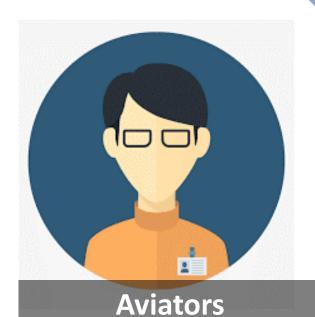# AVIATION SAFETY MANAGEMENT SYSTEM

Designed to provide inspiration and guidance to the global aviation community.

Our goal is to showcase an SMS, based on systems thinking principles, that empowers people to actively participate in the continuous improvement of aviation safety. We dedicate this site to all the front-line operators, accountable managers, safety professionals, and all others who contribute to our aviation industry.

Our Story

SMS User Guide

Aviators

(Front-Line Operators, Operational Support Staff, Support Staff or Any Employee)

Safety Practitioners

(Safety Managers and Safety Experts)

Managers

(Accountable Managers, Senior Managers and Safety Leaders)

User Profiles

Choose a profile to find recommendations for how to get the most out of the Aviation SMS.
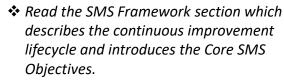
Aviators

You are an aviation professional or work within an aviation organisation. Or maybe someone from outside the industry and you are looking to learn about safety. The following reading list is suggested:

POLICY, OBJECTIVES AND ORGANISATIONAL ARRANGEMENTS

PROCESSES

ROLES AND GROUPS

- ❖ *Read the SMS Framework section which describes the continuous improvement lifecycle and introduces the Core SMS Objectives.*
- ❖ *Read the Safety Policy and Just Culture Policy.*
- ❖ *Review the Just Culture Handbook and read the published articles and blogs on the topic.*
- ❖ *Browse the Safety Objectives which detail the type of safety activities your organisation should consider.*
- ❖ *Browse the Organisational Safety Arrangements and learn about accountable managers, leadership and general responsibilities for staff.*
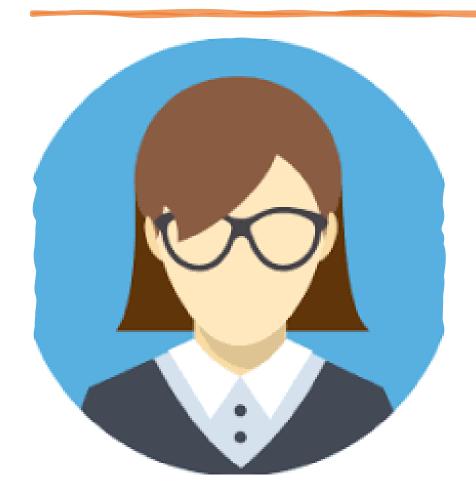
- ❖ *Browse the Process Areas*

- ❖ *Browse the list of Roles and the Committee and Group Structure*

Note: Use the search function to quickly find guidance that matches your areas of interest. It will search the results into Policy, Process, Roles and Templates.

Safety Practitioners

You are a Safety Manager or are working with the SMS on daily basis. If you are looking to learn more about the responsibilities of your Role then select your **Role(s)** or the most applicable to learn more. In addition, the following reading list is suggested:

POLICY, OBJECTIVES AND ORGANISATIONAL ARRANGEMENTS

PROCESSES

ROLES AND GROUPS

❖ *Read the SMS Framework section which describes the continuous improvement lifecycle and introduces the Core SMS Objectives.*
❖ *Read the Safety Policy and Just Culture Policy.*
❖ *Review the Just Culture Handbook and read the published articles and blogs on the topic.*
❖ *Review the Safety Objectives which detail the scope of the SMS activities.*
❖ *Review the Organisational Arrangements to learn about Safety Accountability and Leadership.*
❖ *Read the Document Management section for key responsibilities.*
❖ *Read the Compliance Matrices for your domain.*

❖ *Review the Process Areas that are appliable to your Role or duties.*
❖ *Browse the other Process Areas to familiarise yourself with content.*

❖ *Review the Role most applicable to the duties you have.*
❖ *Browse the list of Roles and the Committee and Group Structure.*
❖ *Review the TORs for each Group that you are involved in.*

Note: Use the search function to quickly find guidance that matches your areas of interest. It will search the results into Policy, Process, Roles and Templates.

Managers

You are a Manager holding accountability within the organisation and you contribute to the strategic direction for the company and delivering the business objectives. You are involved in ensuring risks to achieving those objectives are managed, this includes Safety Risks. The following reading list will help you identify opportunities to develop your leadership skills:

POLICY, OBJECTIVES AND ORGANISATIONAL ARRANGEMENTS

ROLES AND GROUPS

PROCESSES

POLICY, OBJECTIVES AND ORGANISATIONAL ARRANGEMENTS

❖ *Read the SMS Framework which describes the Core SMS Objectives and why we have chosen it.*
❖ *Read the Safety Policy and Just Culture Policy.*
❖ *Review the Just Culture Handbook and read the published articles and blogs on the topic.*
❖ *Review the Safety Objectives which detail the scope of the SMS activities.*
❖ *Review the Organisational Arrangements to learn about Safety Accountability and Leadership.*
❖ *Read the Safety Accountability Statements.*

ROLES AND GROUPS

❖ *Read the Leadership Roles (Accountable Executive or Accountable Manager)*
❖ *Review the Committee and Group Structure and the TORs for each Group.*

PROCESSES

❖ *Review the Processes that are linked to your Role.*
❖ *Browse the Process Areas if your role is not identified.*

SMS
Implementation
Guidance

Initiating your SMS Implementation

Your organisation has identified the intention to implement an SMS for the first time or make a significant change to adapt to new business needs. Successful SMS implementation relies on leadership commitment and sponsorship from the highest level authority in your organisation. Proactive and engaging leadership from all senior managers is required during implementation and for on-going success. SMS Implementation is a long term endeavour which could take between 2 to 4 years to realise the benefits. The sponsorship and investment in resources should therefore be planned appropriately.

Stage 1 of your SMS Implementation involves the following steps:

Step 1: Establish Executive Sponsorship for SMS Implementation	**Step 2: Establish Executive SMS Implementation Objectives**	**Step 3: Identify Project Manager and appropriate resources**	**Step 4: Promote SMS Implementation within other Business Change Activities**	**Step 5: Notify the Regulatory Authority and seek early engagement.**

- ❖ Establish Executive Sponsor for the SMS Programme. This must be the Accountable Executive.
- ❖ The Safety Manager should not be the Executive Sponsor.

- ❖ Integrate SMS Implementation programme into other key business strategic programme (where appropriate).
- ❖ Define the objectives you want to achieve within the SMS Programme and the scope.

- ❖ Identify a Project Manager. This could be the organisations Safety Manager or a 3rd Party.
- ❖ Setup an SMS Implementation team with representatives from across the organisation.

- ❖ Ensure the SMS Programme is included within your organisations Business Change initiatives.
- ❖ Start promotion within your organisation of the SMS Programme.

- ❖ Notify your Regulatory Authority of your intention to implement an SMS.
- ❖ Request a face-to-face session to introduce your SMS Objectives and timescale if you available.

SMS Implementation Roadmap

As the Project Manager you are responsible for leading a team of staff to develop the SMS Implementation Roadmap. The guidance on Aviation SMS can help you plan your strategy and will significantly reduce the effort required for the planning and 'paper-work' stage of the Implementation. The material is generic and needs to be adapted to your own needs. At first glance you may consider the number of processes and roles to be too complex for your organisation. Think of the Aviation SMS as a Toolbox; you only need to select the tools that you require for the task and the steps below will guide you on how to do that.

Stage 2 of your SMS Implementation involves the following steps:

Step 1: Select an SMS Framework	Step 2: Establish set of Safety Objectives.	Step 3: Identify Processes and Roles.	Step 4: Conduct Gap Analysis	Step 5: Develop SMS Implementation Roadmap.

Step 1: Select an SMS Framework
- ❖ Select a SMS Framework to guide your implementation.
- ❖ Consider using the bespoke Framework on Aviation SMS (based on Plan-Do-Check-Act).
- ❖ Adapt it to meet your needs or choose one already published e.g. ICAO or CANSO SoE.

Step 2: Establish set of Safety Objectives.
- ❖ Define the Safety Objectives (SOs) for your organisation.
- ❖ Use the SOs on Aviation SMS as a starting point and adapt to meet your own Framework.
- ❖ Consider the full-set as the final goal. Select ones that are applicable to you in first step.
- ❖ Review the Compliance Matrix to identify the minimum objectives to meet regulatory requirement.

Step 3: Identify Processes and Roles.
- ❖ Define the Processes and Roles you need to implement the Safety Objectives.
- ❖ Use the Processes in the Aviation SMS as a starting point.
- ❖ Review the Activities and allocate these to Roles – define your own Role names or use Job Titles if that is appropriate. This isn't the final allocation!

Step 4: Conduct Gap Analysis
- ❖ Review the organisational practices within your organisation to identify processes/ activities / roles / deliverables that contribute to delivery of the Safety Objectives.
- ❖ Use the output of the review as the basis of your implementation. The intelligence gained will help evolve the Processes and Roles.

Step 5: Develop SMS Implementation Roadmap.
- ❖ Develop an SMS Implementation Plan.
- ❖ Identify actions and resources to implement the Safety Objectives.
- ❖ Define clear timelines for implementation.
- ❖ Gain endorsement of Plan from Executive Sponsors and Regulatory Authority

DEVELOPING YOUR SMS MANUAL WILL BE FIRST PART OF YOUR IMPLEMENTATION PLAN

Aviation SMS Design Outline
(supporting SMS Implementation)

POLICY, OBJECTIVES AND ORGANISATIONAL ARRANGEMENTS

SMS Framework

#1 Deliver Safe Services

#2 Analyse Service Safety Performance

Safety Risk

#4 Control Changes to Services

#3 Identify Service Safety Improvement

#5 Supporting Organisation and Culture

#6 SMS Documentation and Recordkeeping

SMS Framework defines the CORE SMS Objectives – Safety Objectives are defined to demonstrate how the SMS Framework is implemented within the organisation. The SOs have been developed to reflect good practice and include more than what is required to meet the regulatory requirements.

SMS Safety Objectives

SMS Core Objective	Safety Objectives	Compliance
Objective #1: Deliver Safe Services	1-1: Procedures describe how services are provided in normal, abnormal and fall-back scenarios.	Indirect Evidence: Item developed by business management system processes. These items provide the context for the SMS to perform safety risk assessment appropriately. Direct Evidence: Refer to Service Safety Case for evidence of implementation of this objective..
	1-2: Service plans are in place to manage emergency situations and they are coordinated with interfacing organisations.	Indirect Evidence: Item developed by business management system. These items provide the context for the SMS to perform safety risk assessment appropriately. Direct Evidence: Refer to Service Safety Case for evidence of implementation of this objective.
	1-3: Hazards, and associated consequences, for the scope of delivered services are identified and documented.	Indirect Evidence: Conduct Safety Risk Assessments Process Direct Evidence: Refer to Service Safety Case for evidence of implementation of this objective.

Each Safety Objective is supported by a Process or reference to Business Documentation.

A Safety Objectives outlines the need for supporting Committees and Groups at all levels of the organisation.

PROCESSES

AGREE STAKEHOLDER DEPENDENCY — Find Out More

ALLOCATE SAFETY ACCOUNTABILITY TO MANAGERS — Find Out More

ANALYSE SAFETY PERFORMANCE — Find Out More

ASSESS SAFETY COMPETENCY OF PERSONNEL — Find Out More

ASSESS SAFETY IMPACT OF CHANGES — Find Out More

COMMUNICATE SAFETY INFORMATION — Find Out More

Each Process defines one or more Roles

ROLES AND GROUPS

SAFETY IMPACT ASSESSOR — Find Out More

SAFETY IMPROVEMENT COORDINATOR — Find Out More

SAFETY MANAGER — Find Out More

SAFETY PERFORMANCE ANALYST — Find Out More

SAFETY PERFORMANCE COORDINATOR — Find Out More

SAFETY PROMOTION SPECIALIST — Find Out More

Committees and Groups

BOARD SAFETY COMMITTEE — Find Out More

EXECUTIVE SAFETY COMMITTEE — Find Out More

SERVICE SAFETY ACTION GROUP — Find Out More

LOCAL ACTION GROUP — Find Out More

JUST CULTURE PEER GROUP — Find Out More

MULTI-ORGANISATION SAFETY GROUP — Find Out More

Each Process defines one or more deliverables that are required to document the outputs. Templates are provided for these.

TEMPLATES

Deliverable Template	Example	Process	Role
Audit Checklist		Conduct Audits and Reviews	Auditor
Audit Corrective Action Status Report		Conduct Audits and Reviews	Action Owner
Audit Finding Log		Conduct Audits and Reviews	Audit Sponsor Auditee Auditor
Audit Finding Report		Conduct Audits and Reviews	Audit Sponsor Auditee Auditor