



European Maritime Safety Agency

SAFEMED III Seminar on Marine Accident Investigation

IMO legislation



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European Maritime Safety Agency

Contents

- Bottom line: what is an accident investigation?
- Legislative framework
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 - General provisions
 - Part I – Mandatory Standards
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 - ✓ IMO Resolution A.1075(28)
 - ✓ IMO Circular MSC-MEPC.3/Circ.4

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What is an accident investigation?

Activities...

- 1 Assess situation**
- 2 Gather evidence**
- 3 Analyse evidence**
- 4 Draw conclusions**
- 5 Issue recommendations**

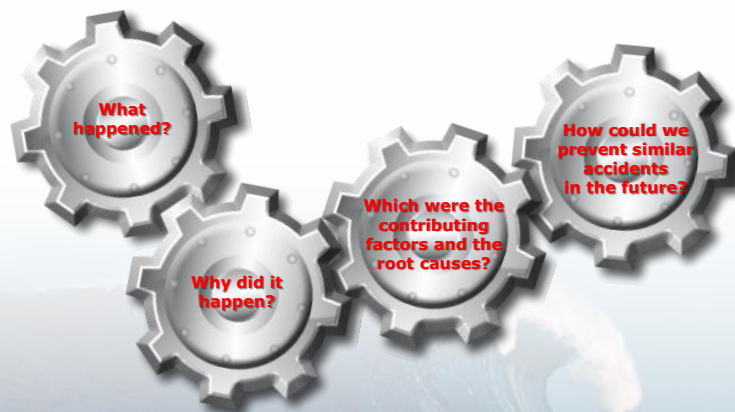
Outcomes...

- a Define severity**
- b Define priorities, understand sequence of events**
- c Identify root causes**
- d Identify missing/breached barriers**
- e Set barriers**

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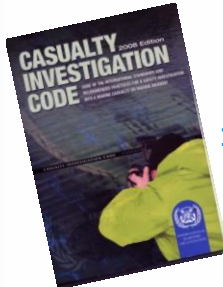
What is an accident investigation...?

Investigating marine accidents means to determine...



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Legislative framework...



IMO Casualty Investigation Code

[Resolution MSC.255(84)]

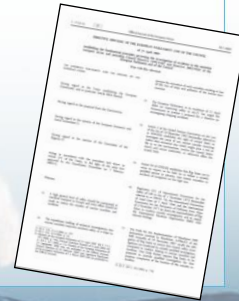
*Came into force 1 January 2010
under SOLAS Reg. XI-1/6*

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Directive 2009/18/EC

In force since June 2009

Transposed since 17 June 2011



Legislative framework...

IMO Casualty Investigation Code

[Resolution MSC.255(84)]



... the investigation and proper analysis of marine casualties and incidents can **lead to greater awareness of casualty causation and result in remedial measures, including better training**, for the purpose of enhancing safety of life at sea and protection of the marine environment

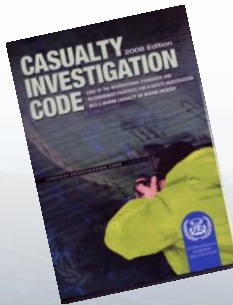
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... to provide, as far as national laws allow, a **standard approach to marine casualty and incident investigation** with the objective of preventing marine casualties and incidents in the future

Legislative framework...

IMO Casualty Investigation Code

[Resolution MSC.255(84)]



Part I - General

Part II- Mandatory StandardsPart III- Recommended practices

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Legislative framework...

IMO Casualty Investigation Code - key points

General:

1. Objective of the Code → a **common approach** in the conduct of marine safety investigations into marine casualties and incidents
2. Contracting government should:
 - Apply consistently the common methodology and approach, in the interest of uncovering the casual factors and other safety risks
 - Provide **REPORTS, at least** about very serious casualty to IMO (**GISIS**) , to assist the international maritime industry to address safety issues

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Legislative framework...

IMO Casualty Investigation Code - key points

General:

3. Marine safety investigation → **DO NOT SEEK to apportion blame**
DO NOT SEEK to determine liability
DO NOT SEEK for responsibilities

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IT IS CONDUCTED WITH THE SOLE OBJECTIVE OF PREVENTING
 MARINE CASUALTIES AND MARINE INCIDENTS IN THE FUTURE

Legislative framework...

IMO Casualty Investigation Code - key points

General:

4. Marine safety investigation should be **SEPARATE from**, and
INDEPENDENT of, any other form of investigation

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NOTE: not to preclude other investigations (e.g. civil, criminal or administrative)

Investigating authority **SHOULD NOT REFRAIN FROM FULLY REPORTING** on
 the causal factors of a marine casualty or marine incident **because blame or
 liability, may be inferred from the findings**

Legislative framework...

IMO Casualty Investigation Code - key points**General:**

5. The IMO Code recognizes:

- **the duty** of each **Flag State** to conduct an investigation into a casualty occurring to any of its ships
- **the right** of **Coastal States** to investigate in the cause of marine casualties or incidents that occurs within their territorial waters
- **the right** of a **State** to investigate in the cause of marine casualties or incidents which they are substantially interested for

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Legislative framework...

IMO Casualty Investigation Code - key points**General:**

6. Definitions:

- **marine casualty**
- **marine incident**
- **marine safety investigation**
- **substantially interested State**
- **very serious marine casualty**

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Legislative framework...

IMO Casualty Investigation Code - key points

General:

6. Definitions:

- **marine casualty**

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A *marine casualty* means an event, or a sequence of events, that has resulted in any of the following which has occurred directly **in connection with the operations of a ship**:

- .1 the **death** of, or **serious injury** to, a person;
- .2 the **loss of a person** from a ship;
- .3 the **loss, presumed loss or abandonment** of a ship;
- .4 **material damage** to a ship;
- .5 the **stranding or disabling of a ship**, or the involvement of a ship in a **collision**;
- .6 **material damage to marine infrastructure external to a ship**, that could seriously endanger the safety of the ship, another ship or an individual; or
- .7 **severe damage to the environment**, or the potential for severe damage to the environment, brought about by the damage of a ship or ships.

Legislative framework...

IMO Casualty Investigation Code - key points

General:

6. Definitions:

- **marine incident**

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A *marine incident* means an event, or sequence of events, other than a marine casualty, which has

occurred directly in connection with the operations of a ship that endangered, or, if not corrected, would endanger
the safety of the ship, its occupants or any other person or the environment.

Legislative framework...

IMO Casualty Investigation Code - key points

General:

6. Definitions:

- **marine safety investigation**

A *marine safety investigation* means an investigation or inquiry (however referred to by a State), into a marine casualty or marine incident, conducted with the objective of preventing marine casualties and marine incidents in the future. The investigation includes the collection of, and analysis of, evidence, the identification of causal factors and the making of safety recommendations as necessary.

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Legislative framework...

IMO Casualty Investigation Code - key points

General:

6. Definitions:

- **substantially interested State**

Substantially interested State means a State:

- .1 which is the **flag State** of a ship involved in a marine casualty or marine incident; or
- .2 which is the **coastal State** involved in a marine casualty or marine incident; or
- .3 whose **environment was severely or significantly damaged** by a marine casualty (including the environment of its waters and territories recognized under international law); or
- .4 where the consequences of a marine casualty or marine incident **caused, or threatened, serious harm to that State** or to artificial islands, installations, or structures over which it is entitled to exercise jurisdiction; or
- .5 where, as a result of a marine casualty, **nationals of that State lost their lives** or received **serious injuries**; or
- .6 that **has important information at its disposal** that the marine safety investigating State(s) consider useful to the investigation; or
- .7 that for some other reason **establishes an interest that is considered significant** by the marine safety investigating State(s).

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Legislative framework...

IMO Casualty Investigation Code - key points

General:

6. Definitions:

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- **very serious marine casualty**

A *very serious marine casualty* means a marine casualty involving

**the total loss of the ship, or
a death, or
severe damage to the environment**

Severe damage to the environment means as evaluated by the State(s) affected or the flag State, as appropriate, produces a major deleterious effect upon the environment.

Legislative framework...

IMO Casualty Investigation Code - key points

Part I - Mandatory Standards:

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- Substantially interested States to be **notified**
- Investigations **shall** be conducted into **very serious marine** casualties (**Flag State**)
- **National law** shall ensure that **investigators have the power** to carry out a marine safety investigation (to board the ship, interview the master and crew and any other person involved, and acquire evidential material)
- **Investigations** to be **impartial and objective** (they have to report on the results of a marine safety investigation **without direction or interference** from any persons or organizations who may be affected by its outcome)

Legislative framework...

IMO Casualty Investigation Code - key points

Part I - Mandatory Standards (cont.):

- A substantially interested State may conduct a **parallel investigation**
- Cooperation to the **extent practical**
- **Substantially Interested States** are to be **consulted** (unless maintaining confidentiality is not guaranteed)
- Investigation reports made public

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Legislative framework...

IMO Casualty Investigation Code- key points

Part II - Recommended:

- Flag State investigation body **should** be independent
- Investigating State **should** allow **participation** to the extent practicable
- **Evidence should**, so far as national laws allow, be prevented from **admission in civil/criminal proceedings**
- Prior to report publication, there **should** be 30 days **consultation** to allow interested parties to comment

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Resolution A. 1075(28)

GUIDELINES TO ASSIST INVESTIGATORS IN THE IMPLEMENTATION OF THE CASUALTY INVESTIGATION CODE

Superseded:

- Resolution 849(20)
- Resolution 884(21)

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The purpose of these Guidelines is to provide practical advice for the systematic investigation of marine casualties and incidents and to allow the development of effective analysis and preventive action.

Resolution A. 1075(28)

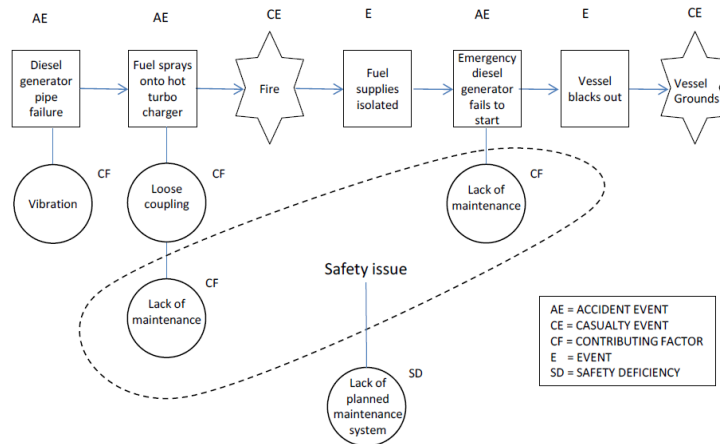
Definitions (2.1)

Event	An action, omission or other happening.
Casualty event	The marine casualty or marine incident, or one of a number of connected marine casualties and/or marine incidents forming the overall occurrence. (e.g. a fire leading to a loss of propulsion leading to a grounding).
Accident event	An event that is assessed to be inappropriate and significant in the sequence of events that led to the marine casualty or marine incident. (e.g. human erroneous action, equipment failure, etc.).
Contributing factor	A condition that may have contributed to an accident event or worsened its consequence. (e.g. man/machine interaction, inadequate illumination, etc.).
Safety issue	An issue that encompasses one or more contributing factors and/or other unsafe conditions.
Safety deficiency	A safety issue with risks for which existing defences aimed at preventing an accident event, and/or those aimed at eliminating or reducing its consequences, are assessed to be either inadequate or missing.

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Resolution A. 1075(28)

Definitions (2.2) sequence of events



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Resolution A. 1075(28)

Qualifications and training of investigators (3)

The appointed investigators need to have expertise in marine casualty investigation and be knowledgeable in matters relating to the marine casualty or incident. Areas of expertise need to include:

- evidence collection techniques,
- interview techniques,
- analysis techniques and
- identification of human and organizational factors in marine casualties and incidents

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Resolution A. 1075(28)

Qualifications and training of investigators (3)

A Marine Safety Investigation Authority should consider developing a FORMAL TRAINING PROGRAMME to ensure that its investigators acquire the necessary knowledge, understanding and proficiency in marine safety investigation

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Notification and cooperation (4)

Notification of a marine casualty or incident is to be provided to all affected parties as soon as reasonably practicable. Notification includes informing the parties involved in the casualty or incident, as well as any substantially interested State

Resolution A. 1075(28)

Notification and cooperation (4)

If the casualty or incident involves substantial interests of more than one State, the States should quickly reach an agreement on cooperation. This agreement may include:

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- ensuring that the objectives of each participating State is in accordance with the IMO Casualty Investigation Code
- which State will lead the investigation
- the possibilities to share casualty information, and draft safety investigation reports with regard to national legislation on confidentiality as well as the potential risk of safety investigation findings being used in criminal and civil lawsuits; and
- distribution of costs related to the investigation

Investigation (5)

Resolution A. 1075(28)

- **Extent of investigation**
- **Initial response**
- **Site management**
- **Start-up meeting**
- **Collection of evidence**
- **Inspection of casualty site**
- **Gathering or recording physical evidence**
- **Witness information**
- **Reviewing of documents, procedures and records**
- **Conducting specialized studies (as required)**
- **Reconstruction and analysis**
- **Reconstruction of the casualty events and their linked conditions**
- **Safety analysis**

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Resolution A. 1075(28)

Reporting (6)

- **Reporting requirements**
- **Final report**
- **Consultation**
- **Publication**

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Appendix 1 - Areas of human and organizational factors inquiry

Scope:

planning the investigation of human and organizational factors during a maritime safety investigation

MSC-MEPC.3/Circ.4

REPORTS ON MARINE CASUALTIES AND INCIDENTS

Revised harmonized reporting procedures Reports required under SOLAS regulations I/21 and XI-1/6, and MARPOL, articles 8 and 12

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Appendix 1 requires generic information

Appendix 2 requires factual information relating to each ship involved in each marine casualty or marine incident

Appendix 3 requires casualty analysis data relating to each ship involved in each marine casualty or marine incident: accidental events and contributing factors

Appendix 4 requires supplementary information to be added in particular circumstances relating to each marine casualty or marine incident



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Thanks for listening!!



European Maritime Safety Agency

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Lisbon, 18-19 February 2014

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European Maritime Safety Agency

Contents

- Legislative framework
 - ✓ The Directive 2009/18/EC
 - ✓ Commission Regulation 1286/2011

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Legislative framework...

Directive **2009/18/EC** of 23 April 2009
establishing the **fundamental principles**
governing the investigation of accidents in the
maritime transport sector [...]

In force since June 2009

Transposed since 17 June 2011



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Legislative framework...

Directive 2009/18/EC

General:

1. It recalls the principles and rules of the IMO Code.
2. However, it strengthens some of the most important aspects, such as:
 - Permanent, independent, impartial investigation body
 - Obligation to notify
 - Investigation of Very Serious Casualty + Serious Casualty (or justification)
 - Flag State, Coastal State and Susbt. interested authorities
 - Timing for carrying out an investigation and to publish report
 - Final Report, Interim Report and Simplified Report
 - Common approach (Common methodology – COM Reg. 1286/2011)

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Legislative framework...

Directive 2009/18/EC

Effectively and independent investigations

"Member States shall define, in accordance with their legal systems, the legal status of the safety investigation in such a way that such investigations can be carried out as effectively and rapidly as possible.

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Member States shall ensure, in accordance with their legislation and, where appropriate, through collaboration with the authorities responsible for the judicial inquiry, that safety investigations are:

- (a) independent of criminal or other parallel investigations held to determine liability or apportion blame; and
- (b) not unduly precluded, suspended or delayed by reason of such investigations."

Scope

Applicable to *marine casualties and incidents* that:

- involve ships flying the flag of one of the Member States
- occur within Member States' territorial sea and internal waters as defined in UNCLOS (12 nm)
- involve other substantial interests of a Member State



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Directive 2009/18/EC, Article 2

Scope-exclusions

The AI Directive does not apply to:

- Ships of war and government service vessels
- Ships not propelled by mechanical means, primitive wooden ships & non commercial pleasure craft
- Inland waterways vessels on inland waterways
- Fishing vessels less than 15m in length
- Fixed offshore drilling units



Directive 2009/18/EC, Article 2

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Obligation to investigate

- **Very** serious casualties:
 - safety investigation **required**
- Serious casualties:
 - **preliminary assessment**;
 - **justification** in case of not undertake a safety investigation
- Less serious or marine incidents:
 - Investigative body to decide

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Note: Within scope

Directive 2009/18/EC, Article 5

Serious Casualty:

'are casualties to ships which **do not qualify as very serious casualties**

IMO
MSC-
MEPC.
3/
Circ.3

and which involve a fire, explosion, collision, grounding, contact, heavy weather damage, ice damage, hull cracking, or suspected hull defect, etc.,

resulting in:

- immobilization of main engines, extensive accommodation damage, severe structural damage, such as penetration of the hull under water, etc., rendering the ship unfit to proceed*, or
- pollution (regardless of quantity); and/or
- a breakdown necessitating towage or shore assistance.'

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* The ship is in a condition, which does not correspond substantially with the applicable conventions, presenting a danger to the ship and the persons on board or an unreasonable threat of harm to the marine environment.

Directive 2009/18/EC article 3 and IMO MSC-MEPC.3/Circ.3

EU COM Regulation 2186/2011

Article 5.4 - Obligation to investigate

When carrying out safety investigations, the investigative body SHALL follow the **Common Methodology** for investigating marine casualties and incidents.

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Investigators can deviate from the Common Methodology, if justified as necessary,

Common Methodology

Purpose, scope and application

- provides a common methodology,
- establishes a common approach applicable in all investigations,
- outlines the characteristics of a good safety investigation

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Content:

- 1 Operational readiness → Preparedness plan**
- 2 Initial assessment and response**
- 3 Strategy and evidence collection**
- 4 Analysis**
- 5 Safety recommendations**
- 6 Reports**
- 7 Follow-up**

Common Methodology

Safety recommendations

Any recommendation shall be:

- Necessary
- Likely to be effective
- Practicable
- Relevant
- Targeted
- Stated in a clear, concise and direct matter
- Stated so that it can be the basis for corrective action plans, highlighting the safety gap that needs to be addressed

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Legislative framework...

The outcome of safety investigations

- **Accident Report**
 - to be published within 12 months
 - Reports to be supplied to Commission (EMSA) for further analysis
 - Investigation data to be recorded in EMCIP (European Marine Casualty Information Platform)
- **Safety Recommendations**
 - Shall in no circumstances determine liability or apportion blame
 - MS to ensure recommendations are duly taken into account by recipients by following up procedures

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Just badly berthed??

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¿ Time for questions ?