



## PORTS and MARITIME AFFAIRS

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### Directive No. CIC/01

### **INVESTIGATION OF MARINE CASUALTIES AND INCIDENTS**

Issued under the enabling power of the Ministerial Resolution 20/2016

Issue Date: 12<sup>th</sup> December 2016

#### 1 Introduction

- (1) All marine casualty or incidents causing death, injury or damage to ship, property or environment where Bahraini flag vessel is involved or where such an incident takes place within Bahrain waters must be investigated. The requirements are stipulated in all major international instruments such as:
  - UNCLOS (paragraph 7 of article 94),
  - Load Lines (article 23 ),
  - SOLAS 74 (regulations I/21 and XI-1/6),
  - MARPOL (articles 8 and 12),
  - STCW 78 (regulation I/5) and
  - Casualty Investigation Code.
  
- (2) Also, the requirements of investigation are taken into respective national legislation such as:
  - Chapter 4 (Marine accidents) on legislative decree of. 23/1982: Bahrain Maritime Code,
  - Regulation 10 (Inquiry / Investigation) of ministerial resolution no. 6/2001: Bahrain Merchant Shipping (Manning, Training, Certification and related Seafarers matters) Regulations 2001,
  - Paragraph (6) of article 4 of legislative decree no. 61/2006: Establishment of (GOP) as amended by legislative decree no. 46/2012 and
  - Regulations 12, 13 and 14 of Ministerial Resolution no. 6/2010: Implementing Regulations of law 61/2006.
  - Regulation 9 of Undersecretary Resolution no. 8/2016: regarding the implementation of the requirements of the International Convention for the Safety of Life at Sea, 1974 and its amendments



- (3) This directive provides guidance for inspectors when conducting marine safety investigation into marine casualties and marine incidents through applying consistent methodology, this directive should read in conjunction with the "Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident"

## 2 Main Objective of the Investigation:

- (1) **The Ports and Maritime Affairs (PMA)** investigates incidents at sea for the purpose of discovering lessons which may be learned with a view to preventing any repetition. It is not the purpose of the investigation to establish liability or to apportion blame, except in so far as it emerges as part of the process of investigating the incident.
- (2) The purpose is to determine the circumstances and causes of the accident/ incident with a view to preserve life, property and environment by appropriate remedial measures to eliminate chances of the same occurring again. Such investigation may lead to review or introduce legislation or procedures including requirement of new equipment etc.

## 3 Definitions

For the purpose of this directive the following definitions apply:

- (1) **A marine casualty:**  
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.



However, a marine casualty does not include a deliberate act or omission, with the intention to cause harm to the safety of a ship, an individual or the environment.

(2) **A marine incident:**

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. However, a marine incident does not include a deliberate act or omission, with the intention to cause harm to the safety of a ship, an individual or the environment.

(3) **A marine safety investigation / inquiry:**

An investigation or inquiry, 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.

#### 4 Casualty Notification

- (1) The master or the shipowner or the ship manager of a Bahraini ship should notify, with a minimum of delay and in any case within 24 hours, the PMA of any casualty or incident wherever it occurred.
- (2) The master or the shipowner or the ship manager of a foreign ship should notify, with a minimum of delay and in any case within 24 hours, the PMA of any casualty or incident occurring within Bahraini territorial waters.
- (3) All relevant parties within the ports in Bahrain or any other relevant party should notify, with a minimum of delay, the PMA of any casualty or incident occurring within the Bahraini ports area.
- (4) Failure to comply with the paragraphs 4.1 to 4.3, the Undersecretary may withdraw the Navigation License of a Bahraini ship and/or refer the violator to the competent court, which the master and the company may be fined in accordance with Article 33.3 of Amiri Decree No. 14/1978. If the violation was committed by a foreign ship, the violator may be referred to the competent court.



## 5 Investigation Procedures and Reporting

Upon receiving a notification of an incident or casualty, the PMA shall perform the following procedures:

- (1) Analysis and classification of information and determining the need for carrying out the investigation.
- (2) The Undersecretary appoints an inspector or technical committee to conduct a marine safety investigation.
- (3) Informing all interested parties on commencement of investigation.
- (4) Taking into consideration the Code for the Investigation of Marine Casualties and Incidents, as amended, incorporating the Guidelines for the Investigation of Human Factors in Marine Casualties and Incidents, issued by IMO.
- (5) Upon completion of the investigation, a detailed report of the incident / casualty should be issued in accordance with the "Format of Reports" " in paragraph number 9
- (6) The PMA may re-open the investigation if new information or evidence relating to any incident/casualty is presented.

## 6 Types of Investigation

If the Authority decides that a casualty is sufficiently serious to warrant an investigation, three types of investigation are possible, plus one other internal enquiry that would not involve an Inspector:

### (1) Formal Investigation

Ministerial resolution no. 6/2010 provides for the Minister to appoint an officer to hold a Formal Investigation (FI) into a casualty. FI is a quasi-legal process, usually conducted by a legal practitioner, with the parties represented by their Counsel. In practice, FI's are held only in the most serious casualties. **The guidelines written in this paper do not apply to the conduct of FI's.**

### (2) Preliminary Inquiry & Inspector's report

The Undersecretary may appoint an Inspector or investigation committee to conduct a preliminary inquiry (PI) into an accident. Although the term



implies that a preliminary inquiry is conducted prior to the establishment of an FI, in practice the majority of PI's conclude with the production of a report and no FI takes place.

The Inspectors are empowered to board ships, inspect any part of a ship, check the certificates, plans and document of the ship and, those of the officers and to require the ship's officers to answer questions relating to any accident which has occurred.

### (3) Company's report

When a less serious casualty is reported it may be considered sufficient for the purposes of the PMA records that the Managers of a vessel submit their own report of the incident. In these circumstances, the Managers will be asked by the Administration to submit a report and such additional information as is deemed appropriate. If it was subsequently considered that the incident was more serious than first thought or other developments indicated that an Inspector's Report was justified the matter would be upgraded and an Inspector duly instructed.

These directive have been prepared for the guidance of inspectors conducting inquiries made under (5.2) above.

## 7 Aims and Objectives

- (1) For all types of investigation, the Aims and Objectives are the same. The over-riding aim is to improve safety at sea and the protection of the marine environment by seeking to ensure that there is no repetition of the accident in question.
- (2) The objectives of the investigation are:
  - To establish the facts
  - To determine the cause of the casualty
  - To make recommendations to prevent a recurrence.
- (3) The aim of the investigation is not to apportion blame, except in so far as arises in determining the cause of the casualty. A marine casualty may often lead either to civil litigation or criminal proceedings, or it may lead to action being taken to suspend or cancel an officer's licence. It is





emphatically not the purpose of preliminary safety investigations to assemble evidence for use in such proceedings.

- (4) In framing possible recommendations, consideration should be given to the practicalities of enforcing them and the anticipated benefit. Where no recommendations are considered appropriate, this should be stated in the report.
- (5) It is important to note that the ship's officers are required to answer questions fully and truthfully. In the majority of jurisdictions around the world it is an accepted principle of law that a person cannot be required to give evidence against oneself. Thus, evidence obtained under the powers in the Merchant Shipping Regulations should not be used in other court proceedings without the agreement of the parties involved. All PI reports contain a note drawing attention to this point.

## **8 Report of Investigations**

An Inspector is instructed to conduct an investigation on behalf of the PMA, and his report should be submitted to the Undersecretary. When the report is eventually issued it will appear in the name of the Authority, and the Inspector's name will not be disclosed. The Inspector should not divulge details of his report, or of evidence which he has obtained in an investigation, to other parties without the prior agreement of the PMA.

## **9 Format of Reports**

Reports should normally be prepared in the following format:

- (1) Summary
- (2) Particulars of vessel
- (3) Factual Narrative
- (4) Comment and Analysis
- (5) Conclusions
- (6) Recommendations
- (7) Annexes



## 10 Summary

The summary should normally be not more than one page in length, summarising briefly the nature of the incident, its causes, and any important recommendations.

## 11 Vessel Details

The report should include the registered details of the vessel(s) involved in the casualty together with any other information about the vessel which is relevant to the incident. This should include a description and possibly some photographs of any equipment or arrangement on the vessel that has relevance to the incident being investigated; such as tank or hold arrangements (in groundings or collisions), special towing or anchor handling equipment (in certain offshore related incidents), cargo handling equipment (where a failure of such gear was relevant) etc.

## 12 Factual Narrative

This should contain a full account of the incident. It will usually begin with a description of the voyages on which the vessel(s) were embarked, qualifications and experience of key officers involved, but without mentioning their names, weather conditions, if relevant, together with an account of any subsequent search and rescue or salvage operations. While it is important that the factual narrative should contain all information relevant to the casualty, it should not contain information such as information about officers who played no part in the casualty, or weather conditions during salvage, unless relevant.

## 13 Comments and Analysis

This should include a discussion of the causes of the casualty. It is important, as far as possible, to separate factual description from analysis and comment. In considering the cause of an accident, **the Inspector should seek, so far as possible, to consider the underlying cause as well as the immediate cause.** For instance, if the cause was a navigational error on the part of the Master, the reason for this should be considered, e.g. inexperience, fatigue, inadequate navigational equipment etc. It is particularly important to seek to identify management weaknesses both on board and ashore, and where a ship holds a document of compliance under the provisions of the ISM



Code, the Inspector should consider whether the systems and procedures have been complied with as approved.

#### **14 Conclusions**

The Conclusions should be a concise summary that brings together the one, two or three prime details of the Narrative, Comments and Analysis, which have been fully laid out in the previous sections, and neatly describes the event, the primary cause and the underlying reason for the incident. They should not contain any new evidence or analysis. This is a separate section.

#### **15 Recommendations**

In making recommendations it is important to be clear to whom they are directed - the shipowner, the Master, the flag state etc. If it is proposed to make a recommendation on the lines "It should be a requirement that ...." the implications of this should be considered. The PMA would be very reluctant to impose additional requirements that go beyond the provisions of international conventions, particularly if this is based on an isolated incident. If the recommendation is that the fitting of an item of equipment should be made mandatory, the Inspector should consider whether that would entail an amendment to SOLAS or any other convention, and if so whether it is realistic to imagine that such an amendment might be achieved, taking into account likely costs and benefits.

#### **16 Annexes or Appendices**

It is often useful to attach copies of key documents such as charts, extracts from log books, etc. as annexes to the report. There should be sufficient detailed copies of documents and statements to demonstrate the source material from which the text of the report, particularly the Comments and Analysis, are derived. Photographs, not black and white photocopies, can substitute one thousand words.

#### **17 Interviews**

- (1) At the start of any interview it is important to make clear to the interviewee his rights and obligations. Interviewees have the right:
  - to be accompanied at the interview by an advisor, who may be a lawyer.





- to object to any person being present at the interview, except the inspector.
  - to review the written record of an interview and to comment on its contents.
- (2) At the conclusion of an interview, it may be desirable to prepare a written statement and request the interviewee to sign it.
  - (3) It should be made clear to the interviewee that he is obliged to answer questions fully and truthfully, and that the purpose of the investigation is to establish the cause of the incident with a view to preventing a repetition; it is not the purpose to apportion blame or liability.
  - (4) It should be explained to the interviewee, if necessary that the report will make clear that nothing in it should be used as evidence in criminal or legal proceedings, or in any proceedings which might lead to suspension or cancellation of an officer's licence.
  - (5) Annex 1 to this directive contains a form that Inspectors may find helpful to invite all witnesses to complete in advance of the interview.
  - (6) Annex 2 is a check list of points to be made clear at the beginning of the interview.
  - (7) Annex 3 contains a format for any statement.

## 18 Examination of Documents

- (1) In all investigations, the Inspector should examine the vessel's Certificate of Registry, the Official Log Book, the deck log book, the statutory certificates and the certificates of the officers.
- (2) Annex 4 to these notes lists a number of other documents that it may be necessary to examine, depending on the circumstances of the accident.
- (3) Annex 5 lists a number of additional points that may need to be considered for specific types of casualty.



## 19 Liaison with other Administrations

- (1) If a casualty involves two vessels of different flags, the other administration may well decide to conduct its own investigation. Similarly, if a casualty occurs in the territorial waters of another state that administration may decide to mount its own investigation. Indeed if an accident involves a large number of casualties from one state, that state may wish to investigate. In all these cases the aim should be, so far as possible, to co-operate with the other administration. For instance, it may be possible to arrange for a representative of the other administration to sit in on interviews with key witnesses. **The aim is to seek to ensure, as far as possible, that different reports into the same incident are consistent with one another. The responsibility for producing PI report rests with the PMA alone, and we must resist pressure from other administrations to slant reports in ways that we do not accept.**
- (2) In all cases involving a second administration, the PMA will liaise with that administration and advice the Inspector of the outcome.

## 20 Incident and Casualty Records

- (1) The information, statements and records obtained during the conduct of the investigation should not be made available to any other party for purposes other than casualty/incident investigation unless the party providing the information authorizes its release or upon a decision by the competent court.
- (2) These records shall include:
  - .1 All statements taken from persons by the investigating authorities in the course of the investigation.
  - .2 All communications between persons involved in the operation of the ship.
  - .3 Medical or private information regarding persons involved in the operation of the ship.
  - .4 Opinions expressed during the conduct of the investigation.

## 21 Publication of Reports

- (1) The present practice is that when PMA receive a casualty investigation report from an Inspector, it will edit it as necessary and then show it in



draft form to any person or organisation criticised in it. The report may then be revised in the light of any such criticisms. It will then be finalised, and a copy sent to the shipowner and to any other interested party such as the Classification Society. A copy will also be deposited with the International Maritime Organization. In practice they are made available to anyone with a legitimate reason to see them.

- (2) **It should be noted that IMO interest centres on safety, security and protection of the environment.** IMO is not interested in apportioning blame or prosecuting any person or settlement of claims or compensation.

## 22 Costs

An Inspector's costs (where the inspector is not a PMA employee) incurred in conducting an investigation, including time, travel and subsistence are normally chargeable to the shipowner. If for any reason an Inspector is unable to recover his costs, he should consult the PMA.

## 23 Revision History:

Revision No. 1 (15 December 2016) of the present Directive is the first revision.

**Hassan Ali Al Majed**  
Undersecretary for Ports and Maritime Affairs  
12<sup>th</sup> December 2016



ANNEX 1

INITIAL DECLARATION

Form that Inspectors may invite all witnesses to complete in advance of the interview.

Name:					
Date of birth		Nationality		Sex	
Home Address					
Date of employment			Rank/Position		
Certificate/license held					
Previous experience					
Duties performed and rest periods during the 24 hours preceding the casualty					
Activities during rest periods in 24 hours preceding the casualty					
Duties Performed during the casualty					
Alcohol consumed during 24 hours preceding the casualty					
Signature				Date	



## ANNEX 2

### Information to be given to interviewees before an interview begins

1. The purpose of the investigation is to discover the cause of a casualty and prevent any recurrence, not to apportion blame.
2. Interviewees are required to answer questions fully and truthfully.
3. The interviewee has the right to be accompanied by any person of his/her own choice, who may be a lawyer.
4. No person other than the interviewee and an inspector may be present without the agreement of the interviewee.
5. Information given and statements made will not be used in any legal proceedings or in any proceedings that may lead to the suspension or cancellation of a certificate of competency or licence.
6. The interviewee has the right to a copy of any record of the interview made by the Inspector or statement made by the interviewee, and to comment on this record or statement.
7. Any statement made by the interviewee will remain confidential and not be released to third parties without consent.

In conducting interviews Inspectors are recommended to put interviewees at their ease, and to elicit their co-operation, assuring them of the aims of the investigation and the protection afforded as outlined above.





### ANNEX 3

#### FORMAT FOR WITNESS STATEMENTS

Note: This following format is based on the witness having completed the preliminary declaration contained in Annex 1.

I, ( Name in full)

of (insert home address and telephone number),

(insert rank or position on ship), holder of (insert details of licences/certificates of competency held)

do declare that .... (insert information provided by witness)

Declared and subscribed at (insert place)

on (insert date)

Signature of witness:



#### ANNEX 4

#### DOCUMENTS THAT MAY REQUIRE EXAMINATION

In addition to the documents mentioned in Section 8, which should be examined in all cases, it may be useful to examine the following documents, depending on the nature of the casualty.

- Crew Agreement and List of Crew
- Passenger List
- Radio Log Book
- Engine Room Log
- Engine Movement Record
- Data logger record
- Course recorder record
- Echo sounder record
- Data/ information from AIS & VDR
- Oil record Book
- Record of soundings
- Record of compass errors
- Radar Log Book
- Night Order Book
- Passage plan
- Charts and nautical publications
- Master's/Chief Engineer's Standing Orders
- Company Standing Orders/Instructions
- Operations Manuals
- Company Safety Manual
- Planned maintenance schedules
- Requisitions for repairs/spares/equipment
- ISM audit records
- Records of crew training
- Security plan and CSR



## ANNEX 5

### POINTS WHICH MAY REQUIRE CONSIDERATION FOR DIFFERENT TYPES OF CASUALTY

#### 1. Fire/Explosion

- How was ship/individual alerted to the fire?
- Where did the fire start?
- How did the fire start?
- What immediate action was taken?
- Condition of fire-fighting equipment
- Availability and type of fire extinguishers (in vicinity and on ship)
- Fire hoses available/used
- Pumps available/used
- Water immediately available?
- Ventilators sealed?
- Material on fire and surrounding fire?
- Fire retardant specification of bulkheads around fire
- Restrictions due to smoke, heat or fumes
- Freedom of access
- Availability of access for fire fighting equipment
- Preparedness of crew - drills and musters
- Response by crew and any shore fire-fighters

#### 2. Collision - General

- Local navigation rules
- Obstructions (e.g. other vessels, shallow water, navigation marks etc.)
- Factors affecting visibility and audibility (sun, shore lights, wind, bridge visibility etc.)
- Geographical plot
- Possible interaction
- Details of other vessel involved

#### 3. Collision - for each ship

- Time, position, course and speed (and means of measurement), when presence of other ship became known.
- Subsequent alterations of course and speed
- Bearing, distance and heading of other ship on visual sighting, time of observations and subsequent alterations of bearing
- Details of any plot of other ship
- Performance of ship's navigational equipment



- Course recorder record
- Lights/signals carried on ships, those sighted on other ship
- Messages sent, received or heard on VHF
- Radars carried, operation at time of collision, ranges and display mode
- Data/ information obtained from AIS & VDR
- Steering by hand or automatic, steering normally or not
- Details of lookout
- Point and angle of contact
- Nature and extent of damage
- Compliance with statutory requirement to provide ship details to and stand by other ship after collision

#### 4. Grounding

- Details of voyage plan, evidence of voyage planning
- Last accurate position and how obtained
- Subsequent opportunities for fixing position and reasons for not obtaining positions
- Chart datum comparison with WGS datum
- Weather, tide and currents experienced
- Effect of any cargo or electrical/magnetic disturbance on compass
- Radars in use, ranges, display mode, performance monitoring
- Data/ information from AIS & VDR
- Charts, sailing directions and notices to mariners held, details of corrections, any relevant warnings therein
- Depth soundings taken, means of obtaining soundings
- Tank soundings taken
- Draught of ship prior to grounding, how determined
- Effect of Squat
- Position of grounding, how obtained
- Cause and nature of any engine or steering gear failure
- Readiness and use of anchors
- Nature and extent of damage
- Action taken after grounding

#### 5. Foundering

- Draught and freeboard leaving last port, changes during voyage
- Freeboard appropriate to zone and date
- Loading procedures, hull stresses
- Particulars of any alterations/repairs to hull/equipment since last survey, and by whom sanctioned
- Condition of ship, possible effects on seaworthiness
- Stability data and when determined



- Factors affecting stability (e.g. structural alterations, weight, distribution of cargo and ballast, possible shift of cargo or ballast)
- Subdivision by watertight bulkheads
- Position and watertight integrity of hatches, side scuttles, ports and other openings
- Number and capacity of pumps, their effectiveness, position of suction
- Cause and nature of water first entering ship
- Measures taken to prevent foundering
- Position of foundering, how established
- Life-saving appliances provided/used, effectiveness.

**6. Pollution resulting from an incident**

- Type of pollutant
- UN Number/IMO hazard class (if applicable)
- Type of packaging
- Quantity on board
- Quantity lost
- Method of stowing and securing
- Stowage and quantities in each compartment/container
- Tanks/spaces breached
- Action taken to prevent further loss/mitigate pollution
- Dispersant/neutralised used
- Use of restriction boom
- Date & time of informing nearest coastal State