Innovative Airport Safety Management Systems and Regulatory Compliance Training Course



19 - 23 Oct 2026

California

7900 € (Per Person)

Ref: #AIR5515_70675

Course Introduction / Overview:

The contemporary aviation industry requires a proactive, systematic approach to safety. This training course is specifically designed to provide professionals with a comprehensive understanding of Airport Safety Management Systems (SMS) and their critical role in ensuring operational excellence and regulatory compliance. It moves beyond traditional, reactive safety measures by focusing on the proactive identification, analysis, and mitigation of hazards and risks. Following the framework established by the International Civil Aviation Organization (ICAO) in Annex 19, this program covers the four core components of SMS: safety policy, risk management, safety assurance, and safety promotion. Participants will explore the principles of human factors and organizational culture as they relate to airport safety. The course also delves into the practical application of SMS concepts, drawing on insights from academic work like "Practical Safety Management Systems" by Paul R. Snyder. By embracing these modern safety principles, BIG BEN Training Center is committed to helping aviation professionals build robust safety cultures that protect both personnel and passengers while meeting all global standards.

Target Audience / This training course is suitable for:

- Airport operations and safety managers.
- Civil aviation authority inspectors and regulators.
- Airport emergency and security staff.
- Air traffic controllers and maintenance supervisors.
- Personnel involved in quality assurance and risk management.
- Anyone seeking to advance their career in airport safety.

Target Sectors and Industries:

- Aviation and Aerospace industry.
- Airport operators and aerodromes.
- Air transport services and airlines.
- Aircraft maintenance and ground handling companies.
- Government agencies are responsible for aviation oversight and safety regulation.
- Air navigation service providers.

Target Organizations Departments:

- Safety Management and Quality Assurance Departments.
- Airport Operations and Airside Management.
- Risk Management and Compliance.
- Emergency Planning and Response.
- Ground Handling and Maintenance.
- Air Traffic Control.

Course Offerings:

By the end of this course, the participants will have able to:

- Design and implement a robust Airport Safety Management System.
- Identify and analyze potential hazards and safety risks in airport operations.
- Develop and apply effective risk mitigation strategies.
- Ensure compliance with international standards, including ICAO Annex 19.
- Establish a positive safety culture through effective safety promotion.
- Conduct internal safety audits and performance monitoring.
- Manage change within the airport environment safely.

Course Methodology:

This training is delivered through a highly interactive and engaging methodology that blends theoretical knowledge with practical application. We don't just lecture, we facilitate a learning experience that includes a mix of presentations, group discussions, and case studies drawn from real-world aviation incidents. You'll work on hands-on exercises, like conducting hazard identification workshops and developing risk matrices, to reinforce key concepts. Participants will get valuable feedback from our expert instructors, as well as their peers, in a collaborative environment. This approach is designed to ensure you not only understand the principles of an Airport Safety Management System but also know how to utilize them effectively in your daily work. BIG BEN Training Center focuses on building practical, job-ready skills that make a tangible difference in the safety and efficiency of your organization.

Course Agenda (Course Units):

Unit One: The Foundation of Aviation Safety Management Systems.

- The evolution of safety thinking and accident causation models.
- Understanding the four pillars of an effective SMS framework.
- Regulatory requirements and international standards, including ICAO Annex 19.
- Safety policy, objectives, and senior management commitment.
- Roles, responsibilities, and accountability for safety.
- Documentation and implementation planning.

Unit Two: Safety Risk Management (SRM) in Practice.

- System description and functional hazard analysis.
- Proactive and reactive hazard identification techniques.
- Risk assessment, analysis, and tolerability.
- Developing effective safety risk controls and mitigation strategies.
- Safety management of change processes.
- Human factors and their impact on safety.

Unit Three: Safety Assurance (SA) and Performance Monitoring.

- Safety performance indicators and targets.
- Continuous safety monitoring and data collection.
- Internal and external safety audits and inspections.
- Incident and accident investigation and root cause analysis.
- Corrective action planning and follow-up.
- Management review and continuous improvement.

Unit Four: Safety Promotion and Cultivating a Safety Culture.

- Safety communication and awareness programs.
- Safety training and competency assurance.
- Promoting a just culture and voluntary reporting systems.
- The role of leadership in building a positive safety culture.
- Managing safety information and data sharing.
- Safety culture surveys and assessment.

Unit Five: Implementation and Advanced Applications of SMS.

- Practical steps for implementing an SMS in an airport environment.
- Integrating SMS with existing quality and security management systems.
- Emergency response planning and coordination.
- Managing contractor and tenant safety.
- Auditing SMS effectiveness and preparing for regulatory oversight.
- Case study analysis of successful SMS implementations.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can an organization's existing culture of compliance be transformed into a proactive, resilient safety culture through the principles of a formal safety management system?

What unique qualities does this course offer compared to other courses?

This course stands out by providing an in-depth, hands-on approach to Airports Safety Management Systems that goes beyond simple regulatory compliance. Instead of just teaching concepts, we immerse participants in practical scenarios and exercises that simulate real-world challenges. You'll leave with a tangible, workable plan for implementing or enhancing an SMS at your specific organization. The content is meticulously curated to reflect the latest global standards and best practices, with a strong emphasis on the human and organizational factors that drive safety performance. We focus on developing a systematic way of thinking that allows you to proactively identify and manage risks before they lead to an incident. Our expert instructors bring extensive industry experience, offering insights and practical examples that no textbook can provide. This training is not just about gaining knowledge; it's about building the skills and mindset needed to be a true leader in airport safety.