

→ Syllabus - SMS for Non- Complex ATO's

Syllabus

SMS Non-Complex ATO's (3 days)

Comprehensive competence.

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1 Day 1

1.1 Module SQ01: Make Safety a System		
<i>Note: Presentation of generic SMS risk management process and safety culture definition, may be adapted to customer specific process and definition on request</i>		
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 organization 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 	Group discussion on “What is safety, risk and risk assessment?”
	<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 	Group discussion on “Meaning of safety culture?”

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>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: A training organization (ATO) wants to implement a 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>

1.3 Module SQ03: SMS Costs and Benefits		
Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 6: Understand role of SMS in the decision making process and allocation of resources</p> <p>Objective 7: Find out if and how a functioning SMS can save costs to your organisation</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 organisation
	<p>4. Effective Safety Reporting</p> <ul style="list-style-type: none"> • Requirements • Incentives and barriers 	

1.4 Module SQ04: Setting Up an SMS		
Objectives	Contents of Module	Practical Training/Discussion
Objective 8: Be able to develop a system description	1. System Description: <ul style="list-style-type: none"> ICAO requirements for a system description 	Start working on a system description
Objective 9: Prepare and perform a gap analysis	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 10: Know how to develop an implementation plan	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 11: SMS documentation requirements		
Objective 12: Setting up an SMS documentation		
Objective 13: SMS documentation in daily practice	4. Policy and Standards: <ul style="list-style-type: none"> Safety Policy requirements No blame policy Integration of existing policies 	
	5. System Processes and Operating Procedures: <ul style="list-style-type: none"> Existing manuals Integration of SMS requirements 	Examination of existing operational and quality manuals
	6. The SMS handbook: <ul style="list-style-type: none"> SMS handbook layout What needs to be done 	Start working on an SMS handbook

2 Day 2

2.1 Module SQ05: Safety Culture and Reporting		
<i>Note: Use of generic SMS risk management process, may be adapted to customer specific process on request</i>		
Objectives	Contents of Module	Practical Training/Discussion
Objective 14: 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 15: Learn how to assess and improve safety culture		
Objective 16: Improve reporting 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?”

2.2 Module SQ06: Communication Techniques, Safety Promotion and Assurance

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

Objectives	Contents of Module	Practical Training/Discussion
<p>Objective 17: How to communicate SMS objectives and procedures to all operational personnel</p> <p>Objective 18: 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 • The role of the Safety Manager • SM → Accountable Manager 	Discuss examples of organisational SMS communication
	<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 	Case study internal incident
Objective 19: Understand Safety Assurance	<p>1. Safety Assurance:</p> <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
Objective 20: Develop and Review SPIs	<p>2. Safety Performance Indicators (SPIs):</p> <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

2.3 Module SQ07: Emergency response preparedness

Note: May be adapted to customer specific ERP on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 21: 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	Case study: Major accident
	2. Annex 13 Investigation Participants Role of the airline Final report	

2.4 Module RAT03: Modeling Risk

Objectives	Contents of module	Practical Training/Discussion
Objective 22: Distinguish between Threat, Hazard and Consequence	Hazard Identification: Definition of Threats, Hazards and Consequences Documentation of Hazards	Group Activity “what is a threat, hazard, consequence?” (Flipchart)
Objective 23: Show methods and tools for Hazard Identification	Bow Tie Model: Development of Bow Tie Model	Group Activity “develop bow tie model for specific risk”
Objective 24: Develop a Bow Tie Model in the group		
Objective 25: Get practical experience with the Bow Tie Model		

3 Day 3

3.1 Module RAT05: Safety Risk Management

Note: Presentation of a generic risk matrix, probability and severity table, may be adapted to customer specific matrix and tables on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 26: Show methods and tools for Safety Risk Assessment	Risk Assessment: <ul style="list-style-type: none"> • Definition of Risk Severity and Risk Probability • Handling of Risk Severity and Risk Probability tables • Introduction of Risk Index and Risk Matrix 	Group discussion on severity and probability
	Safety Risk Mitigation: <ul style="list-style-type: none"> • Four Strategies for Risk Mitigations 	Practical examples for risk mitigation strategies
	Risk Management Process: <ul style="list-style-type: none"> • Schemata of Risk Management Process 	

3.2 Module RAT07: Safety Risk Evaluation (SRE)

Notes: Based on "Safety Issue Risk Assessment" provided by EASA ARMS working group, may be adapted to customer specific implementation on request. Use of generic risk evaluation document template and example, may be adapted to customer specific template and example on request

Objectives	Contents of Module	Practical Training/Discussion
Objective 27: Ability to use the Safety Risk Evaluation Document	Motivation for safety risk evaluation <ul style="list-style-type: none"> Risk assessment example case study 	Group discussion about the pitfalls of the performed risk assessment
Objective 28: Perform a Safety Risk Evaluation and get practical experience	Safety Risk Evaluation (SRE): <ul style="list-style-type: none"> When to perform a safety risk evaluation Usage of results 	Group discussion of triggers of safety risk evaluation by means of example
Objective 29: Get to know a ready to use and practical risk assessment tool	Safety Risk Evaluation Document: <ul style="list-style-type: none"> Introduction how to handle the safety risk assessment document Example for specific already filled out safety risk evaluation document 	
	<ul style="list-style-type: none"> Contents of Module 	Practical Training/Discussion

3.3 Module RAT09: Course Summary and Test

Objectives	Contents of Module	Practical Training/Discussion
Objective 30: Get an overview about lessons learned	1. Summary of course	Discussion of open questions regarding the course contents
Objective 31: Check your knowledge through an open book test	2. Open book test	1 hour test with 20 questions