST1, ST12, RM5

B.3 AMC100.73 Section 3 – SMS Component 1 (Safety Policy, Objectives)

B.3.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
3.1.1	To distinguish the accountability and responsibilities of the Accountable Executive, management, and key safety personnel	Safety performance roles and responsibilities of: a) Accountable Executive b) Senior Management c) Frontline Managers d) Safety Manager e) Safety Committees, if applicable Safety accountability vs. responsibility (delegation) Level(s) of management with authority to make decisions regarding safety risk tolerability Accountable Executive in organisations holding multiple certificates	SM ICG The Senior Manager's Role in SMS SM ICG The Frontline Manager's Role in SMS ICAO SMM: 9.3.5, "Safety accountability and responsibilities" 9.3.6, "Appointment of key safety personnel" CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 2: Safety Policy and Objectives (p. 1–7) TCCA AC 107-001, Guidance on Safety Management Systems Development: 3.5, "The Accountable Executive and Corporate Culture"	ST4
3.1.2	To discern how management commitment to an organisation's SMS is reflected in the safety policy and evidenced by their actions throughout the organisation	Safety policy does the following: • Defines the organisation's commitment to safety, including the promotion of a positive safety culture • Identifies the obligations of staff to use the safety reporting system • Describes what is unacceptable behaviour (including circumstances under which disciplinary action would not apply) • Commits to provide sufficient resources to manage safety (financial, human, material, and equipment) Organisational structure appropriate to the size and complexity of the organization Management commitment and active support (alignment of the organisation's activities to the safety policy, allocation of resources, management reviews, dashboards, safety meeting attendance) Periodic review of safety policy (e.g., change of AE or significant organisational change)	SM ICG The Senior Manager's Role in SMS SM ICG The Frontline Manager's Role in SMS SM ICG SMS Evaluation Tool ICAO SMM: 8.3.6.8, "State safety policy and safety objectives" 9.3.4, "Management commitment" ISO 9001, Guidance on Auditing Top Management Commitment	RM2, RM4, RM5

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
3.1.3	To identify how organisations set and measure safety objectives	Safety objectives do the following: • Reflect the organisation's commitment to continuously improve the effectiveness of their SMS • Are communicated throughout the organisation and periodically reviewed Safety performance management reflects the State SSP/EASP or other regional safety plans (if available) Relationship between safety objectives, safety performance targets, and safety performance indicators	ICAO SMM: 4.1.6, "Safety performance management and interfaces", 9.5.4.20 SM ICG SMS for Small Organizations (p. 3) SMS for Airports: 4.2, "Safety Policy and Objectives" TCCA AC 107-001, Guidance on Safety Management Systems Development: 4.2–4.3, "Safety Policy and Objectives"	ST7, ST9
3.1.4	To validate an organisation's emergency response plan coordination process	Sectors required by the State to establish and maintain Emergency Response Plans (ERP) Coordination of ERPs with the organisation's affected external interfaces	ICAO SMM: 9.3.7, "Coordination of emergency response planning" CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 2: Safety Policy and Objectives (p. 13–14) TCCA AC 107-001, Guidance on Safety Management Systems Development: 10.0, "Emergency Response Plan" CAA NZ AC 100-1, Safety Management: 2.2.2, "Coordinated Emergency Response Planning" SMS for Airports: Coordination of Emergency Planning (pp. 16–17) FAA ACC 150/5200-31C, Airport Emergency Plan Change 2	ST4, ST5
3.1.5	To evaluate an organisation's SMS documentation system	SMS documentation system includes: a) SMS Manuals—to describe SMS policies, processes, procedures, and accountabilities • Integration of SMS manual with other required documentation, need for document controls, periodic reviews b) SMS Records—outputs of the SMS processes and procedures (examples of records: meeting minutes, safety data, safety reports, hazard logs, risk registers, safety risk assessments, etc.) • Retention of records	ICAO SMM: 9.3.8, "SMS Documentation" SM ICG SMS Evaluation Tool ISO 9001, Guidance on Auditing Electronic Documented Information Systems TCCA AC 107-001, Guidance on Safety Management Systems Development: 5.0, "Documentation" CAA NZ AC 100-1, Safety Management: 2.2.3, "Development, Control and Maintenance of Safety Management Documentation" EHEST SMM for Complex Operators: Chapter 7, "Documentation Control Procedure"	ST1, ST2, ST4, ST5

B.4 AMC100.73 Section 3 – SMS Component 2 (Safety Risk Management)

B.4.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
3.2.1	To evaluate an organisation's safety reporting system and investigation process	Mandatory and voluntary reporting systems - Perimeter of mandatory and voluntary reporting systems: accessibility to third parties Maturity of reporting—types of reports (i.e., first-, second-, third-generation reports: "He has done something wrong," "Something may go wrong," "I have done something wrong," etc.) Internal investigation of safety events - Prioritisation of safety investigations causal analysis process and outputs - Various models of causal analysis: BowTie, Fishbone Diagram, 5 Whys, etc. Timely corrective and preventive actions Validation of effectiveness in preventing recurrence Recurrence indicates ineffective corrective action	ICAO SMM: 5.2.5, "Mandatory safety reporting systems," 5.2.6, "Voluntary safety reporting systems" SM ICG SMS for Small Organizations: 2.1.1–2.1.3, Appendix 8 CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 4: Safety Assurance (pp. 2–3) SMS for Airports: 6.4, "Safety Reporting"; 6.5, "Accident and Incident Investigation" CAA NZ AC 100-1, Safety Management: 2.4.1, "Safety Investigation" TCCA AC 107-001, Guidance on Safety Management Systems Development: 6.2, "Reactive Processes" TCCA AC SUR-002, Root Cause Analysis and Corrective Action for TCCA Findings Mini-Guide to Root Cause Analysis Best Practices for Event Review Committees CAP1760: Effective Problem Solving and Root Cause Identification	ST1, ST11

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
3.2.2	To assess an organisation's hazard identification processes	Definition of and relationship between hazards and consequences Methods of hazard identification (reactive, proactive) • Use of multiple sources of hazard identification • Hazard identification is ongoing Examples of typical hazards for aviation sectors • Hazards related to interfaces • Hazards related to human factors organisational hazards Collection and analysis of hazards	SM ICG SMS Evaluation Tool SM ICG Hazard Taxonomy Examples SM ICG Development of a Common Hazard Taxonomy ECAST SMS WG Guidance on Hazards Identification SMS for Airports: 5.3, "Identify Hazards"; Table 8, "Common Airport Hazards" CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 3: Safety Risk Management (pp. 1–5) CAA NZ AC 100-1, Safety Management, 2.3.1, "Hazard Identification" TCCA AC 107-001, Guidance on Safety Management Systems Development: 6.3, "Pro-Active Processes" ICAO SMM: 2.5.1, "Introduction to hazards," 2.5.2, "Understanding hazards and their consequences," 9.4.4, "Hazard identification, 9.7.3, "Identification of SMS interfaces" Shell Aircraft International: A Simplified Process for Hazard Management	RM3, RM4

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency (ST: System Thinking RM: Risk Management)
3.2.3	To assess the effectiveness of an organisation's risk management process	Definitions and concepts related to risk management Risk management process (analysis, assessment, and control of the safety risks associated with identified hazards) Risk management techniques, tools, models, methods Tolerable level of risk and risk control prioritisation Safety-critical implications in risk management include: - Failing to identify latent hazards within the organisation, which could lead to unacceptable levels of risk - Under-rating risk (based on what happened or has happened in the past, not what could have happened) - Assessing risk in isolation (not involving staff with practical knowledge of the activity being assessed) - Assessing only the most severe outcome (which is usually also the least probable, while a less severe but more probable risk scenario could result in a higher risk rating) Awareness of vulnerability in underlying assumptions when determining probability and severity	ICAO SMM: 2.5.3 through 2.5.8 SM ICG SMS Evaluation Tool CAA NZ AC 100-1, Safety Management: 2.3.2, "Risk Management" CASA SMS for Aviation - A Practical Guide (3rd Edition) Booklet 3: "Safety Risk Management" EHEST SMM for Complex Operators: Chapter 8, "Safety Risk Management" SMS for Airports: 5.4–5.7 FAA ATO SMS Manual Dec 2022: Section 3, "The Safety Risk Management Process" ARMS Methodology for Operational Risk Assessment in Aviation Organizations FSF Basic Aviation Risk Standard TCCA Integrated Risk Management Framework Lexicon	RM6, RM1, RM7, RM8

B.5 AMC100.73 Section 3 – SMS Component 3 (Safety Assurance)

B.5.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
3.3.1	To analyse an organisation's means to measure its safety performance (What)	Definitions related to safety performance Safety performance relates to the organisation's contribution to aviation safety Indicators: Types of indicators, use of indicators, characteristics of effective indicators, possible unintended effects of using indicators and targets Data: Types of data, sources of data, quality of data, characteristics of data, limitations of data, data collection methods Data analysis: Tools, capability, trends Measuring what is important rather than what is easy to measure Results: Input into management review process, action taken	ICAO SMM: 4.3-4.4, 8.4.7.14-8.4.7.15 SM ICG A Systems Approach to Measuring Safety Performance – The Regulator Perspective SM ICG Measuring Safety Performance Guidelines for Service Providers SM ICG SMS for Small Organizations: 3.1, "Safety Performance Monitoring and Measurement," Appendix 11, "Safety Performance Indicators for a Small Organization" SMS for Airports: 6.7, "Measuring SMS Performance—Trend Analysis" CAA NZ AC 100-1, Safety Management: 2.4.2, "Monitoring and Measuring Safety Performance" FAA ATO SMS Manual, Dec 2022: 1.6.1, "Measuring NAS-Wide ATO Safety Performance"; 4.1, "Developing Safety Performance Targets"	ST7, ST8, RM1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
3.3.2	To evaluate how an organisation assesses its safety performance compared with its safety objectives (How)	Links and robustness of the safety performance cycle: Set objectives, targets, and indicators → Determine sources of data → Gather and analyse data → Monitor performance indicators → Measure safety performance → Input into management review → Assess results and take action → Validate corrective action effectiveness → Review objectives and targets → etc. effectiveness looks at whether: • The process is documented • Safety data is collected; what sources of data the organisation is using; the quality of the data used for safety indicators; how accessible safety reporting systems are • Safety data is analysed; what analytical capability the organisation has; what tools are used • Information is extracted; what trends are detected; how indicators are used as input into the management review process • Alert levels and alerting triggers are appropriate and activated • Indicators are understood and results are communicated; feedback to submitters using the reporting systems • Information drives corrective action or further improvement in safety performance targets; which management decisions are made Indicators are periodically reviewed for appropriateness and pertinence	SM ICG SMS Evaluation Tool EASA/ANSP Questionnaire for Measurement of Effectiveness of Safety Management SKPI	ST7, ST9

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
3.3.3	To assess an organisation's change management process	Recognizing which changes, in isolation or combination, may have a safety impact - Changes which may affect the level of safety risk associated with the organisation's aviation products, infrastructure/system, management, operation, or services provided Recognizing the impact of internal and external change - Identifying and managing the safety risks that may arise from those changes Effectiveness of existing risk controls/mitigations Introduction of new hazards	ICAO SMM: 8.5.6, "Management of change: State perspective" 9.5.5, "The management of change" CASA SMS for Aviation - A Practical Guide (3rd Edition): Booklet 4, Safety Assurance (pp. 2–3) CASA Management of Change for Aviation Organizations CAA NZ AC 100-1, Safety Management: 2.4.3, "Management of Change" SM ICG SMS for Small Organizations: 3.2, "The Management of Change"; Appendix 13, "Management of Change Template" EHST SMM for Complex Operators: 8.9, "The Management of Change"; Appendix 8, "Change Management Form" TCCA Aviation Safety Letter – "An Ounce of Prevention"	RM2, RM6, RM7
3.3.4	To explain the relationship between quality assurance and safety assurance	Defining quality assurance and safety assurance Safety assurance complements quality assurance to validate the effectiveness of safety risk controls Interaction between quality assurance and safety assurance Basic characteristics of QMS and differences with SMS	ICAO SMM: 9.7.6, "SMS and QMS integration" CAA NZ Resource Kit Booklet 2, From QMS to SMS CAA NZ AC 00-3, Internal Quality Assurance TCCA AC 107-001, Guidance on Safety Management Systems Development: 9.0, "Quality Assurance Program" ISO 9001 Guidance on Internal Audit Safety Assurance v Quality Assurance (lessons learned from Toyota)	ST1, ST2, ST8, ST11

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
3.3.5	To evaluate how an organisation assesses the effectiveness of its SMS, to continuously improve the SMS	What effectiveness means External/internal review processes (audits, surveys, safety performance indicators [SPIs], lessons learned, etc.) Outcomes feeding back into the SMS Link with the safety performance cycle Recognizing a change in safety performance and taking action Senior management review of the effectiveness of the SMS	ICAO SMM: 9.5.4, "Safety performance monitoring and measurement" SM ICG SMS Evaluation Tool ISO 9001, Guidance on Auditing Improvement NZCAA AC 100-1, Safety Management: 2.4.4, "Continuous Improvement of the SMS"; 2.4.5, "Internal Audit Programme"; 2.4.6, "Management Review" SMS for Airports: 6.6, "SMS and Internal Safety Assessments"; Annex B and C SM ICG SMS for Small Organizations: 3.3, "Continuous Improvement of the SMS"; Appendix 14, "Management Review Template"	ST3, ST7, RM5

B.6 AMC100.73 Section 3 – SMS Component 4 (Safety Promotion)

B.6.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS Competency ST & RM
3.4.1	To evaluate an organisation's safety communication, training, and education processes	Training and Competency: - Competency definition and competency assessment - Training needs analysis (includes contracted personnel), including ongoing (recurrent) training - Training methodology appropriate to the material and the individual - Training will vary between different roles in the organisation - Competency of trainers (external providers or internally delivered) - Effectiveness of safety training programme is monitored - Training documentation and records Safety Communication: - Identification of relevant safety information sources (internal and external, including from interfacing organisations) - Communication of safety information (internal, and external to other affected organisations) - Methods of communication (appropriate to target audience) - Safety-critical information is communicated in a timely manner Ensuring communication is received and acted upon as required	ICAO SMM: 8.3.7.4-8.3.7.8, 8.6.4-8.6.6-8.6.9, 9.6.4-9.6.5 CASA SMS for Aviation - A Practical Guide (2nd Edition Booklet 5: Safety Promotion) NZCAA AC 100-1, Safety Management: 2.5.1, "Safety Training and Competency"; 2.5.3, "Communication of Safety-Critical Information"; 2.5.1, "Training and Competency Guidance Material" SMS for Airports: 6.8, "Safety Training and Education" EHEST SMM for Complex Operators: Chapter 10, "Safety Promotion"; Chapter 11, "Training and Communication on Safety" SM ICG SMS Evaluation Tool ISO 9001, Guidance on Auditing Competence ISO 9001, Guidance on Auditing Internal Communication	ST1, ST5

B.6 AMC100.73 Section 4 – SMS Evaluation

B.6.1

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
4.1	To recognize different approaches to implementing and achieving an effective SMS	-Various approaches to implement SMS -SMS procedures should be customized to each organisation -Extending a single SMS over multiple activities requiring an approval/certificate -Integration of SMS with existing management system	Less complex organisations: SM ICG SMS for Small Organizations SM ICG SMS for Small Organizations: Considerations for Regulators CASA SMS for Aviation - A Practical Guide (2nd Edition)* Booklet 7: Scaling for Size and Complexity CAA NZ Resource Kit Booklet 3, Implementing SMS Guidelines for Small Aviation Organizations UK CAA CAP 1059, Safety Management Systems: Guidance for Small, Non-Complex Organizations TCCA AC 107-002, SMS Development Guide for Smaller Aviation Organizations More complex organisations: UK CAA CAP 795, Safety Management Systems (SMS) Guidance for Organizations TCCA AC 107-001, TCCA AC 107-001, Guidance on Safety Management Systems Development	ST5, ST12
4.2	To plan an assessment of an organisation's SMS	- Team management, work scheduling, planning effective interviews, and sampling, etc. - Researching safety intelligence, safety record, enforcement record, and documentation of the organisation - The authority's policies, processes, procedures, and tools for the assessment of an organisation's SMS	TCCA AC SUR-004, Civil Aviation Surveillance Program International Accreditation Forum "Duration of QMS and EMS Audits"	RM1, RM5

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
4.3	To obtain objective evidence where possible and exercise judgment when necessary to reach conclusions about an organisation's SMS	Cross-checking of information from different sources Seeking confirmation of doubts and concerns Gathering objective evidence to support evaluation activities Use of subjective judgment to assess effectiveness rather than just compliance	State legal authorities for inspectors re: evidence gathering ISO 9001, Audit Guidance on Evidence Collection	ST1, ST2, ST6, ST9, ST12, RM2, RM4, RM1
4.4	To explain the allowable use and control of information obtained from an organisation's SMS	State legal framework and regulator policies for protection and release of organisation information (appropriate vs. inappropriate usage or disclosure) Appropriate information to take into the regulator's possession (what is evidence?) Potential impact of data release or inappropriate usage, including inadvertent disclosure State responsibility to determine the most appropriate action to address safety issues arising from sensitive information accessed (e.g., internal reporting systems, flight data monitoring [FDM])	State legal requirements and policies Example compliance philosophies: FAA Order 8000.373C, Federal Aviation Administration Compliance Program TCCA CAD 107-004, Aviation Enforcement – Safety Management Systems	ST4, ST6
4.5	To identify systemic deficiencies in an organisation	Systems thinking (i.e., beyond how the organisation presents itself through its manuals, to understand their system and processes) Definition of systemic Difference between systemic and individual deficiencies Systemic deficiencies at an organisational level	SKYbrary Toolkit: Systems Thinking for Safety/Systems Thinking Methods	ST10, ST11

Learning Objective #	Learning Objective	Key Learning Points	Resources	Core SMS ST, RM
4.6	To assess the effectiveness of an SMS and discern whether the SMS is appropriate for the size and complexity of the organisation	Typical markers of organisational complexity Application of the State SMS evaluation tool to assess an SMS, including scalability Acceptance criteria taken into account for the assessment and the expectation for different levels of performance (Present, Suitable, Operating, Effective) How well the SMS processes are applied to technical processes' What is compliance? "Simple compliance" (are they complying?) vs. "effective compliance" (how they are complying, how compliance will be maintained, is the output as expected?)	SM ICG SMS Evaluation Tool EASA/ANSP Questionnaire for Measurement of Effectiveness of Safety Management SKPI SM ICG SMS for Small Organizations: Considerations for Regulators AeroSafetyWorld, May 2012, SMS Reconsidered: Four questions to assess SMS effectiveness	ST1, ST2, ST4, ST5, ST9, ST12, RM1, RM6, RM1

EM 100.73 Appendix C – ICAO CASI (CIVIL AVIATION INSPECTOR) COMPETENCY FRAMEWORK

C.1 AMC100.73 ICAO CIVIL AVIATION INSPECTOR COMPETENCY FRAMEWORK

C.1.1 Below is the competency framework for the SMS Inspector, reproduced from ICAO Doc 10070, with a reorganisation that places systemic thinking and risk management competencies at the beginning. Note that an asterisk (*) after a bullet signifies “observable behaviours considered particularly important for remediation and enforcement tasks.”

C.1.2

Competency: SYSTEMS THINKING	
Description	Understands and determines how the various components of management systems interact and affect the overall system safety performance.
Observable Behaviours	ST1. Accurately evaluates the inter-relationship between policies, processes and procedures of the stakeholder's systems, particularly the SMS and SSP. ST2. Accurately evaluates the inter-relationship between various systems, including SMS, quality, and compliance of the stakeholder, recognizing how these components interact and interface, while maintaining an objective, non-punitive, and no-blame approach. ST3. Determines the effectiveness of the implementation of continuous improvement, reactive and proactive processes. ST4. Recognizes the essential components of a functional SMS and their interoperability, cultural aspects, human and organisational factors, and the confidentiality of safety information (particularly the reporting system). ST5. Determines whether the stakeholder's management systems are appropriate for the types of certificates, size and scope/complexity of the operation. ST6. Accurately assesses how different management systems interact with one another across various stakeholders, including interfaces and human and organizational factors. ST7. Uses the appropriate set of metrics to measure and monitor regulatory and organisational safety performance. ST8. Interprets findings from analysis of performance data within the organisational safety performance framework and indicators system. ST9. Assesses the achievement of safety performance objectives using risk management and compliance monitoring principles, considering organizational capability and maturity. ST10. Understands the impact of the regulatory framework on the safety issues and challenges of the stakeholder. ST11. Accurately determines whether the root cause(s) of deficiencies results from a single-point or systemic failure(s). ST12. Assesses the difference between compliance- and performance-based oversight.

C.1.3

Competency: RISK MANAGEMENT	
Description	Demonstrates an effective approach to the oversight of a stakeholder considering its business model, risk profile and its availability of resources.
Observable Behaviours	RM1. Evaluates the appropriateness of risk assessments performed by stakeholders and actions taken to manage hazards to an acceptable level, including change management processes, and considering human performance aspects and organisational factors. RM2. Identifies whether strategic decisions consider risk assessment principles and results. RM3. Recognizes the role of human and organisational factors. RM4. Understands the relationship between Safety Risk Management and Safety Assurance processes, and evaluates risk mitigation actions and proposed system changes. RM5. Recognizes business practices or organisational cultures that are potential indicators of increased levels of risk, considering the influence of human performance and limitations. RM6. Applies appropriate certification requirements and surveillance techniques according to changing levels of risk, analysing critically the organisations safety performance. RM7. Identifies if appropriate remedial or enforcement action is required to address an issue at its root cause. RM8. Ensures that stakeholders implement remedial measures associated with safety issues or proposed changes.

C.1.4

Competency: ETHICS AND VALUES	
Description	Demonstrates integrity, transparency, openness, respect and fairness and considers the consequences when making a decision or taking action. Acts consistently in accordance with fundamental values of the civil aviation authority.
Observable Behaviours	• Treats others respectfully, fairly and objectively regardless of differences. • Answers questions truthfully without embellishment or attempt to cover up a lack of knowledge. • Maintains privacy and confidentiality when appropriate. • Manages professional relationships with appropriate role boundaries. • Adheres to professional codes of conduct when taking action and making decisions. • Takes responsibility for own actions. • Identifies and mitigates conflict of interest situations. • Acts with integrity. • Uses resources of the organisation in a cost-conscious manner. • Demonstrates the values of the organisation.

C.1.5

Competency: COMMUNICATION	
Description	Effectively conveys, receives, and understands information in oral, written, and non-verbal modes.
Observable Behaviours	• Verifies that the recipient is prepared to receive information. • Confirms that information conveyed was received and accurately understood. • Listens actively and objectively without interrupting. • Checks own understanding of other's communication (e.g. repeats or paraphrases, asks additional questions). • Presents appropriate and accurate information in a clear, concise, and compelling manner in all media. • Adapts content, style, tone, and media of communication to suit the target audience including cultural considerations and to promote dialogue. • Understands other people's concerns. • Maintains open lines of communication with management, stakeholders, and colleagues. • Communicates complex issues clearly and credibly with diverse audiences. • Delivers difficult or unpopular messages with clarity, tact, and diplomacy.

C.1.6

Competency: PROBLEM SOLVING AND DECISION MAKING	
Description	Solves issues of varied levels of complexity, ambiguity, and risk. Makes timely decisions that take into account relevant facts, tasks, goals, constraints, risks, and conflicting points of view.
Observable Behaviours	• Collects related and sufficient information from a variety of sources in a timely manner. • Breaks down complex tasks into manageable parts. • Considers multiple possible causes of problems. • Identifies risks involved for different solutions to a problem. • Identifies interdependencies between various components of a problematic situation. • Develops solutions that address the situation in its entirety. • Takes steps to mitigate medium- to long-term impact of solutions when developing solutions to fix immediate issues. • Provides a rationale behind each decision. • Makes timely decisions based on applicable rules and procedures. • Responds decisively when inappropriate conduct is identified to affect positive change without delay*. • Recognizes scope of own authority for decision making and escalates to the appropriate level if necessary. • Demonstrates decisiveness when under pressure or faced with complex or sensitive situations. • Incorporates lessons learned in future decisions.

C.1.7

Competency: INITIATIVE	
Description	Identifies and addresses issues independently, proactively, and persistently to achieve objectives.
Observable Behaviours	• Seizes opportunities that arise. • Acts promptly in a crisis situation. • Deals with obstacles effectively. • Looks for ways to enhance efficiency and effectiveness. • Looks for resources to support objectives. • Anticipates and acts on potential issues. • Organises personal workload to ensure excellence in productivity and quality of service.

*C.1.8

Competency: TECHNICAL EXPERTISE	
Description	Applies and improves technical knowledge and skills to perform safety oversight duties in a specific aviation discipline.
Observable Behaviours	• Applies technical knowledge and skills to correctly address a situation. • Accurately answers complex technical questions. • Keeps up to date on specialized technical knowledge and skills. • Recognizes trends in practice of one's own technical area and anticipates changes. • Interprets correctly and explains the intent of the applicable statute, regulation, or standard for a given context. • Evaluates efforts by stakeholders to demonstrate initial compliance with the regulations. • Develops and implements an effective programme to monitor continuing compliance of the regulations by stakeholders. • Contributes as a subject matter expert to the development of regulations and guidance. • Consistently provides appropriate guidance to stakeholders and colleagues on how to implement performance-based regulations. • Applies appropriate procedures in accordance with the CAR standards. • Applies enforcement measures when necessary and in accordance with applicable regulations.*

C.1.9

Competency: LEADERSHIP AND TEAMWORK	
Description	Collaborates up, down, and across the organisation to foster and promote a clear vision and common goals. Energizes others to achieve the goals and positive results.
Observable Behaviours	• Gains the trust and confidence of others. • Promotes positive working relationships. • Encourages open discussion. • Facilitates resolution of conflicts. • Inspires others to collaborate and strive towards excellence. • Actively solicits constructive feedback. • Willingly adopts suggestion for improvement from others. • Directs the work of the team to adapt to circumstances. • Empowers team members to make decisions. • Identifies the required resources to support the team.

C.1.10

Competency: CRITICAL THINKING	
Description	Analyses information in order to consistently achieve desired outcomes.
Observable Behaviours	• Accurately analyses stakeholder performance data for trends. • Evaluates information with accuracy and objectivity. • Seeks additional detail or clarification from colleagues or stakeholders. • Synthesises data from a variety of sources appropriately. • Applies procedures appropriately. • Recognizes that different processes and procedures can lead to similar outcomes. • Analyses the thoroughness and effectiveness of all documented processes. • Determines if employees understand and adhere to processes. • Determines if stakeholders understand and adhere to processes. • Assesses the efficiency and effectiveness of the implementation and maintenance of mandatory system-based programmes against operational requirements. • Distinguishes between lapses, negligence, and reckless action.*

EM 100.73 Appendix D – SMS Inspector competency evaluation tool

D.1 AMC100.73 Introduction

- D.1.1 The International Civil Aviation Organisation (ICAO) Annex 19 promotes a common approach to Safety Management across aviation sectors and domains, both for States and for organisations.³

The Safety Management International Collaboration Group (SM ICG) developed the Safety Management System (SMS) Inspector Competency Assessment Tool in direct support of this common approach for the activities related to the SMS assessment. The following guidance explains the background, purpose, and methodology relevant to the use of the SMS Inspector Competency Assessment Tool.

D.2 AMC100.73 Background and Purpose

- D.2.1 ICAO requires that Civil Aviation Safety Inspectors (CASIs) are authorized by the Director to ensure that national safety regulations and standards are followed in the aviation industry. One of the safety oversight activities performed by the CASIs is the SMS assessment for compliance with CAR Part 100. This document assumes that a CASI performing SMS assessments or a Fit-and-proper person (FPP) who is responsible for the aviation document holder's SMS is referred to as an SMS Inspector⁴. It is crucial for the SMS Inspectors to be qualified and competent in their roles.

In this context, the SMS Inspector Competency Assessment Tool is designed to help assess how well a SMS Inspector demonstrates the OBs associated with both Systems Thinking and Risk Management competencies. This tool can be used for both initial and recurrent assessments. By identifying areas for improvement, an organisation (CASA and aviation document holder) can ensure that its inspectors have the necessary competencies to effectively assess an SMS.

The SMS Evaluation Tool is used to assess a trainee's ability to demonstrate the OBs linked to the Systems Thinking and Risk Management competencies during an On-The-Job (OJT) session.

Appendix C provides a breakdown of which OBs for these competencies are associated with each component or element of the SM ICG SMS Evaluation Tool.

D.3 AMC100.73 Design Considerations

- D.3.1 The Competency Assessment Tool is designed with the following considerations:

- The Competency Assessment Tool assesses the competencies of SYSTEMS THINKING and RISK MANAGEMENT, recognizing them as the most important for inspectors working with SMS. The other seven (7) competencies are common to all inspectors or industry SMS Managers and should be evaluated through other mechanisms.
 - This assessment methodology should be practical and manageable for SMS trainers/evaluators⁵ to use during the onsite assessment, while concurrently engaging the service provider during the assessment (if needed). As such, the methodology adopts an approach that enables the competency assessor to identify OBs which were clearly lacking or not demonstrated for each Subject.
 - The assessment should be fair and objective, and the results should be transparent in reflecting the trainee's performance across the OBs, and in showing how the sufficiency of the trainee's competency is determined.
 - The form should be relatively straightforward and quick for the trainer/evaluator to fill in and tally the results, and to arrive at a conclusion whether the trainee is sufficiently competent.

³ CASA may delegate safety management related functions to Pacific Aviation Safety Office (PASO) Inspectors from time to time. When delegated, CASA still retains this responsibility.

⁴ Note: The terms "inspector" and "evaluator" in this document refer to CASA personnel authorised to conduct the SMS assessment or evaluation.

⁵ The SMS trainers/evaluators are SMS inspectors deemed competent to conduct the SMS assessment, as well as SMS training of inspectors.

- The rating scale used to measure the satisfactory demonstration of the OBs and Competency should be similar to that of typical assessments which use the competency-based training and assessment (CBTA) approach.
- The results are supported by visual aids which provide a quick overview of the trainee's performance profile, including a breakdown of the score for the various OBs, and whether the various criteria to determine sufficient competency of the trainee were fulfilled.
- The tool is flexible and can be used for both qualitative and quantitative assessments. For a qualitative assessment, the first sheet of the form may serve as a guide for evaluating inspector competency without using the scoring formula, allowing SMS trainers/evaluators to assess a trainee in a more qualitative manner.
- The grading criteria should be relatively strict and comprehensive in ensuring that the trainee has satisfactorily demonstrated all the OBs. However, in view of practical resource constraints, flexibility should be accorded to the trainer/evaluator to allow the trainee to pass and conduct SMS assessments when a required number of OBs/competencies are demonstrated to the required level, albeit on condition that remedial action will be taken to address OBs which were not fulfilled. For example, the remedial action could constitute undergoing further training/ understudy and be observed by the competency assessor during a future assessment(s).

D.4 AMC100.73 When to use the Tool?

- D.4.1 The Competency Assessment Tool acknowledges the systemic nature of safety, requiring that competencies such as Systems Thinking and Risk Management are demonstrably applied throughout the assessment of SMS processes. It facilitates a comprehensive, practical assessment of the competencies of an SMS Inspector. **The tool may be downloaded from the CASA website.**

Designed as an integral component of the CASA's Inspector training program, the tool supports both initial and recurring training. The tool will be used during On-the-Job Training (OJT) sessions to assess trainees in a real-world scenario under the supervision of highly experienced SMS trainers/evaluators.

From the perspective of the competency assessment, the OJT session serves a dual purpose: it provides practical instruction and guidance to SMS Inspectors and gathers essential data for the competency assessment. Additionally, the assessment team delivers the SMS assessment for the service provider. Ultimately, this tool plays a pivotal role in developing and maintaining the competencies of SMS Inspectors at the required level.

D.5 AMC100.73 Objectives of the Competency Assessment

- D.5.1 The competency assessment will be performed during an OJT session as part of an SMS maturity evaluation. Therefore, the global competency assessment objectives must be defined accordingly.

The competency assessment objectives will reflect the nature of the SMS evaluation conducted in the OJT session, whether for initial approval or continuous surveillance:

1. **Certification or Initial Approval:** The competency assessment objective can be defined as: "Evaluate whether all system characteristics and processes have reached the levels of Present and Suitable."
2. **Continuous Surveillance:** The competency assessment objective can be established as: "Evaluate whether all system characteristics and processes have reached the levels of Present, Suitable, Operational, and Effective (if applicable)."

CASA PNG or aviation document holders may use the Competency Assessment Tool to assess the trainee over one or more SMS evaluations. In all cases, all Elements in the form should be completed before determining if the trainee is competent to conduct SMS evaluations independently.