European Maritime Safety Agency

Training on Accident Investigation

Operation readiness and work processes

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Content:

1. Issues on operational readiness
2. Initial assessment and response
3. Strategy and planning
4. Best practices (PCF WG12)

1. Operational Readiness

Operational readiness

Preliminary information

Once a casualty occurs (regardless its severity) we need to gather as much information as practically possible, to understand:

- what has happen
- where it has happened
- to whom it has happened
- in which circumstances it has happened, and
- which have been the consequences, if any.

Information sources

Can include: (by no means exhaustive list!)

- Contact details Flag States (GISIS)
- 24hr contacts for investigative bodies (EMCIP portal)
- Other national authorities (CG, port authorities, police)
- Ship and company details (‘Seaweb’, Equasis, etc.)
- AIS information, VTS
- Environmental and hydrological data
- Nautical publications
- Access to IMO Conventions and maritime regulations, etc
- VDR, ECDIS and GPS reference sources
- Travel information for deploying investigators
- ...

Accident Notification

Initial fact finding often takes place under pressure, the following will be useful in assessing the seriousness and the best response:

- Source of notification
- Time and date of notification
- Time and date of marine casualty;
- The name of the ship, ship type, and its Flag State;
- Name and contact details of owners and operators;
- Name and contact details of ship agents, if applicable;
- The IMO number or distinctive letters;
- The nature of the marine casualty;
- The location of the marine casualty, including latitude and longitude, where known;
- The number of any seriously injured or killed persons;
- Consequences of the casualty to individuals, property and the environment;
- A brief description of the casualty event;
- The identification of any other ship involved;
- Each ship's condition and intended movements;
- Contact details of anyone with information about the casualty or its victims;
- Details of VDR's, where fitted:- an early decision on whether to request the VDR data be 'saved' should be made
- The contact details of each involved ship, shipping company and point of contact;
- Contact information for the competent authority of any substantially interested State, and their investigative body;
- …

Generic templates / check lists

Notification templates

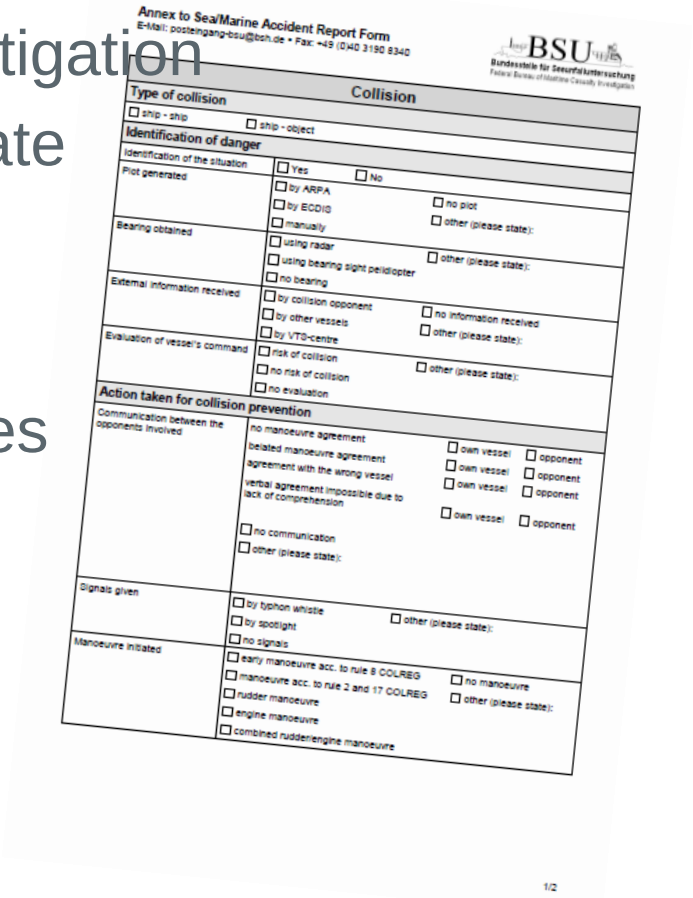
- Standard notification data (Annex II, Dir 2009/18/EC)
- To interested parties at start of investigation
- When decision taken not to investigate

Information exchange forms

- Between States
- Between AIBs and national authorities

Check lists

- Passenger/crew questionnaires
- Ship's certificates/documents.



Annex to Sea/Marine Accident Report Form

E-Mail: posteingang-bsu@bsh.de • Fax: +49 (0)40 3190 8340

BSU Bundesstelle für Seeunfalluntersuchung

Federal Bureau of Maritime Casualty Investigation

Collision		
Type of collision	☐ ship - ship ☐ ship - object	
Identification of danger		
Identification of the situation	☐ Yes ☐ No	
Plot generated	☐ by ARPA ☐ by ECDIS ☐ manually	☐ no plot ☐ other (please state):
Bearing obtained	☐ using radar ☐ using bearing sight peliclopter ☐ no bearing	☐ other (please state):
External information received	☐ by collision opponent ☐ by other vessels ☐ by VTS-centre	☐ no information received ☐ other (please state):
Evaluation of vessel's command	☐ risk of collision ☐ no risk of collision ☐ no evaluation	☐ other (please state):
Action taken for collision prevention		
Communication between the opponents involved	no manoeuvre agreement belated manoeuvre agreement agreement with the wrong vessel verbal agreement impossible due to lack of comprehension ☐ no communication ☐ other (please state):	☐ own vessel ☐ opponent ☐ own vessel ☐ opponent ☐ own vessel ☐ opponent ☐ own vessel ☐ opponent
Signals given	☐ by typhon whistle ☐ by spotlight ☐ no signals	☐ other (please state):
Manoeuvre initiated	☐ early manoeuvre acc. to rule 8 COLREG ☐ manoeuvre acc. to rule 2 and 17 COLREG ☐ rudder manoeuvre ☐ engine manoeuvre ☐ combined rudder/engine manoeuvre	☐ no manoeuvre ☐ other (please state):

1/2

Generic agreements

- Cooperation between States
- Cooperation between investigative authorities
- Enabling contracts with specialist services
- Information leaflets.

MAIB

MARINE ACCIDENT INVESTIGATION BRANCH

Every MAIB inspector carries an electronic copy of the MOU. For further information about this agreement or either organisation, refer to the contact details below:

Marine Accident Investigation Branch
Carlton House
Carlton Place
Southampton
Hampshire
SO15 2DZ

Accident Reporting Line (24 hr)	(023) 8023 2527
General Use	(023) 8039 5500
E-mail	maib@dft.gsi.gov.uk
Website	www.maib.gov.uk

Association of Chief Police Officers
25 Victoria Street
London
SW1H 0EX

Switchboard	020 7227 3434
E-mail	info@acpo.police.uk
Website	www.acpo.police.uk

Stephen Meyer
Chief Inspector of Marine Accidents

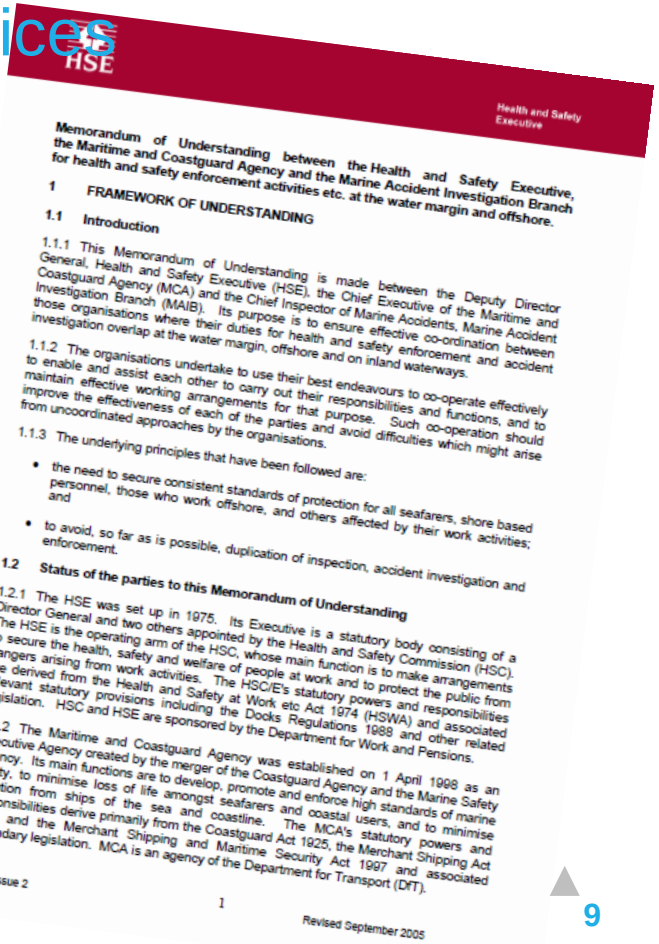
CC Jon Stoddart
Chair of ACPO Homicide Working Group

Information on the Memorandum of Understanding (MOU) between the Marine Accident Investigation Branch (MAIB) and the Association of Chief Police Officers (ACPO).

The aim of this MOU is to ensure effective investigation of marine accidents in England, Wales and Northern Ireland, while maintaining the independence of all parties, and reinforcing the importance of close co-operation between MAIB and the police.

The Crown Prosecution Service (CPS) has approved the principles outlined in the agreement.

- An MAIB investigation and a police investigation will progress in parallel with maximum co-operation at all times.
- There should be early contact and close co-operation between the MAIB and the police throughout their respective investigations, both on and off site.
- MAIB inspectors must be allowed unrestricted access to an accident scene and to any preserved wreckage and evidence.
- Where possible, there should be an exchange of factual information as investigations proceed in parallel. This includes any examination or analysis of a piece of evidence and gathering and handling of evidential samples taken from witnesses.



HSE

Health and Safety Executive

Memorandum of Understanding between the Health and Safety Executive, the Maritime and Coastguard Agency and the Marine Accident Investigation Branch for health and safety enforcement activities etc. at the water margin and offshore.

1 FRAMEWORK OF UNDERSTANDING

1.1 Introduction

1.1.1 This Memorandum of Understanding is made between the Deputy Director General, Health and Safety Executive (HSE), the Chief Executive of the Maritime and Coastguard Agency (MCA) and the Chief Inspector of Marine Accidents, Marine Accident Investigation Branch (MAIB). Its purpose is to ensure effective co-ordination between those organisations where their duties for health and safety enforcement and accident investigation overlap at the water margin, offshore and on inland waterways.

1.1.2 The organisations undertake to use their best endeavours to co-operate effectively to enable and assist each other to carry out their responsibilities and functions, and to maintain effective working arrangements for that purpose. Such co-operation should improve the effectiveness of each of the parties and avoid difficulties which might arise from uncoordinated approaches by the organisations.

1.1.3 The underlying principles that have been followed are:

- the need to secure consistent standards of protection for all seafarers, shore based personnel, those who work offshore, and others affected by their work activities; and
- to avoid, so far as is possible, duplication of inspection, accident investigation and enforcement.

1.2 Status of the parties to this Memorandum of Understanding

1.2.1 The HSE was set up in 1975. Its Executive is a statutory body consisting of a Director General and two others appointed by the Health and Safety Commission (HSC). The HSE is the operating arm of the HSC, whose main function is to make arrangements to secure the health, safety and welfare of people at work and to protect the public from dangers arising from work activities. The HSC/E's statutory powers and responsibilities are derived from the Health and Safety at Work etc Act 1974 (HSWA) and associated relevant statutory provisions including the Docks Regulations 1988 and other related legislation. HSC and HSE are sponsored by the Department for Work and Pensions.

1.2.2 The Maritime and Coastguard Agency was established on 1 April 1998 as an Executive Agency created by the merger of the Coastguard Agency and the Marine Safety Agency. Its main functions are to develop, promote and enforce high standards of marine safety, to minimise loss of life amongst seafarers and coastal users, and to minimise pollution from ships of the sea and coastline. The MCA's statutory powers and responsibilities derive primarily from the Coastguard Act 1925, the Merchant Shipping Act 1995 and the Merchant Shipping and Maritime Security Act 1997 and associated secondary legislation. MCA is an agency of the Department for Transport (DfT).

MOU -Issue 2

1

Revised September 2005

Major accident response

Important to prepare for major events

Conduct exercises (were possible) to:

- Test procedures and contacts
- Raise awareness of AIB role

What about logistics?

Health and safety

- Investigative Body has duty of care for its staff
- Investigating accidents is a hazardous activity
- Risk assessment and mitigation measures should be derived centrally as well as by investigator on site
- Investigator health and inoculations:
  - *Yellow fever*
  - *Tetanus*
  - *Diptheria*
  - *Polio*
  - *Hepatitis A*
  - *Hepatitis B*
  - *Typhoid*
- Security of destination countries.

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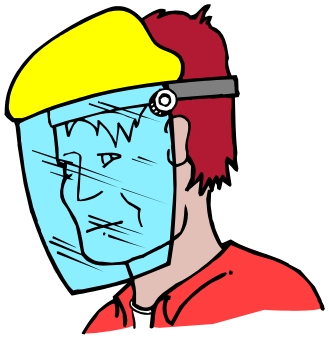
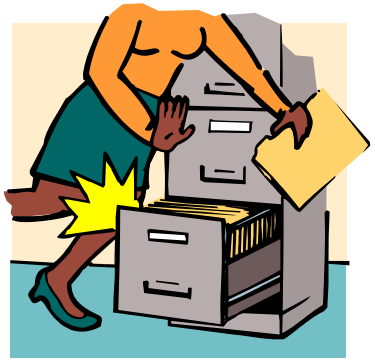
Investigator Equipment

Can include:

?





Investigator Equipment

Can include:

- Suitable identity documents;
- High-visibility an
  jacket;
- Steel toe-cappe
- Safety helmet w
- Safety goggles/
- High-visibility ve
- Automatic inflata
- Working gloves;
- Overalls (reusab
- Dust mask;
- Latex type glove
  collection;
- Waterproof trou
- Safety torch;
- First aid/medica

- Mobile telephone;

nloading equipment;

mera;

mcorder;

e measure;

order;

mputer;

g and sampling equipment -
tainers;

tteries and other equipment
s;

aterials;

HS2/CO2 analyser with in-date
ation;

ol kit when physical evidence
expected;

2. Initial Assessment and Response

Initial assessment: principles

- **Vital** to assess **quickly** initial notification to ensure evidence is not lost and to provide appropriate response

- **Further inquires** if notification information received is not adequate to make a decision **(proactivity)**

- **Readily available** information sources can be highly beneficial at this stage.

Which criteria would you consider for the initial assessment?

Initial assessment: criteria

- The seriousness of the marine casualty or incident
- The type of vessel and/or cargo involved
- The potential safety value that may be gained by conducting an investigation
- The public profile of the casualty
- Whether the casualty is part of an identifiable trend
- The potential (as opposed to actual) consequences of the casualty or incident
- The extent of resources available
- Any risks associated with not investigating
- Serious injuries occurring on board to crew and/or passengers
- The pollution of environmentally sensitive areas
- Ships subject to significant structural damage
- Casualties which disrupt, or have the potential to disrupt, major port operations.

Initial assessment: criteria

+ ART.5 AID

COMMISSION REGULATION (EU) No 1286/2011

of 9 December 2011

adopting a common methodology for investigating marine casualties and incidents developed pursuant to Article 5(4) of Directive 2009/18/EC of the European Parliament and of the Council

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2009/18/EC of the European Parliament and of the Council of 23 April 2009 establishing the fundamental principles governing the investigation of accidents in the maritime transport sector and amending Council Directive 1999/35/EC and Directive 2002/59/EC of the European Parliament and of the Council (1), and in particular Article 5(4) thereof,

Whereas:

(1) Directive 2009/18/EC requires the Commission to adopt a common methodology for investigating marine casualties and incidents to be followed by investigative bodies when carrying out safety investigations.

(2) The common methodology for investigating marine casualties and incidents should provide for common standards applicable in principle to all investigations carried out in accordance with Directive 2009/18/EC in order to achieve a high level quality investigation.

(3) The general rules as provided for by the common methodology should be directly used by the investigative bodies of the Member States.

(4) The measures provided for in this Regulation are in accordance with the opinion of the Committee on Safe Seas and the Prevention of Pollution from Ships (2),

HAS ADOPTED THIS REGULATION:

Article 1

The common methodology for investigating marine casualties and incidents as provided for in Article 5(4) of Directive 2009/18/EC is set out in the Annex to this Regulation.

Article 2

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, 9 December 2011.

For the Commission

The President

José Manuel BARROSO

3. Strategy and planning

Scope

- Sufficient to eliminate uncertainty and ambiguity
- Must go beyond immediate evidence and aim at underlying causes
- Agreement on scope between substantially interested States supports allocation of task.

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Timing

- Human recollection deteriorates rapidly (as well as physical evidence)
- Investigation should not cause unreasonable delay to ship involved
- Detention not to be ruled out if it is believed important evidence will be lost
- Arriving swiftly at the scene of accident can help AIB:
  - To liaise with other concerned authorities
  - To progress in evidence collection.

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Planning

Need to plan over **short term**:

- Dynamic process as investigation progresses
- Prioritise collection of evidence, given:
  - Key witnesses' recollection will degrade over time
  - Witnesses may be repatriated quickly
  - Availability of supporting evidence before interviews
  - Accidents may need to be cleared or areas repaired

Need to plan over **longer term**:

- Reports should be published in shortest feasible timeframe (within 12 months at very least)
- Plan to take into account other work, training and leave commitments, as well report reviewing and publication.

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Powers of investigation

- Vary between States as dependent on national legislation
- Powers should only be used where necessary and with utmost discretion
- Better co-operation than confrontation!
- Investigators must, however, be fully aware of the powers they can exercise.

Investigator deployment

- Number of investigators assigned important. **How many?**
- Depends on:
  - Scale of investigation
  - The need for speed
  - Location of accident
  - Availability of investigators
  - Individual strengths and skills of investigators

- Small scale investigation normally requires 2 investigators
- Large scale investigation may require multi-disciplinary team
- One investigator may be all that is available:
  - Not ideal
  - Will take longer to collect evidence.

Coordination with other SIS

- Initial notification usually received by CS or FS
- To determine who is SIS
- Coordinate between SIS to agree:
  - Whether to investigate
  - Who is the lead investigating State
  - Strategy (scope, timing, planning)
  - The initial practical measures and the AIB best placed to carry them out
  - Access to a vessel and crew
  - Use of AIB's powers.

Coordination with other SIS

- Provide mutual assistance in a prompt time frame (e.g. to acquire info otherwise not available to the lead AIB)
- Have equally rights to witnesses and evidence
- Have the right their view is taken into account by lead investigating state.

Working with 3rd parties

- Good liaison essential (police, rescue and fire services, etc)
- Early on site brief to explain:
  - The objective and status of the safety investigation
  - The intended extent of cooperation with other investigations
  - The intended procedures for dealing with witness and material evidence
- Judicial investigations
  - safety investigation does not take place at expense of fair judicial proceeding
  - Emphasis role
  - Ability to conduct independent investigations
  - Areas of possible mutual cooperation.

Group work about ‘Strategy and Planning’

In groups, look at the incident involving the collision of “*Ocean Carrier”* with two other oil tankers while they were alongside.

Following the decision of your AIB to launch an investigation, outline a strategy to gather evidence, identifying priorities and constraints.

A group discussion will then take place.

Legal representatives

- Litigation will frequently be involved after an accident
- Lawyers may well be on scene before investigators
  - Have every right to be there
  - Represent interests of their clients

- Important to liaise with owners and the ship concerned to minimise conflict

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Next of kin

- **Consider early contact in investigation process if welcomed by next of kin**
- **Provide:**
  - Basic factual information
  - Details of process underway and what is to come
  - Reassurance case is being taken seriously
  - Emphasis aim of investigation is not to blame and find anyone responsible
- **Keep next of kin updated on progress of investigation.**

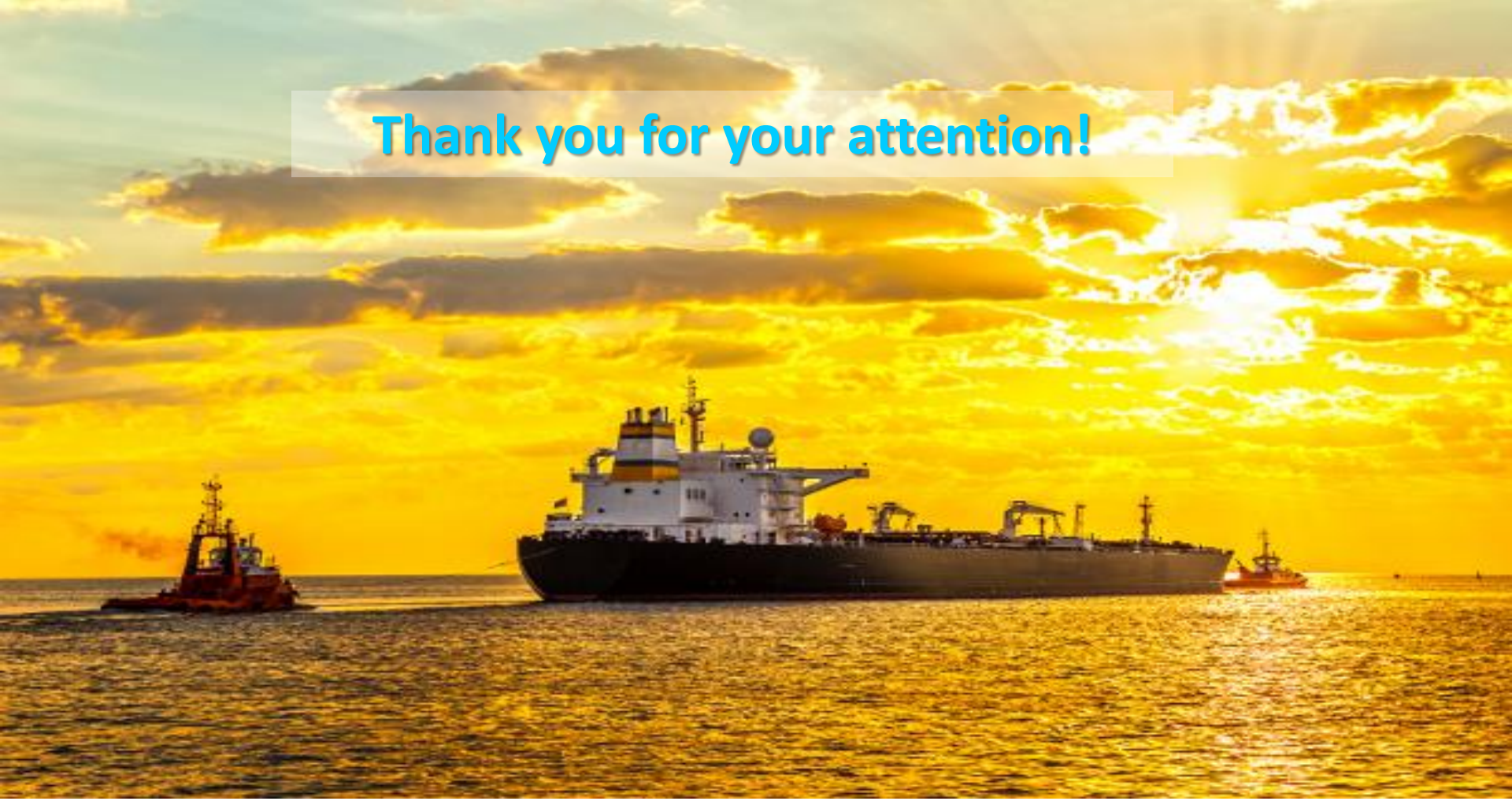
4. Best practices (PCF WG12)

Comms between AIB and national authorities

- To share a form facilitating collection of Annex 2 data
- To give AIB access to national casualty reporting systems
- To promote a JC approach supporting the reporting
- To ensure that the information flow works minimising underreporting (e.g. cross check with commercial sources, SSN…)
- Cooperation with concerned authorities
  - Periodic meeting
  - Joint exercises
  - Direct communications lines
- Working agreements
  - To preserve VDR data
  - To provide proper evidence storage facilities.

MoU with Prosecutors and Police

- General principles
  - Goal: to facilitate the day-by-day work
  - Working agreement (not binding)
  - Mutual recognition of the responsibilities
  - Training for investigators on forensic evidence
- Content of the MoU:
  - To highlight that criminal and safety investigations are independent each other
  - Mutual exchange of factual information (beware of confidentiality!)
  - To ensure regular dialogue on investigation process
  - AIB to have immediate and unrestricted access to evidence and primacy of interviews.
  - Procedures facilitating data acquisition (e.g. coroner reports).
- Implementation
  - Advertisement
  - Procedure for updates.



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Handling the media/press

- **Good rapport with media can be an asset!**
- **Develop procedure for dealing with press**
- **Do not speculate, stick with facts:**
  - What happened
  - Where it happened
  - When it happened
  - What the immediate consequences were
  - What can still be expected
  - Launch of an investigation process.

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