ICAO GLOBAL AVIATION TRAINING TRAINAIR PLUS™

HLSC 2015

New ICAO Approach to Safety Management Training

Elizabeth Gnehm
ICAO Technical Coordinator
Safety Management

Background

- 23 Nov. 2006 – Initial SARPs on safety management systems (SMS)
- 2009 – Introduction of State Safety Programme (SSP) training courses
- More than 200 Safety Management training courses delivered by ICAO between 2006 and 2013

Background

- Feedback from courses and workshops supported the development of new Annex 19 and SMM (third edition)

Safety Management Training Programme

- Consistent and cost-effective methodology is necessary
- ICAO started the development of a new approach to teaching safety management
  - Updated with the latest Standards
  - Use of tools and exercises relevant to real-life scenarios and best practices

Course Structure

- A Standardized Training Package with blended learning approach: Online + Classroom
- Online – enables participants to receive homogeneous instruction on safety management
- Classroom activity – safety management concepts applied through a case study similar to the one they will face in the workplace

Course Objectives

This course will provide :

- personnel involved in SSP/SMS implementation with the knowledge, skills and attitudes to advocate SMS requirements and guidance material, as well as the acceptance/oversight of service providers' SMS.
- service providers' staff with the basic knowledge, skills and attitudes to implement, administer or participate in SMS operations.

Expected benefits

- SSP/SMS implementation plans based on the ICAO frameworks
- Resolution of safety-related issues by applying the required skills and knowledge associated with the key SSP/SMS processes, such as:
  - hazard identification and risk mitigation (HIRM)
  - safety data collection and processing systems
  - safety performance indicator development, measurement and monitoring

Expected benefits

- Improve the level of compliance with SM SARPs
- Facilitate the development of safety management training programmes by and for regulatory and service provider personnel
- Enable States and operators to interact effectively in the resolution of safety-related issues

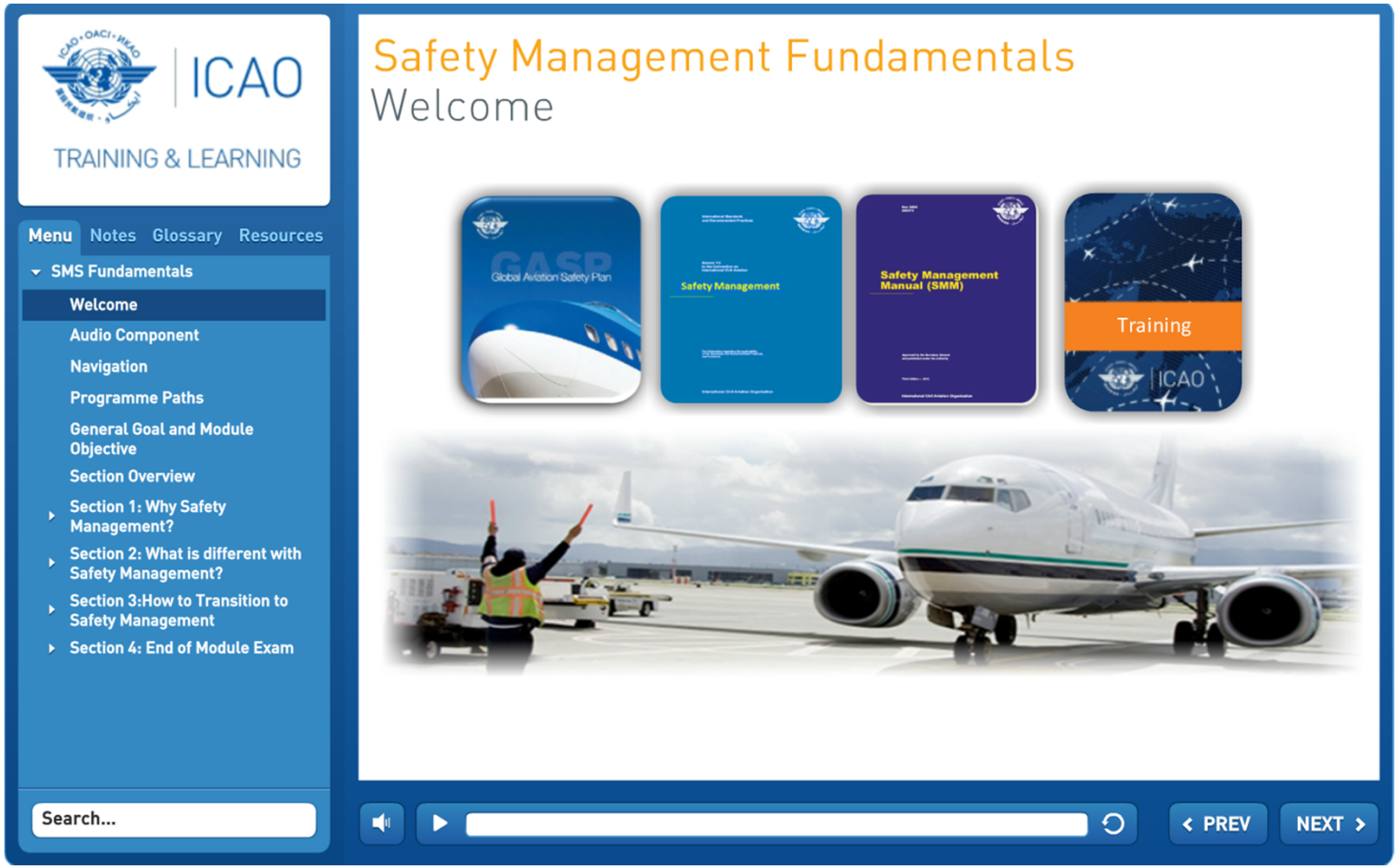
Course Demo

Module 1 : Safety Management Fundamentals

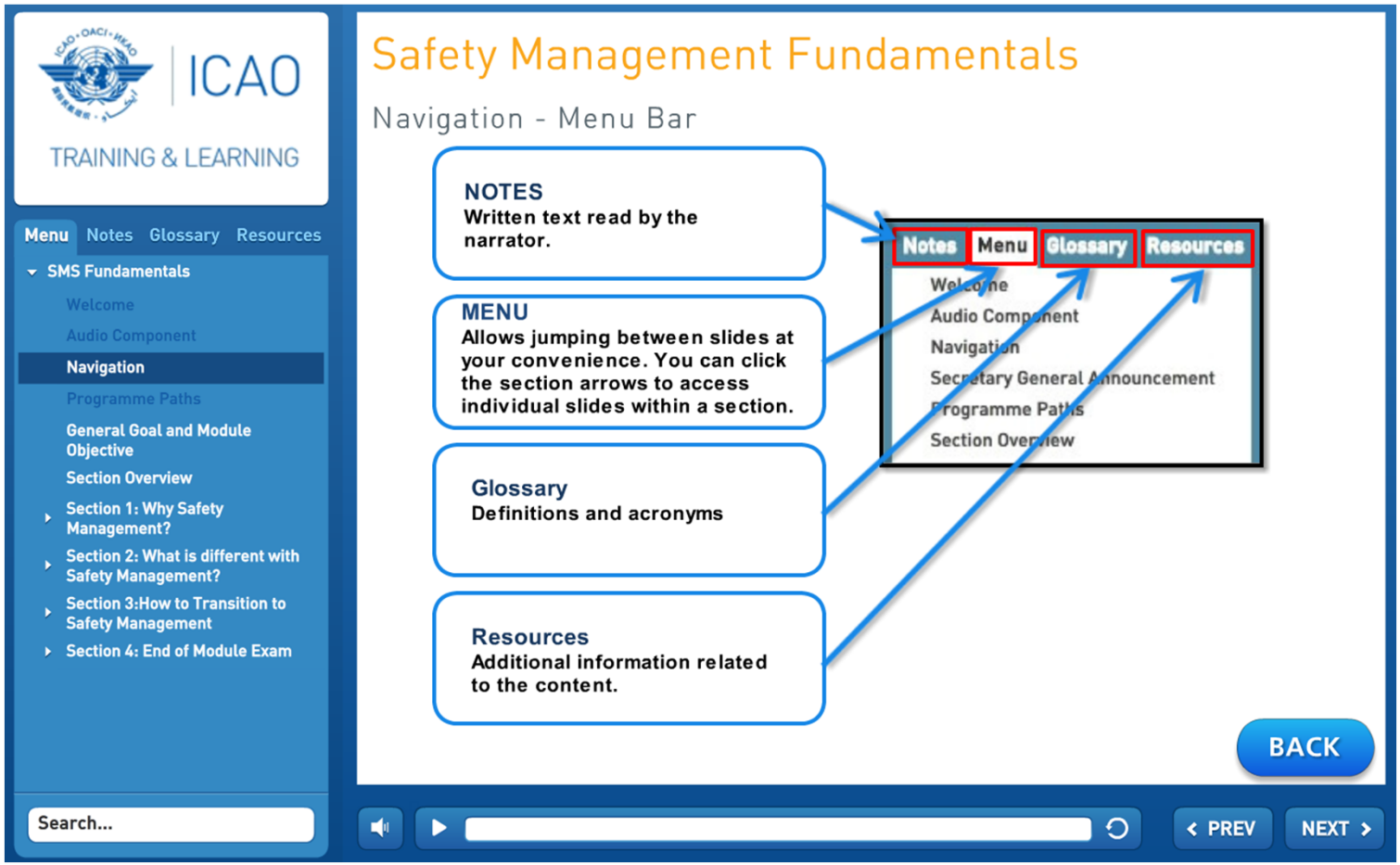
Module 2 : ICAO Safety Management Provisions

Module 3A/B : State Safety Programme
Safety Management Systems

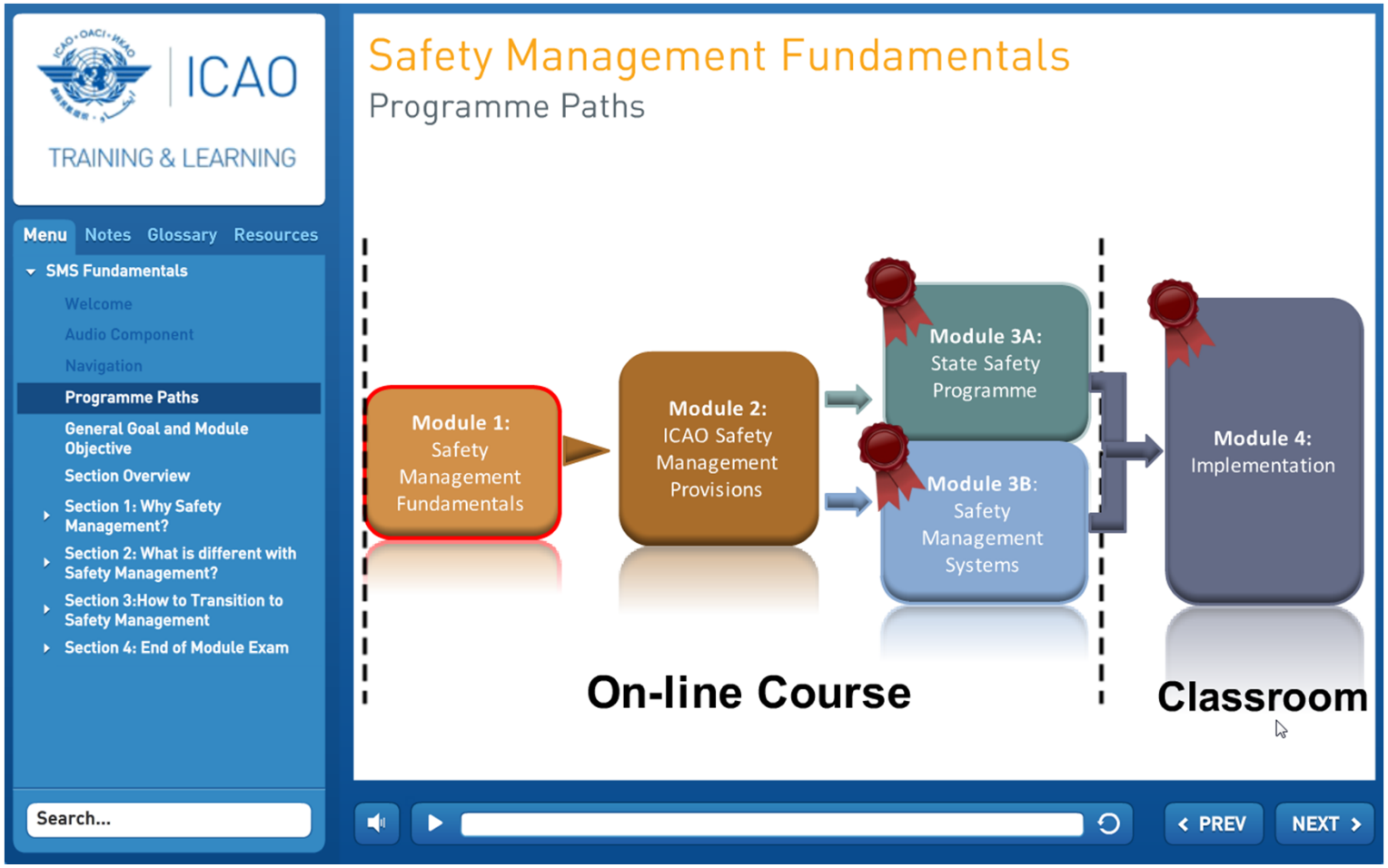
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
Section 2: What is different with Safety Management?
Section 3:How to Transition to Safety Management
Section 4: End of Module Exam
Search...
Safety Management Fundamentals
Welcome
GASP
Global Aviation Safety Plan
Safety Management
Safety Management Manual (SMM)
Training
ICAO
PREV
NEXT

Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
Section 2: What is different with Safety Management?
Section 3:How to Transition to Safety Management
Section 4: End of Module Exam
Search...
Safety Management Fundamentals
Navigation - Menu Bar
NOTES
Written text read by the narrator.
MENU
Allows jumping between slides at your convenience. You can click the section arrows to access individual slides within a section.
Glossary
Definitions and acronyms
Resources
Additional information related to the content.
Notes
Menu
Glossary
Resources
Audio Component
Navigation
Programme Paths
Section Overview
BACK
PREV
NEXT

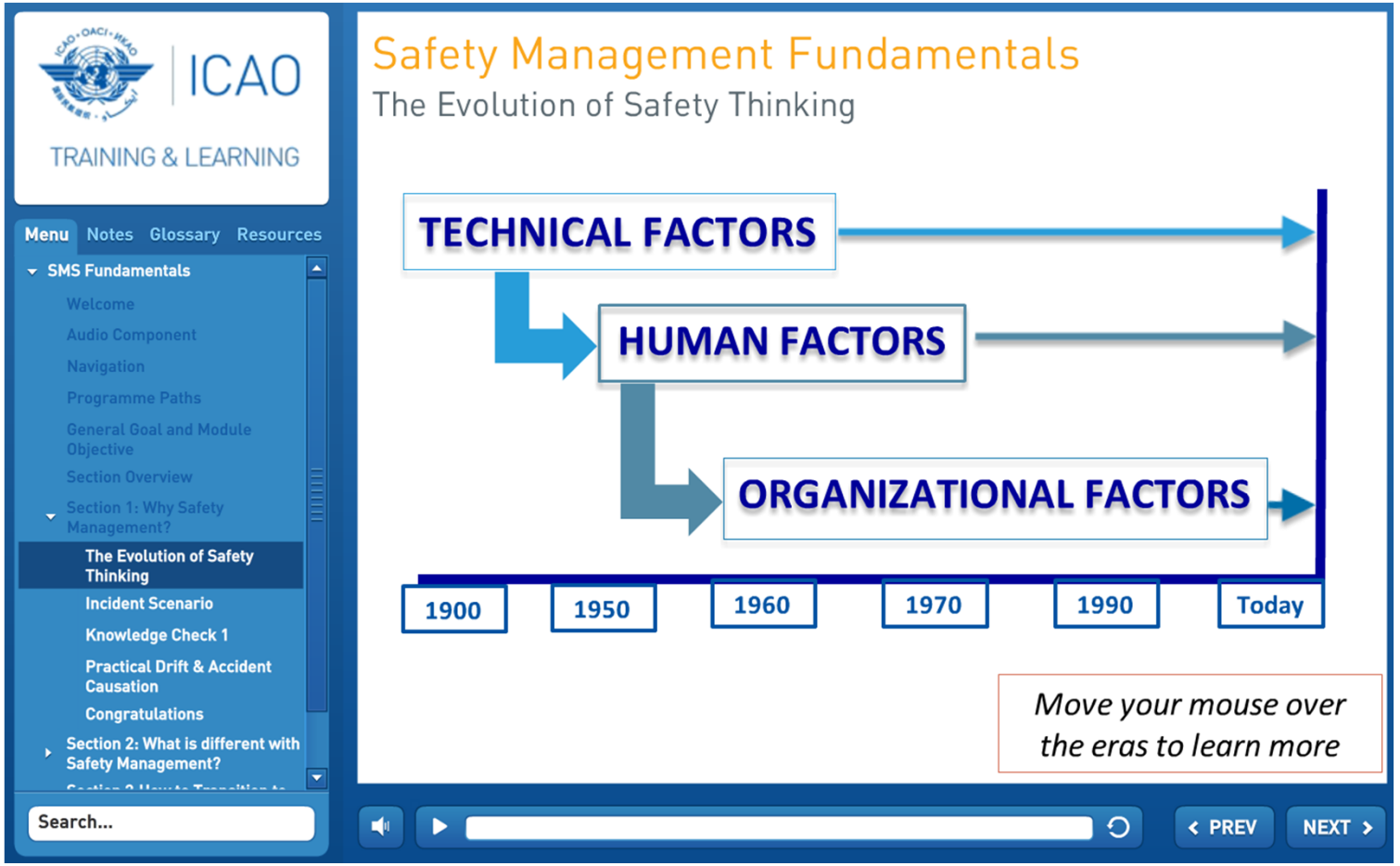
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
Section 2: What is different with Safety Management?
Section 3:How to Transition to Safety Management
Section 4: End of Module Exam
Search...
Safety Management Fundamentals
Programme Paths
Module 1: Safety Management Fundamentals
Module 2: ICAO Safety Management Provisions
Module 3A: State Safety Programme
Module 3B: Safety Management Systems
Module 4: Implementation
On-line Course
Classroom
PREV
NEXT

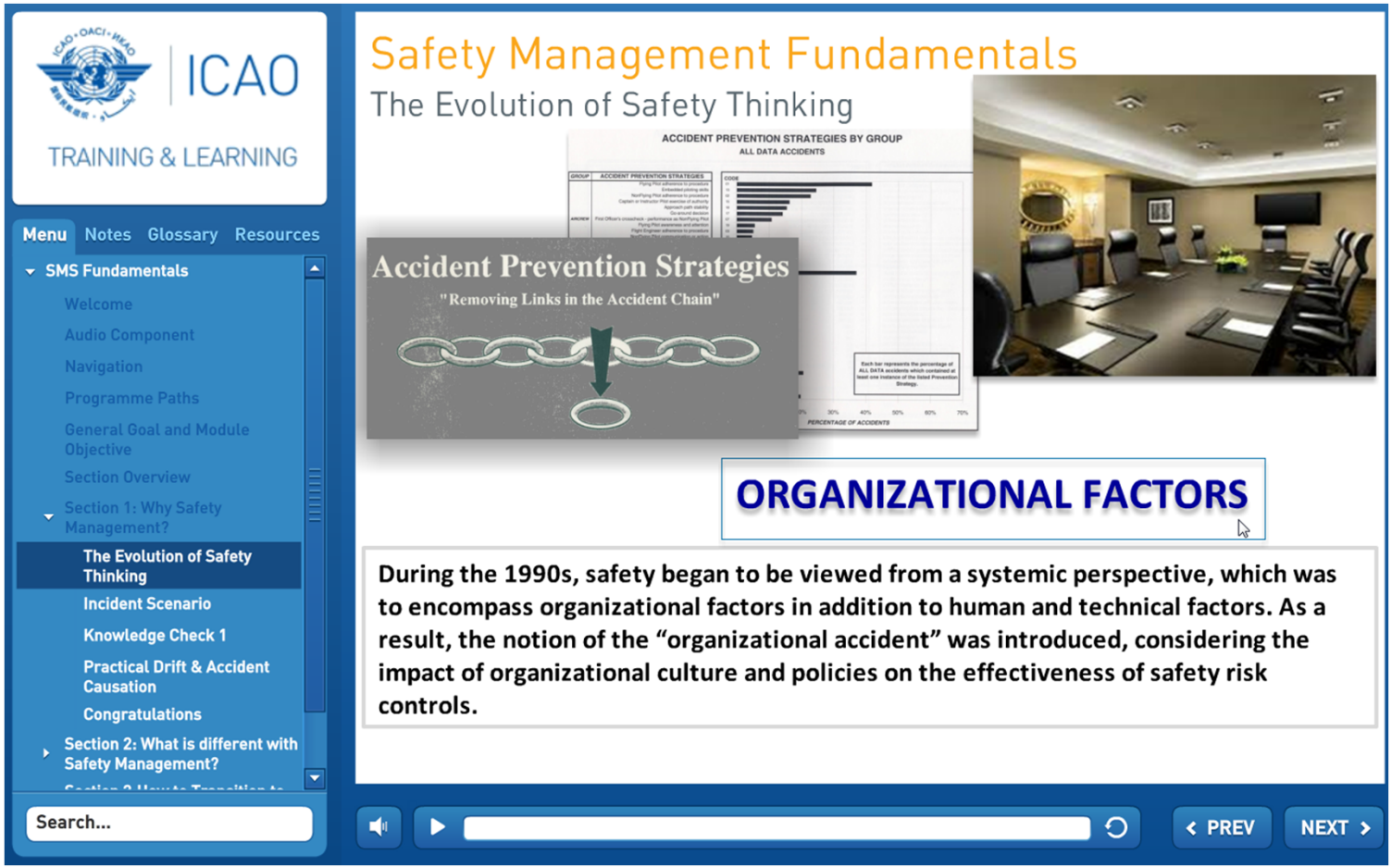
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
Section 2: What is different with Safety Management?
Section 3:How to Transition to Safety Management
Section 4: End of Module Exam
Search...
Safety Management Fundamentals
Course Navigation
Click on a highlighted button to navigate to the section
Section 1: Why safety management?
Section 2: What is different with safety management?
Section 3: How can you transition to safety management?
Section 4: End of Module Exam
PREV

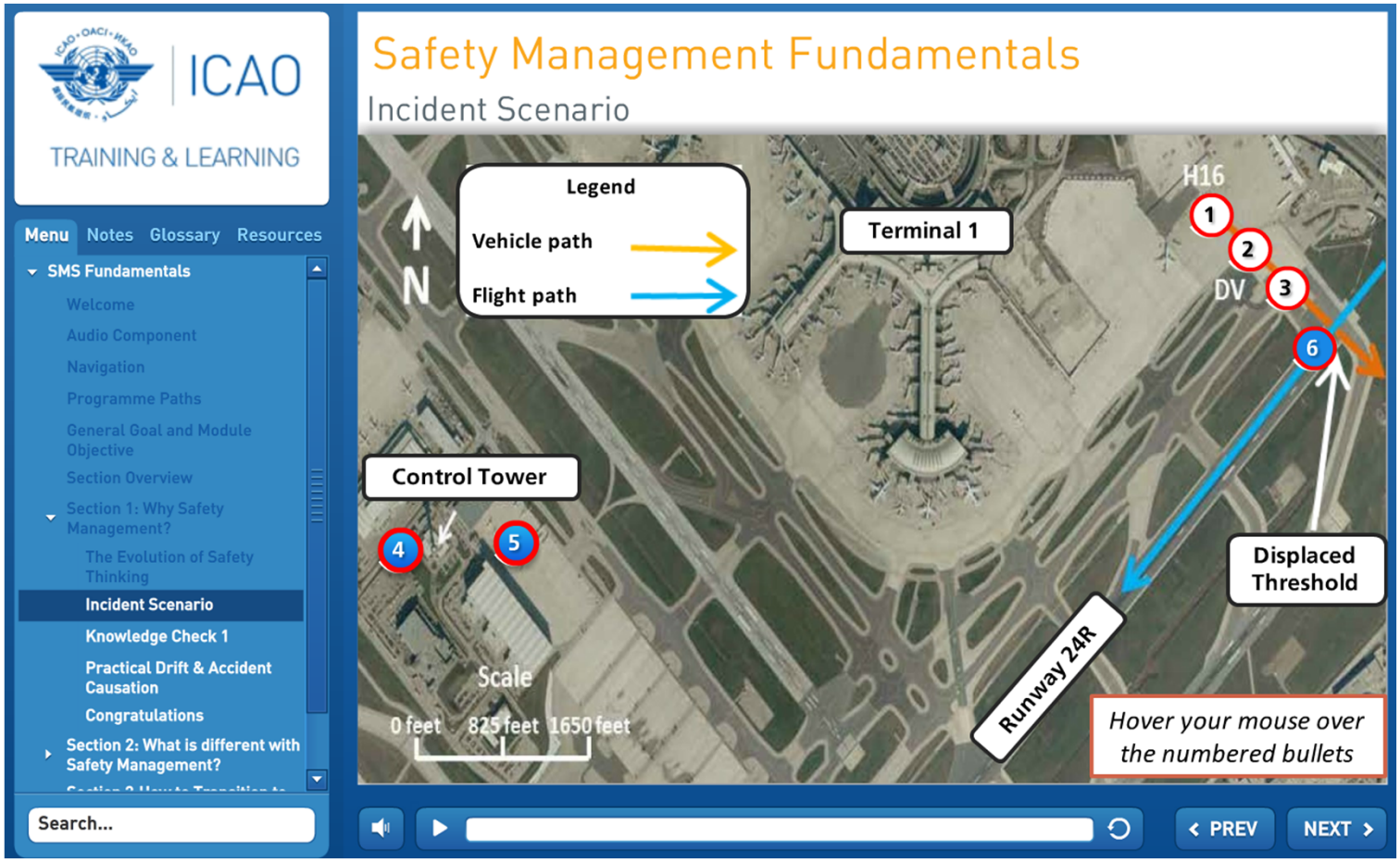
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
The Evolution of Safety Thinking
Incident Scenario
Knowledge Check 1
Practical Drift & Accident Causation
Congratulations
Section 2: What is different with Safety Management?
Search...
Safety Management Fundamentals
The Evolution of Safety Thinking
TECHNICAL FACTORS
HUMAN FACTORS
ORGANIZATIONAL FACTORS
1900
1950
1960
1970
1990
Today
Move your mouse over the eras to learn more
PREV
NEXT

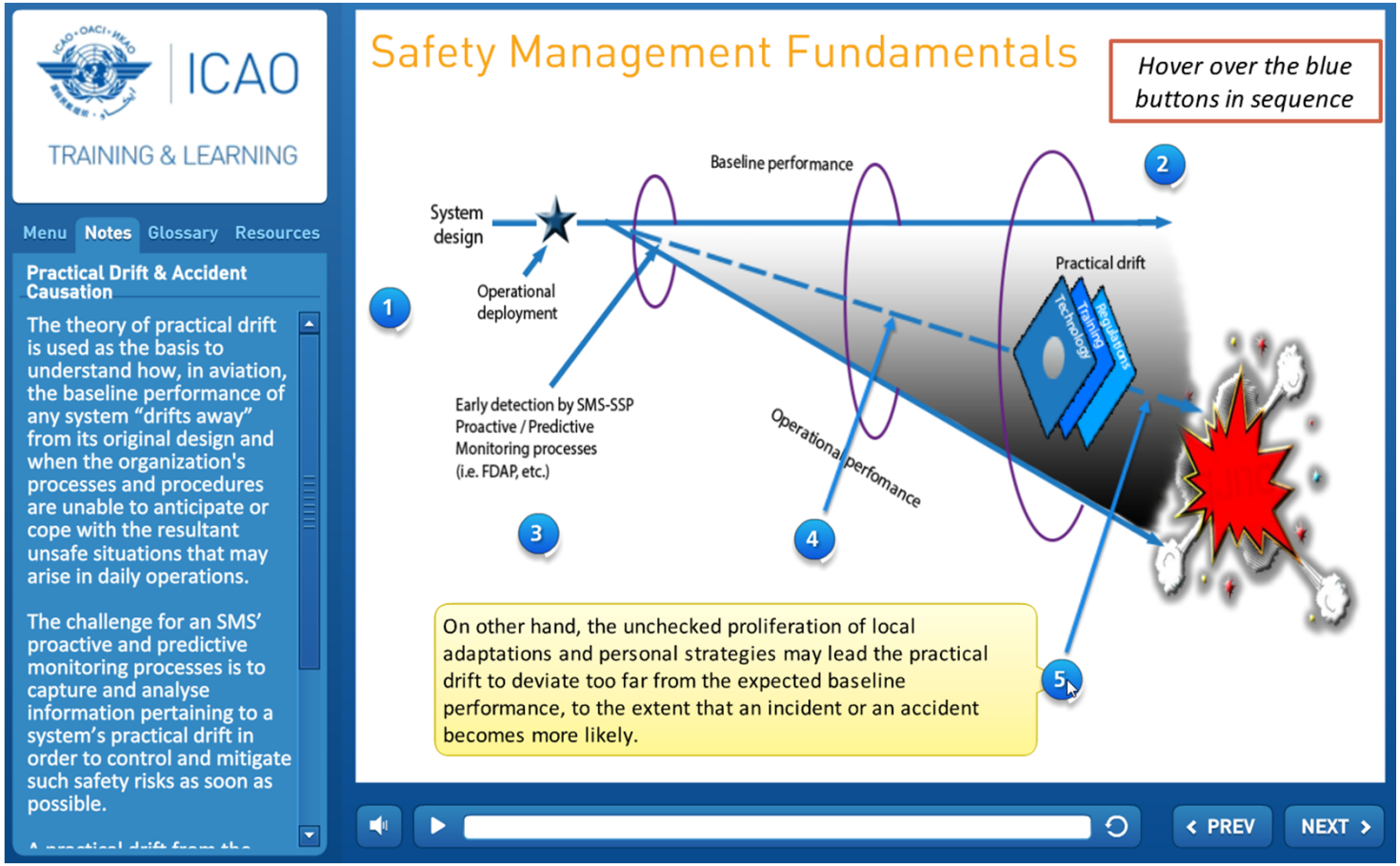
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
The Evolution of Safety Thinking
Incident Scenario
Knowledge Check 1
Practical Drift & Accident Causation
Congratulations
Section 2: What is different with Safety Management?
Search...
Safety Management Fundamentals
The Evolution of Safety Thinking
ACCIDENT PREVENTION STRATEGIES BY GROUP
ALL DATA ACCIDENTS
Accident Prevention Strategies
"Removing Links in the Accident Chain"
ORGANIZATIONAL FACTORS
During the 1990s, safety began to be viewed from a systemic perspective, which was to encompass organizational factors in addition to human and technical factors. As a result, the notion of the "organizational accident" was introduced, considering the impact of organizational culture and policies on the effectiveness of safety risk controls.
PREV
NEXT

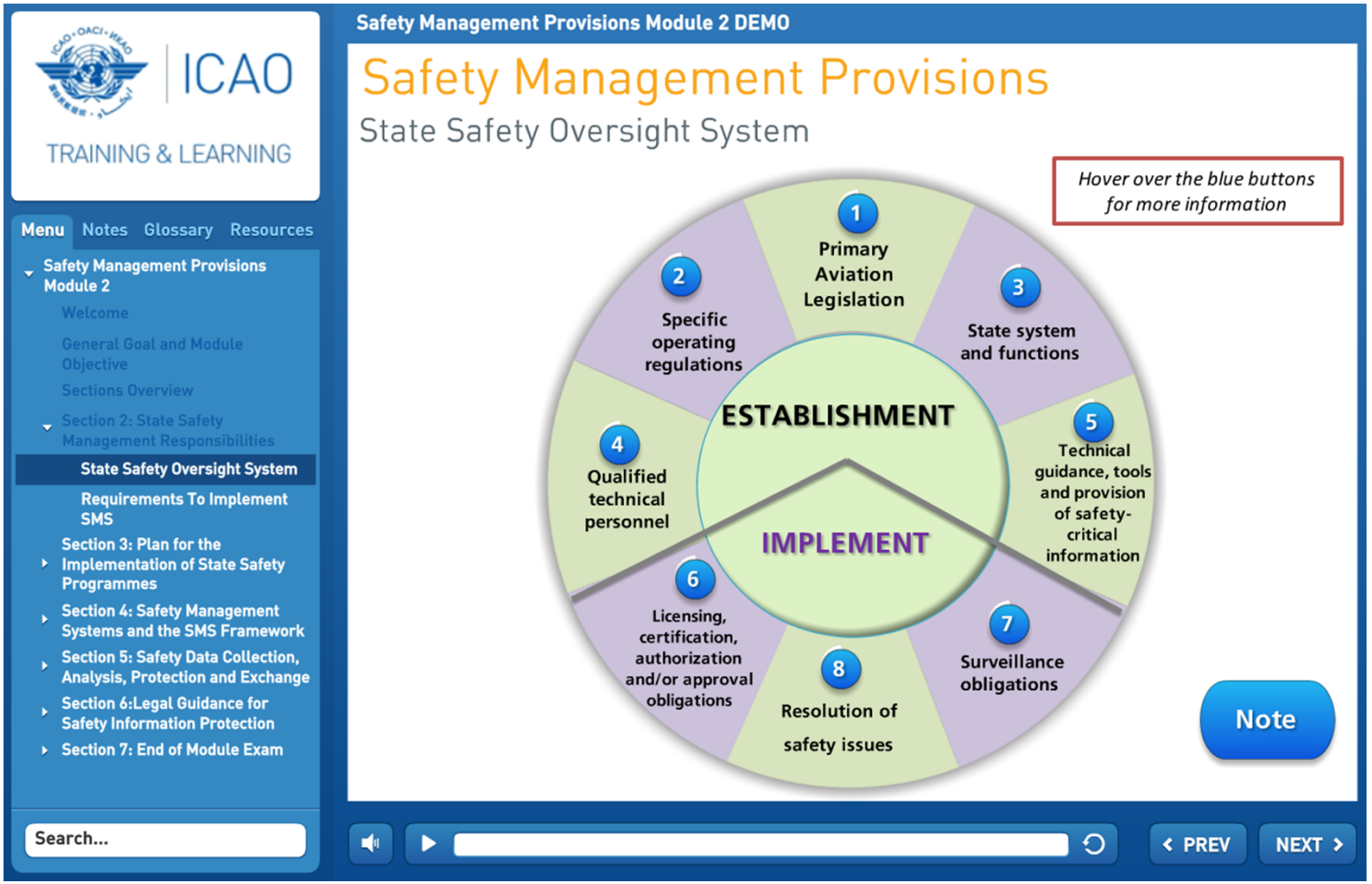
Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
SMS Fundamentals
Welcome
Audio Component
Navigation
Programme Paths
General Goal and Module Objective
Section Overview
Section 1: Why Safety Management?
The Evolution of Safety Thinking
Incident Scenario
Knowledge Check 1
Practical Drift & Accident Causation
Congratulations
Section 2: What is different with Safety Management?
Search...
Safety Management Fundamentals
Incident Scenario
Legend
Vehicle path
Flight path
N
Terminal 1
H16
1
2
DV
3
6
Control Tower
4
5
Displaced Threshold
Runway 24R
Scale
0 feet
825 feet
1650 feet
Hover your mouse over the numbered bullets
PREV
NEXT

Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
Practical Drift & Accident Causation
The theory of practical drift is used as the basis to understand how, in aviation, the baseline performance of any system "drifts away" from its original design and when the organization's processes and procedures are unable to anticipate or cope with the resultant unsafe situations that may arise in daily operations.
The challenge for an SMS' proactive and predictive monitoring processes is to capture and analyse information pertaining to a system's practical drift in order to control and mitigate such safety risks as soon as possible.
Safety Management Fundamentals
Hover over the blue buttons in sequence
Baseline performance
System design
Operational deployment
Practical drift
Technology
Training
Regulations
Early detection by SMS-SSP Proactive / Predictive Monitoring processes (i.e. FDAP, etc.)
Operational performance
1
2
3
4
5
On other hand, the unchecked proliferation of local adaptations and personal strategies may lead the practical drift to deviate too far from the expected baseline performance, to the extent that an incident or an accident becomes more likely.
PREV
NEXT

Course Demo


ICAO
TRAINING & LEARNING
Menu
Notes
Glossary
Resources
Safety Management Provisions Module 2
Welcome
General Goal and Module Objective
Sections Overview
Section 2: State Safety Management Responsibilities
State Safety Oversight System
Requirements To Implement SMS
Section 3: Plan for the Implementation of State Safety Programmes
Section 4: Safety Management Systems and the SMS Framework
Section 5: Safety Data Collection, Analysis, Protection and Exchange
Section 6:Legal Guidance for Safety Information Protection
Section 7: End of Module Exam
Search...
Safety Management Provisions Module 2 DEMO
Safety Management Provisions
State Safety Oversight System
Hover over the blue buttons for more information
1 Primary Aviation Legislation
2 Specific operating regulations
3 State system and functions
4 Qualified technical personnel
5 Technical guidance, tools and provision of safety-critical information
6 Licensing, certification, authorization and/or approval obligations
7 Surveillance obligations
8 Resolution of safety issues
ESTABLISHMENT
IMPLEMENT
Note
PREV
NEXT

Course Demo


Safety Management Systems Module 3B demo
ICAO
TRAINING & LEARNING
Menu
Glossary
Notes
Resources
1.4. Target Audience
1.5. Section 1: Framework Introduction
1.5.1. Some SMS Basics
1.5.2. SMS Framework Components and Elements
1.5.3. 1. Safety Policy and Objectives
1.5.4. Management Commitment and Responsibility
1.5.5. Safety Accountabilities
1.5.6. 2. Safety Risk Management
1.5.7. Hazard Identification
1.5.8. Safety Risk Assessment and Mitigation
1.5.9. Section 1 Completed
1.5.10. Certificate of Completion
Search...
Safety Management Systems
Certificate of Completion
Certificate
John Smith
PREV
NEXT

Course Fee

- 900USD including the 4 CBT modules
- Same fee for all individuals (CAA inspectors, aviation industry personnel and private individuals
- Cost for classroom activity yet to be decided

ICAO

THANK YOU