



Course Description

SAFETY MANAGEMENT SYSTEMS (SMS) FOR CIVIL AVIATION (5 days)

Course Code: TALS-03

IATA Diploma: *Safety Management in Civil Aviation*

General description

This course provides the fundamentals of how to systematically manage safety in civil aviation using the Safety Management System concept developed by ICAO. A Safety Management System, or SMS, is a systematic approach to managing safety, including the necessary organisational structures, accountabilities, policies and procedures.

The concept of a Safety Management System draws together the safety policies, procedures, accountabilities and organizational structure. Implementing a Safety Management System can also improve business, introduce operational efficiencies, and enhance relationships between clients including airlines, service providers and civil aviation regulators. This 5 day course provides a thorough introduction to the SMS concept and guidance on how to implement.

How you will benefit

- ✔ Understand the fundamentals of a Safety Management System (SMS) and relate it to your organization
- ✔ Learn how the financial cost of safety can be managed
- ✔ Target resources appropriately and measure the results
- ✔ Manage safety risks proactively
- ✔ Build a positive safety culture
- ✔ Ensure effective communications on safety

Designed for:

- ✔ Civil Aviation Managers concerned with safety
- ✔ Air Traffic Controllers and managers responsible for safety in Air Navigation Service Providers
- ✔ Managers and operational staff from Civil Aviation Authorities, Air Navigation Service Providers, Airlines, Airports and other aviation organizations

Course Content

1. SMS course introduction

Participants will be able to understand the background, the need for, and the importance of the concept of a safety management system in the provision of aviation services.

- ✔ International Civil Aviation Organization (ICAO) rationale on SMS
- ✔ Why SMS?
- ✔ New ICAO Requirements including Annex 19



- ✔ Global Aviation Safety Plan (GASP)
- ✔ Main components of ICAO SMS
- ✔ Benefits of SMS

2. Basic safety concepts

Participants will be able to describe and explain the limitations of traditional methods to manage safety. They will be able to describe and explain: new perspectives and methods for managing safety; basic safety analysis models; the impacts of people and culture on safety.

- ✔ Concept of safety
- ✔ Evolution of thinking
- ✔ Reasons model -Cause of accidents
- ✔ The organizational accident
- ✔ The SHEL(L) model
- ✔ Errors and violations
- ✔ Organizational culture
- ✔ Safety investigation

3. Introduction to systematized safety management

Participants will be able to explain the need for, the strategies and the key features of safety management.

- ✔ The safety stereotype
- ✔ The management dilemma
- ✔ Need for safety management
- ✔ Strategies for safety management
- ✔ The imperative of change
- ✔ Safety management – Nine building blocks
- ✔ Four responsibilities for managing safety

4. Hazards

Participants will be able to understand the fundamentals of hazards and hazard identification and know how to apply the fundamentals of hazard identification through a case study.

- ✔ Definitions
- ✔ Understanding hazards
- ✔ Hazard identification
- ✔ Hazard analysis
- ✔ Documentation of hazards

5. Risks

Participants will be able to understand the fundamentals of risk management, and apply the fundamentals of risk management through a case study.

- ✔ First fundamental – Risk management
- ✔ Second fundamental – Risk probability
- ✔ Third fundamental – Risk severity
- ✔ Fourth fundamental - Risk assessment and tolerability
- ✔ Fifth fundamental – Risk control/mitigation
- ✔ Risk management warm-up exercises

6. SMS regulation

Participants will be able to describe the safety management requirements in ICAO Annex 19, including the relationship between the State Safety program and an SMS.



- AGA, ATS and OPS/AMO safety management
- What is a State Safety Program (SSP)?
- What is an SMS?
- Acceptable level of safety – Implementation, scope and legal considerations
- Protection of sources of safety information

7. Introduction to SMS

Participants will be able to describe the features of an SMS, explain the importance of system description and gap analysis, and the relationship between SMS and QMS

- ICAO requirements
- SMS – Introductory concepts
- SMS features
- System description
- Gap analysis
- Third fundamental – SMS and QMS
- Clarifying terms

8. SMS planning

Participants will be able to describe the requirements associated with the planning of an SMS; and explain the structure and components of an SMS implementation plan.

- The components of SMS
- The elements of SMS
- Safety policy and objectives

9. SMS operation

Participants will be able to describe the requirements associated with the operation of an SMS.

- Safety risk management
- Safety assurance
- Safety promotion

10. Phased approach to SMS implementation

Participants will be able to develop a basic SMS implementation plan, based upon a phased execution approach. Service providers who have already progressed beyond the initial implementation phase, will be better able to modify their SMS implementation plan appropriately.

Supplementary module

11. Understanding risks

Participants will have a more advanced understanding of risk and risk management as the basis of an SMS. A vocabulary of risk will be learned.

- Risk management principles and vocabulary based on ISO 31000 Standard
- Uncertainty, risk and probability
- Risk management steps in ISO 31000.

Certificate awarded

An IATA Certificate of Completion is awarded to participants obtaining a grade of 70% or higher on all exercises and exams. A special distinction is awarded to participants obtaining a grade of 90% or higher.



This course is a step toward earning an IATA Diploma in:

[Safety Management in Civil Aviation Diploma](#)