



Purpose:

The e-learning module is designed for theoretical training of seafarers of management and operational levels in accordance with Chapters II, III of the STCW Convention in the part concerning of risk management and incident investigation.

What is an e-learning module?

E-learning module is the electronic textbook on one or more sections. Theoretical materials can be accompanied by drawings, diagrams, photos, animations and videos. There is a test for assessment of knowledge gained at the end of each section.

Contents:

- Introduction. Main definitions
- ISM code guidelines related to the risk assessment
- Risk management process
- Ensuring continuity and flexibility of risk management process
- Human factor effect on conducting risk assessment
- Incident investigation procedures and analysis of their main causal

Target groups

Deck - Management
Deck - Operational
Engine - Management
Engine - Operational

Ship types

Generic





Regulations

Table A-II/1 STCW Code

Competence:

Application of leadership and teamwork skills

Knowledge, understanding and proficiency:

Knowledge and ability to apply decision-making techniques:
.1 Situation and risk assessment

Table A-II/2 STCW Code

Competence:

Use of leadership and managerial skill

Knowledge, understanding and proficiency:

Knowledge and ability to apply decision making techniques:
.1 situation and risk assessment

Table A-III/1 STCW Code

Competence:

Application of leadership and teamworking skills

Knowledge, understanding and proficiency:

Knowledge and ability to apply decision-making techniques:
.1 situation and risk assessment

Table A-III/2 STCW Code

Competence:

Use leadership and managerial skill

Knowledge, understanding and proficiency:

Knowledge and ability to apply decision-making techniques:
.1 situation and risk assessment

Table A-III/6 STCW Code

Competence:

Application of leadership and teamworking skills

Knowledge, understanding and proficiency:

Knowledge and ability to apply decision-making techniques:
.1 situation and risk assessment



ISM Code

IMO Model Course 1.39 "Leadership and Teamwork"

IACS GUIDE TO RISK ASSESSMENT IN SHIP OPERATIONS

Code of Safe Working Practice for Merchant Seafarers (CoSWP)

Code of the International standards and recommended practices for a safety investigation into a marine casualty or marine incident (Casualty Investigation Code)



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Section 2. Ism code guidelines related to the risk assessment.

Ism code guidelines related to the risk assessment.

2.1 Content and meaning of ism code item 1.2.2

ISM Code item 1.2.2 – Safety management objectives of the company should, inter alia, assess all identified risks to its ships, personnel and establish appropriate safeguards.

The aforementioned objectives cover the successful and continuous SMS functioning and depend on the improvement of its functions. Although this is not always recognized, but the development and implementation of the SMS is in fact the essence of an exercise in risk assessment.



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Section 3. Risk management process.

3.9. Risk matrix.
Combination of likelihood of a hazardous situation occurrence and severity of the consequences is usually illustrated as follows. The table presented is named 'risk matrix'.

		Consequence		
		Slightly Harmful	Harmful	Extremely Harmful
Likelihood	Highly Unlikely	Trivial Risk	Tolerable Risk	Moderate Risk
	Unlikely	Tolerable Risk	Moderate Risk	Substantial Risk
	Likely	Moderate Risk	Substantial Risk	Intolerable Risk

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Section 5. Human factor effect on conducting risk assessment.

Human factor effect on conducting risk assessment.


5.1. Subjective nature of risk perception. Safety culture.

Subjective Nature of Risk Perception.

It is important to take into account the subjective nature of risk perception. E.g. a boatswain with many years of experience may have a very different view of the risks involved in working at height, from an inexperienced sailor.

This divergence in understanding risks arises from differences in experience, professional training and human temperament, and it can be considerable. Since the judgements of the people directly engaged in ship activities may not coincide with the opinions of those who assess their activities, it is essential that the ship staff be involved in the risk assessment process.

The best safeguard against accidents is genuine safety culture.



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Section 6. Incident investigation procedures and analysis of their main causal factors.

Check List for Inspection Performed by Safety Officer.

Provided below are examples of issues that the safety officer should consider in the course of the inspection. This is not an exhaustive list, it may vary to suit the particular design or conditions of a particular ship.

Means of Access / Safe Movement:

- are there safe (lighted and marked) means of access to the inspected part of the ship?
- if any means of access are in an unsafe condition, e.g. when a ladder has been removed, is the dangerous place adequately blocked off and have warning signs or notices been posted?
- is the inspected part of the ship transit? Is the safe transit passage ensured (lighting, marking)?
- are there any protruding parts of ship structures over which one can trip or run against? Are they properly



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Section 6. Incident investigation procedures and analysis of their main causal factors.

Working Conditions.

- is the equipment adequately guarded?
- are the necessary safe operating instructions clearly displayed?
- are there safety labels in place?
- are permits to work used when necessary?
- are the employees provided with individual protective clothing and equipment?
- is the protective clothing and equipment in good condition and correctly used?
- is there any faulty equipment and what has been done to restore it to a serviceable condition?
- is the level of supervision adequate (especially for inexperienced seafarers)?
- what practical safety improvement could be made?



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Test tasks

COMMENT

The hazard identification procedure includes:

1. Identify regions exposed to hazards.
2. Assess consequences of identified hazards.
3. Evaluate hazard occurrence probability.

Test of questions

Arrange the sequence of actions for hazards identification correctly.

Последовательность в распознавании опасности

- ↑ ↓ Evaluate hazard occurrence probability.
- ↑ ↓ Identify regions exposed to hazards.
- ↑ ↓ Assess consequences of identified hazards.

Вопросов: 1

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