



Global **Safety** Network (GSN) Diploma Programme



Global Safety Network (GSN) Diploma

Enhancing levels of safety to meet regulatory standards and best operational practice

Mission of the programme

Supporting airports to improve and maintain safety standards and operations

The ACI Global Safety Network (GSN) Diploma Programme is a six (6) certificate programme designed to provide participants with a broad and detailed understanding of safety in all areas of airport operations to meet the needs of airside operators and safety managers in developing, implementing and operating effective Safety Management Systems (SMS) in line with International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) and Airports Council International's guidance material.

Diploma programme structure

To earn the GSN silver or gold diplomas, participants must successfully complete the required GSN certificate courses for each diploma within three (3) years. The silver diploma is a prerequisite of the gold diploma.

Each GSN course may be taken as a stand-alone certificate course.

Silver diploma: GSN 1 to GSN 3

-  GSN 1 | Safety Management Systems
-  GSN 2 | Airside Safety and Operations
-  GSN 3 | Emergency Planning and Crisis Management

Gold diploma: GSN 1 to GSN 6 **Prerequisite: Silver diploma**

-  GSN 1 | Safety Management Systems
-  GSN 2 | Airside Safety and Operations
-  GSN 3 | Emergency Planning and Crisis Management
-  GSN 4 | Working with Annex 14
-  GSN 5 | Advanced Safety Management Systems
-  GSN 6 | Aerodrome Auditing and Compliance

Target audience

- Airport operations directors, managers, officers and staff
- Airport safety managers, officers and staff
- Airport emergency managers, rescue and fire fighting officers and staff
- Airport ground handling managers and personnel
- Airport health and safety personnel
- Air traffic controllers
- Airport planners and designers
- Civil Aviation Authority inspectors and regulators

GSN 1: Safety Management Systems

Course description

Classroom, 5 days

The Safety Management Systems (SMS) course provides participants with a comprehensive overview of airport SMS. Participants learn how SMS can enhance the safety of airport operations and how to implement them following industry best practice.

This course is delivered by senior airport managers with extensive experience of operational procedures, SMS and aerodrome certification. It includes a combination of both theoretical knowledge and practical skills, such as airside group exercises, to provide a comprehensive and relevant learning experience.

Learning objectives

Upon completing this course, participants will be able to:

- Demonstrate general awareness of international regulatory requirements on SMS
- Recognize the importance of adhering to the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs)
- Consider the airport's responsibilities in providing a safe work environment and the challenges of SMS implementation
- Demonstrate familiarization with the principles of SMS as an essential tool for safety enhancement
- Describe the principles of risk assessment and hazard identification
- Demonstrate general awareness of how to conduct an accident and incident investigation
- Explain the fundamentals of a safety culture and the impact of human factors on airport safety
- Describe how to prepare for safety airport audits and inspections (based on ICAO SARPs)
- Demonstrate familiarization with the fundamental requirements of SMS documentation and training

GSN 2: Airside Safety and Operations

Course description

Classroom, 5 days

The Airside Safety and Operations course provides participants with an understanding of all of the facets of airside safety and operations. The course covers industry best practice including recommended equipment and technologies, procedures and regulations for a safe and efficient airside-operating environment.

This course is delivered by senior airport managers with extensive experience of operational procedures, Safety Management Systems (SMS) and aerodrome certification. It includes a combination of both theoretical knowledge and practical skills, such as airside group exercises, to provide a comprehensive and relevant learning experience.

Learning objectives

Upon completing this course, participants will be able to:

- Differentiate between International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) with reference to airside safety and operations
- Demonstrate general awareness of the tasks and responsibilities of an aerodrome operator regarding safety management
- Identify apron signs, markings, navigation aids and lighting in use at aerodromes
- Demonstrate general awareness of procedures used by airports for adverse weather and low visibility operations
- Describe an effective airside driver programme, types of driver permits and vehicle permit procedures on aerodromes
- Demonstrate familiarization with fuel management, handling of hazardous materials and other environmental issues
- Define contributing factors and mitigating strategies to reduce runway incursions
- Explain the importance of wildlife hazard and habitat management within and around the aerodrome
- Discuss the importance of stakeholder management with airport operations
- Demonstrate general awareness of the concept of Airport Collaborative Decision Making (A-CDM)

GSN 3: Emergency Planning and Crisis Management

Course description

Classroom, 5 days

The Emergency Planning and Crisis Management course provides participants with required tools to proactively plan for emergencies and to manage activities during a crisis. Participants are introduced to the international requirements of an Emergency Plan, learn how to manage a crisis at the airport and engage all stakeholders to resume safe airport operations as soon as possible.

This course is delivered by senior airport managers with extensive experience of operational procedures, Safety Management Systems and aerodrome certification. It includes a combination of both theoretical knowledge and practical skills, such as airside and table-top group exercises, to provide a comprehensive and relevant learning experience.

Learning objectives

Upon completing this course, participants will be able to:

- Demonstrate general awareness of the international requirements on airport emergency planning
- Describe the ICAO Standards and Recommended Practices (SARPs) for Airport Rescue and Fire Fighting (ARFF)
- Define the different types of crises that can happen at an airport including aircraft accidents and acts of unlawful interference
- Recognize the importance of preparing for an accident or incident on the aerodrome
- Explain the responsibilities of the airport and various stakeholders following an accident or incident including victim support and media management during a crisis situation
- Apply relevant tools and best practice to implement emergency plans and procedures at their airport
- Describe best practice for crisis management and the activities required to return to normal airport operations
- Recognize the importance of training on airport emergency planning

GSN 4: Working with Annex 14

Course description

Classroom, 5 days

The Working with Annex 14 course is designed for airside safety personnel and planners who already have a basic knowledge of airport operations and aerodrome design and who will need to implement the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) either through their Safety Management System (SMS) or as part of a new aerodrome development.

This course is delivered by senior airport managers with extensive experience of operational procedures, SMS and aerodrome certification. It includes a combination of both theoretical knowledge and practical skills, such as airside group exercises, to provide a comprehensive and relevant learning experience.

Learning objectives

Upon completing this course, participants will be able to:

- Review the contents of ICAO Annex 14 for aerodrome certification
- Explain how ICAO SARPs are used by regulators, airport planners and safety personnel
- Discuss practical examples illustrating the application of ICAO SARPs for runways, taxiways and aprons
- Demonstrate familiarization with Annex 14 requirements for aerodrome pavement strength, friction and maintenance
- Calculate and re-declare runway distances as part of planned works or in an emergency situation
- Demonstrate general awareness of Obstacle Limitation Surfaces (OLS) and how to calculate and control OLS penetration
- Analyze the operational issues related to managing multiple runway operations
- Review how a risk assessment is conducted and applied
- Describe what is an aeronautical study as a tool to manage non-compliances at the airport while maintaining safe operations
- Demonstrate familiarization in preparing airports for safety audits

GSN 5: Advanced Safety Management Systems

Course description

Classroom, 5 days

The Advanced Safety Management Systems (SMS) course provides participants with an in-depth understanding of SMS by exploring their requirements and composition.

Through group exercises and case studies, participants are exposed to best practice on how to implement and improve safety management through safety monitoring, training and documentation.

Learning objectives

Upon completing this course, participants will be able to:

- Demonstrate familiarization with the International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs) under Annex 14 and Annex 19
- Recognize the accountabilities and responsibilities for key airport personnel regarding SMS
- Appreciate the different competing priorities (profit versus safety) when managing an aerodrome
- Recognize the impact of human factors on SMS
- Develop proper investigative processes using “Just Culture” techniques
- Demonstrate how to develop safety related key performance indicators (KPI)
- Determine how to develop robust standard operating procedures (SOPs)
- Explain the five fundamentals of risk management as part of SMS
- Apply the fundamentals of aeronautical studies to manage safety non-compliances
- Promote safety awareness through education and communication

GSN 6: Aerodrome Auditing and Compliance

Course description

Classroom, 5 days

The Aerodrome Auditing and Compliance course provides participants with a toolkit to audit safety procedures of infrastructure and equipment of an airport and other organizations operating at the aerodrome.

The course is delivered by aerodrome safety and compliance experts and combines classroom activities with practical exercises at an airfield to allow participants to experience auditing techniques under real conditions while receiving essential guidance and coaching in applying International Civil Aviation Organization (ICAO) Standards and Recommended Practices (SARPs).

Learning objectives

Upon completing this course, participants will be able to:

- Demonstrate familiarization with the ICAO SARPs on aerodrome certification
- Explain how the audit process enhances an airport’s safety management systems
- Give examples of how to improve safety through different types of audits
- Recognize the difference between safety audits and safety inspections
- Explain the importance of safety compliance
- Describe and apply different auditing tools and techniques
- Describe the importance of establishing an aircraft turnaround audit programme to enhance safety
- Analyse the pre-planning process and structure of an airport safety audit
- Explain how to develop audit compliance templates and checklists
- Demonstrate familiarization with how to analyse audit findings and develop audit reports
- Describe the techniques to use to and implement audit follow-up actions



GLOBAL TRAINING

To find out more information, please contact us at:



training@aci.aero



+1 514 373 1200



aci.aero/GSN