



SMS Training for Safety & Quality Professionals

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Syllabus

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SMS for Safety and Quality Professionals (3 days)

Safety compliance.

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1 Day 1

1.1 Module SQ01: Make Safety a System

Note: Presentation of generic SMS risk management process and safety culture definition, may be adapted to customer specific process and definition on request

Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 1: Understand the context and drivers of a Safety Management System</p> <p>Objective 2: Differentiate existing safety management organisation and new elements of a SMS</p>	<p>1. Framework:</p> <ul style="list-style-type: none"> • Definition of Safety, Risk and Risk Assessment • Concept of a Safety Management System • SMS Risk Management Process 	<p>Group discussion on “what is safety, risk and risk assessment?”</p>
	<p>2. Requirements:</p> <ul style="list-style-type: none"> • ICAO Standards and Reference Documents • SMS Definition 	
	<p>3. Orientation & Safety Culture:</p> <ul style="list-style-type: none"> • Reactive, proactive and predictive Safety Measures • Safety Culture Definition 	<p>Group discussion on “meaning of safety culture?”</p>

1.2 Module SQ02: SMS Background		
Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 3: Understand the relationship between a State safety program (SSP) and an SMS</p> <p>Objective 4: Be able to describe SMS requirements: ICAO Document 9859 and Annexes</p> <p>Objective 5: Be able to describe EASA Ops SMS requirements</p> <p>Objective 6: Be able to understand the FAA SMS Regulations</p>	<p>1. ICAO Safety Management SARPs:</p> <ul style="list-style-type: none"> • ICAO Safety Management SARPs framework • SMS safety performance measurement and indicators • Development of SSP • Relationship SSP-SMS 	<p>Exercise: An Airline wants to implement an SMS</p>
	<p>2. ICAO SMS Standards - Overview:</p> <ul style="list-style-type: none"> • The base of SMS • The ICAO components of SMS 	
	<p>3. EASA Ops SMS Regulations:</p> <ul style="list-style-type: none"> • Implementation rules (IRs) • Accepted means of compliance (AMCs) • Guidance material (GM) 	<p>Practical examples</p>
	<p>4. FAA SMS Requirements</p> <ul style="list-style-type: none"> • 14 CFR Part 5 – SMS Regulations • 14 CFR Part 119 – SMS Regulations 	

1.3 Module SQ03: SMS Costs and Benefits		
Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 7: Understand role of SMS in the decision making process and allocation of resources</p> <p>Objective 8: Find out if and how a functioning SMS can save costs to your organization</p>	<p>1. Safety Pays Off:</p> <ul style="list-style-type: none"> • St Recall from Safety Risk Management • Cost & Benefit Analysis • Strategy for the Cost & Benefit Analysis 	
	<p>2. Failure Induces Costs:</p> <ul style="list-style-type: none"> • Direct Cost • Indirect Cost • Calculating Failure 	Regarding a wheels-up landing situation, identify the direct and indirect costs associated with the incidence
	<p>3. Costs and Benefits:</p> <ul style="list-style-type: none"> • General Considerations • Costs of a Safety Management System • Benefits of a Safety Management System 	Identify and discuss the core traits for an effective safety reporting system in your organization
	<p>4. Effective Safety Reporting</p> <ul style="list-style-type: none"> • Requirements • Incentives and barriers 	

1.4 Module SQ04: Safety Knowledge Management		
Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 9: Understand the need for safety knowledge management</p> <p>Objective 10: Understand how to administrate the SMS input to maximize system efficiency</p>	<p>1. Introduction to Knowledge Management:</p> <ul style="list-style-type: none"> • Statement and Challenge • Definition of Knowledge Management • What System do we need? • What Knowledge do we need? 	
	<p>2. Enabling Technology:</p> <ul style="list-style-type: none"> • The Key to Success / The Goal • Types of Safety Data Bases • Requirements for a Safety Data Base • Safety Data Base Integrity • Safety Data Base Capabilities • Safety Data Base Selection 	<p>Exercise Knowledge Management (Group Work Activity)</p>

2 Day 2

2.1 Module SQ05: Setting Up an SMS		
Objectives	Contents of Module	Practical Training/Discussion
Objective 11: Be able to develop a system description	1. System Description: <ul style="list-style-type: none"> ICAO requirements for a system description System description for an airline operators 	Start working on a system description
Objective 12: Prepare and perform a gap analysis		
Objective 13: Know how to develop an implementation plan	2. Gap Analysis: <ul style="list-style-type: none"> Gap analysis requirements Gap analysis check list How to perform a gap analysis 	Group work on a gap analysis checklist example
Objective 14: Know SMS documentation requirements	3. Implementation plan: <ul style="list-style-type: none"> Use of an implementation plan The ICAO phased approach to an SMS Resource planning Authority approval 	First steps towards an implementation in your organisation
Objective 15: Be able to set up an SMS documentation		
Objective 16: Use SMS documentation in daily practice	4. System Processes and Operating Procedures: <ul style="list-style-type: none"> Existing manuals Integration of SMS requirements 	Examination of existing operational and quality manuals
	5. The SMS handbook: <ul style="list-style-type: none"> SMS handbook layout What needs to be done 	Start working on an SMS handbook

2.2 Module SQ06: SMS Integration

Note: Presentation of a generic SMS implementation and risk assessment tools (safety risk evaluation, safety review, event risk classification), may be adapted to customer specific implementation and tools on request

Objectives	Contents of module	Practical Training/Discussion
Objective 17: Learn how to integrate a SMS in the organisation	1. Integration of a SMS: <ul style="list-style-type: none"> Integration according to SMS definition 	
Objective 18: Understand the structure of the Safety Review Board	2. Organizational Structures: <ul style="list-style-type: none"> Structure of Safety Review Board Functions of each element 	Discussion on “Organisational impact of SMS implementation”
Objective 19: Get to know the roles and responsibilities	3. Accountabilities: <ul style="list-style-type: none"> Roles and responsibilities in an SMS 	
Objective 20: Understand the meaning of the safety policy	4. Policies: <ul style="list-style-type: none"> Safety Policy requirements No blame policy Integration of existing policies 	
Objective 21: Distinguish between different risk assessment tools	5. Procedures: <ul style="list-style-type: none"> Overview and triggers of risk assessment tools The management of change 	

2.3 Module SQ07: Safety Culture and Reporting

Note: Use of generic SMS risk management process, may be adapted to customer specific process on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 22: Define Safety Culture	1. Safety Culture: <ul style="list-style-type: none"> Definition of Safety Culture Characteristics of Safety Culture 	Group discussion on “How to establish/improve safety culture?”
Objective 23: Learn how to assess and improve safety culture	2. Reporting Culture: <ul style="list-style-type: none"> Incentives Reporting culture Strategies to improve reporting rates 	Group discussion on “reporting - where is the limit?”
Objective 24: Improve reporting culture		

2.4 Module SQ08: Communication Techniques and Safety Promotion

Note: May be adapted to customer specific safety promotion on request

Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 25: How to communicate SMS objectives and procedures to all operational personnel</p> <p>Objective 26: How to communicate SMS results to the management and authorities</p>	<p>1. Elements of safety promotion</p> <ul style="list-style-type: none"> • SMS manuals • Safety commitment • Target group specific training and safety awareness • Safety information 	
	<p>2. Communication flow</p> <ul style="list-style-type: none"> • How to are actively encourage operational personnel to identify and report hazards • SMS Communication between SRB, SSO and SAG members • Safety communication between all levels of the organisation • The role of the Safety Manager 	<p>Discuss examples of organizational SMS communication</p>
	<p>3. Risk Reporting</p> <ul style="list-style-type: none"> • Internal risk reporting • Keep the management in the safety loop • External risk reporting to authorities 	<p>Case study internal incident</p>

3 Day 3

3.1 Module SQ09: Safety Assurance and Safety Performance Indicators (SPIs)

Note: Use of generic SMS risk management process, may be adapted to customer specific process on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 27: Understand Safety Assurance Objective 28: Develop and Review SPIs	1. Safety Assurance: <ul style="list-style-type: none"> • Safety surveys • Methods to detect changes in functional systems or operations • Use of safety records 	Apply methods for management of change
	2. Safety Performance Indicators (SPIs): <ul style="list-style-type: none"> • Quantitative safety level • Consideration of all aspects of the provision of ATM • Development of ANS specific SPIs 	Discuss set of SPIs

3.2 Module SQ10: Emergency response preparedness

Note: May be adapted to customer specific ERP on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 29: Get to know your emergency response plan	1. Emergency Response Plan (ERP) outline Elements of the ERP Duties and responsibilities The role of the SMS during an emergency Media relation and information management	Case study: Major accident
	2. Annex 13 Investigation Participants Role of the airline Final report	

3.3 Module SQ11: Risk Assessment introduction		
Objectives	Contents of Module	Practical Training/Discussion
Objective 30: Get a short introduction of risk assessment requirements	1. Modeling risk	
	2. Safety risk management	
	3. Safety Risk Evaluation (SRE)	

3.4 Module SQ12: Course Summary and Test		
Objectives	Contents of Module	Practical Training/Discussion
Objective 31: Get an overview about lessons learned	1. Summary of SMS course <ul style="list-style-type: none"> • Overview of SMS building blocks • Phased approach • Implementation steps in your organisation 	
Objective 32: Check you knowledge through an open book test		