

## Marine accident investigations and related EMSA tasks

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## Casualty Investigation Relevant international legislation

### Mandatory

- UNCLOS 1982 – Articles 94(7); 58(2)
- SOLAS 1974 – Regulation I/21
- MARPOL 73/78 – Article 12
- LOAD LINES 1966 – Article 23
- ILO Conventions No. 134 and 147

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## Casualty Investigation Relevant international legislation



IMO requirements for accident investigation adopted with Resolution MSC.255(84)

Made mandatory through the Chapter XI-1 of SOLAS and into force 1 January 2010

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## Casualty Investigation

EU legislation – a bit of history

**Directive 99/35/EC** “on a system of mandatory surveys for the safe operation of regular ro-ro ferry and high speed passenger craft services”

### Art. 12 – Accident investigation

- ✓ Investigation of marine casualties to be carried out
- ✓ Investigation to be concluded in the most efficient way and within the shortest possible time
- ✓ Reports to be made public

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## Casualty Investigation

EU legislation – a bit of history

**Directive 2002/59/EC** “establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC”

**Art. 3 r)** – casualty means a casualty within the meaning of the IMO Code for the investigation of marine casualties and incidents.

**Art. 10** – All ships fitted with a Voyage Data Recorder, data of which shall be made available to the Member State concerned in the event of an investigation following a casualty

**Art. 11** – Investigation of marine casualties to be carried out according to the IMO Code

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## Casualty Investigation

Current EU legislation

In the framework of the 3<sup>rd</sup> Maritime safety package it was adopted the

**Directive 2009/18/EC**

establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and amending Directives 1999/35/EC and 2002/59/EC

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## Casualty Investigation

### Current EU legislation – main principles

- Safety investigations
- Investigations to be conducted by impartial, permanent investigative bodies, independent in their organisation
- Obligations
  - Obligation to investigate all 'very serious casualties'
  - Conduct preliminary assessments for 'serious casualties'

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## Casualty Investigation

### Current EU legislation – main principles

- Flag State, within territorial waters, substantially interested State
  - Only one investigation and with cooperation of others
  - Scope of conduct of the investigation to be decided by the AI body/bodies
  - Common methodology
  - Effective cooperation to be enabled by formation of PCF
- Investigation reports published within 12 months
- Accident data to be populated in EMCIP
- Member State to follow up safety recommendations

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## Casualty Investigation

### Current EU legislation

#### Purpose (art.1):

To improve maritime safety and the prevention of pollution by ships, and reduce the risk of future marine casualties through proper investigations and accurate reporting and proposal for remedial actions

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## Casualty Investigation

### Current EU legislation

#### Application (art.2):

**Marine casualties and Incidents occurring to, within, or**

- ☐ Ships flying the flag of a Member State
- ☐ Territorial sea and internal waters of a Member State
- ☐ Involve substantial interests of the Member States

**Pleasure boats** (unless used for commercial purposes, crewed and carrying >12 passengers) and **fishing vessel <15 metres in length**, excluded from the application

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## Casualty Investigation

### Current EU legislation

#### Status of safety investigations (art.4)

**independent** from criminal or other parallel investigations held to determine liability or apportion blame

**not unduly precluded, suspended and delayed** by reason of such investigations

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## Casualty Investigation

### Other types of investigations

- **Criminal enquiries** by:
  - Government administrations (maritime, incl. coastguard)
  - Police forces
    - Determining if laws have been breached incurring a possible penalty
- **Civil proceedings** brought by:
  - Hull underwriters
  - P & I Insurance
  - Classification Societies
  - Cargo interest
    - Determining who is to blame, financial liability
- **Safety investigation**

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## Casualty Investigation

Current EU legislation – Questions for a safety investigation

- What happened?
- Why did it happen?
- What can be done to prevent similar accidents in the future?
- Description of sequence of events
- Identify underlying conditions
- Describe the safety problem and proposal to solve it

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## Casualty Investigation

Current EU legislation

### Obligation to investigate (art.5)

Member States shall ensure that a safety investigation is carried out after “**very serious casualties**”

In the case of “serious casualties”, the investigative shall carry out a preliminary assessment in order to decide whether or not to undertake a safety investigation

**Common methodology designing non-essential elements to be followed**

**Note:**

In addition the investigative body shall decide whether or not a safety investigation of any other marine casualty or incident shall be undertaken

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## Casualty Investigation

Current EU legislation

### Obligation to notify (art.6)

Marine accidents has to be **notified** to the investigative body **without delay** by the responsible authorities or parties involved

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## Casualty Investigation

### Current EU legislation

#### Investigative bodies (art. 8.1)

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Safety investigations carried out by an **impartial permanent investigative body** (*independent in its organization, legal structure and decision-making of any party whose interests could conflict with the task entrusted to it*) endowed with the necessary powers, and by suitably qualified investigators, competent in matters relating to marine casualties and incidents.

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## Casualty Investigation

Current EU legislation – What does it mean independent, impartial body

- Independent from criminal or other parallel investigations held to determine liability or apportion blame
- Independent in its organisation, .... of any party whose interests could conflict with the task entrusted to it.
- Endowed with necessary powers and resources
- Carry out safety investigations in an unbiased manner

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Directive 2009/18/EC, article 4 and 8

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## Casualty Investigation

### Current EU legislation

#### Investigative bodies (art. 8.4)

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Must have **free access** to any relevant area or data as reported in the relevant bullet list

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## Casualty Investigation

Current EU legislation

### Investigative bodies (art. 8.5)

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Must be enabled to **respond immediately** on being notified **at any time** of a casualty, and to obtain sufficient resources to carry out its functions independently.

The **status** of the investigators has to **guarantee their independence**

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## Casualty Investigation

Current EU legislation

### Confidentiality (art.9)

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- ☐ Witness evidence and other statements
- ☐ Records revealing the identity of persons who gave evidence
- ☐ Medical or private information regarding persons involved in the casualty or incident

cannot be made available for purposes other than the safety investigation unless the competent authority in the MS determines that there is an overriding interest in their disclosure

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## Casualty Investigation

Current EU legislation

### Permanent co-operation (art. 10)

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Through the COSS shall be decided the procedures for a permanent co-operation framework between MS, enabling their respective investigative bodies.

Better quality of the investigations and optimizing the use of resources

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## Casualty Investigation Current EU legislation

### Accident reports (art.14)

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Defined format of the report and **results of the investigations made public**

Simplified report possible for marine casualties other than "very serious"

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## Casualty Investigation Current EU legislation

### Safety recommendations (art. 15)

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Can concern the single investigation or made on the basis of an abstract data analysis.

In no circumstances the safety recommendation can apportion blame or liability for a casualty

**Close the loop:** safety recommendations to be acknowledged and feedback to be given to the investigative body

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## Casualty Investigation Current EU legislation

### Accident database (art. 17)

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EMCIP is the "European Marine Casualty Information Platform"

Data will be input by the investigative bodies of the Member States

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## Casualty Investigation

EMSA tasks

### At present time

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## Casualty Investigation

EMSA tasks

### At present time

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Organize workshop, seminars and training activities in order to strengthen capacities and to facilitate cooperation between Member States

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## Casualty Investigation

EMSA tasks

### In the future

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Continue with the present activities but, mainly, the Agency will manage the EMCIP and will assist the Commission in the assessment of Members States for verifying the effective implementation of the Directive

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## What happened?

The vessel suffered a catastrophic failure of her hull in way of her engine room

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MSC Napoli MAIB Report No 9/2008

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## Why did it happen?

The investigation has identified a number of factors which contributed to the failure of the hull structure, including:

- Not sufficient buckling strength in way of the engine room
- The classification rules did not require buckling strength calculations to be undertaken beyond the vessel's amidships area
- There was no, or insufficient, safety margin between the hull's design loading and its ultimate strength
- The load on the hull was likely to have been increased by whipping effect
- The ship's speed was not reduced sufficiently in the heavy seas

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## What can be done to prevent similar accidents in the future?

1500 ships screened, of more than 12 ships required remedial actions

Safety recommendations to IACS:

- To increase the requirements for container ship design,
- Research of whipping effect
- Initiate development of technical aids for measuring hull stresses on container ships

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Safety recommendations to:

- International Chamber of Shipping
- Zodiac Maritime Agencies (ISM)

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## Casualty Investigation

ANY QUESTION?

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THANK YOU FOR  
LISTENING



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