ABSTRACT

Improving ship safety through accident investigation is important for preventing similar casualties and incidents in the future. The analysis is made of an institutional framework at international level and of the activities of the International Maritime Organization and European Maritime Safety Agency in developing a common methodology for investigating maritime accidents. In author’s opinion current significant differences between marine incident investigation activities and databases resulting from various legal systems support the need for establishing a comprehensive legal framework as a response mechanism. Proposals are made to facilitate to all the states involved to conduct the marine casualty investigation, analysis and reporting in accordance with recognized best practice and to facilitate the implementation of improved environmental standards based on standardized casualty-related data.

Key words: legal standards, marine accident investigation, casualty-related data

1 SOURCES OF LAW CONCERNING MARINE ACCIDENT INVESTIGATIONS


The United Nations Convention on the Law of the Sea in Art.94 para 7 deals with the duties of a flag state in the manner that each State shall cause inquiry to be held before a suitably qualified person or persons into every marine casualty or incident of navigation on the high seas involving the ship flying its flag and causing loss of life or serious injury to nationals of another State or serious damage to ships or installations of another State or to marine environment. The flag State and other State shall
co-operate in the conduct of inquiry held to by that other State into any such marine casualty or incident of navigation.

1.2 **International Convention of Safety of Life at sea (SOLAS) as amended**

In the regulation I/21 Casualties of the International Convention of Safety of Life at Sea there is an obligation of each administration to conduct the investigation of a casualty occurring to any ship subject to the provisions of the present Convention when it judges that such an investigation may assist in determining what changes in the present regulation may be desirable.

Each Contracting government undertakes to supply the Organization with pertinent information concerning the findings of such investigation. No report or recommendations of the Organization based upon such information shall be disclosed to the identity or nationalities of ships concerned or in any manner fix or imply responsibility upon any ship or person.

1.3 **International Convention for the Prevention of Pollution from Ships, as modified by the Protocol of 1978 relating thereto (MARPOL 73/78) as amended**

Article 12 Casualties to the ship of MARPOL 73/78 is pointing to the duty of each administration to conduct the investigation of any casualty occurring to any of its ships subject to the provisions of the Regulation if such a casualty has produced a major deleterious effect upon the marine environment.

Each Party to the Convention undertakes to supply the Organization with pertinent information concerning the findings of such investigation, when it judges that such information may assist in determining what changes in the present Convention might be desirable.

1.4 **IMO Resolution A.849 (20) Code for investigation of marine casualties and incident**

The purpose of the Code for investigation of marine casualties and incident is to promote a common approach to the safety investigation of marine casualties and incident, and also to promote co-operation between States in identifying the contributing factors leading to marine casualties. The Code is the aid to remedial action and to enhance the safety of seafarers and passengers and the protection of the marine environment.

The objective is to prevent similar casualties in the future by gathering and analysing information and drawing conclusions on marine incident contributing factors.

Marine casualty means an event that has resulted in the death of, or serious injury to, a person that is caused by, or in connection with the operations of the ship; or the loss of a person from a ship that is caused by, or in connection with, the operation of the ship; or the loss, presumed loss or abandonment of a ship; or material damage to a ship; or stranding or disabling of a ship, or the involvement of a ship in collision, or material damage being caused by, or in connection with the operation of a ship or; damage to the environment brought about the damage of a ship or ships being caused by, or in connection with, the operations of the ship or ships.
Marine incident means an occurrence or event being caused, or in connection with, the operation of a ship by which the ship or any person is imperilled, or as a result of which a serious damage to the ship or structure or the environment might be caused.

Thorough and unbiased marine casualty investigations are the most effective way of establishing the circumstances and causes of a casualty. Marine casualty investigators should be given the same priority as criminal and other investigations held to determine responsibility or blame.

Flag States are encouraged to ensure that investigations are carried out into all causalities occurring to its ship. The lead investigating State should be responsible for developing a common strategy for investigating the casualty in liaison with substantially interested States, providing the investigator in charge and co-ordinating investigation, establishing the investigation parameters, being the custodian of records and interviews and other evidence, co-ordinating with other agencies conducting other investigation, providing logistical support and for liaison.

Reports casualty investigation should include a summary outlining basic facts and stating whether any deaths, injuries or pollution occurred as a result, the identity of flag State, owners, managers, company, classification society, details of the dimensions and engine of the ships involved with the description of crew, work routine and other relevant matters, a narrative detailing the circumstances of the casualty, analysis and comment which should enable the report to reach logical conclusions, or findings, establishing all factors that contributed to the casualty, a section analysing and commenting the casual elements, including both mechanical and human factors meeting the requirement of IMO database and, where appropriate, recommendation with a view to preventing similar casualties.

Appendix - Guidelines to assist investigators in implementing the Code contains the list of information generally required in all cases covering particulars of the ship, documents to be produced, particulars of a voyage, particulars of personnel involved, particulars of sea state, weather and tide, particulars of the incident, assistance after the incident, authentication of documents, engine-rooms orders and external sources of information. Additional information required in specific cases includes questions on fire/explosion, collision, grounding, foundering and pollution resulting from an incident. Guidelines include part dealing with securing of physical evidence, voyage data recorders and other sources of information.

1.5 Resolution A.884 (21) Amendments to the Code for investigation of marine casualties and incident (Resolution A.849 (20))

The Resolution A.884 (21) adopts the amendment to the Code for investigation of marine casualties and incident incorporating the Guidelines for the investigation of human factors in marine casualty and incidents.

A systematic approach means a step-by-step process in the investigation of human factor with the purpose to prevent recurrence of similar occurrences by identifying and recommending remedial action. General investigation procedure and techniques include timing of investigation, occurrence site, witness and background information, the investigation sequences, fact-finding and methods of conducting interviews and selection of interviews on site and remote from the occurrence site. Topics to be covered by investigator are human factors, organization on board, working and living conditions,
ships factor, shore side management, external influences and environment, analysis, reporting procedure and qualifications and training of investigators.


In Article 2 e Tasks the European Maritime Safety Agency shall facilitate cooperation between Member States of the European Union and the European Commission in the development, with due regard to different legal system in the Member States, of a common methodology for investigating maritime incidents according to agreed international principles, in the provision of the support of Member States in activities concerning investigations related to serious maritime accidents, and in carrying out out of an analysis of existing accident investigation reports.


The purpose of this Directive is to improve maritime safety and the prevention of pollution by ships, and so reduce the risk of future marine casualties, by facilitating the expeditious holding of safety investigations and proper analysis of marine casualties and incidents incurred to determine their causes; and ensuring the timely and accurate reporting of safety investigations and proposals for remedial action.

This Directive shall apply 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; or involve other substantial interests of the Member States.
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. 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 independent of criminal or other parallel investigations held to determine liability or apportion blame; and not unduly precluded, suspended or delayed by reason of such investigations.

There is an obligation to investigate by the investigative body after very serious marine casualties: involving a ship flying its flag, irrespective of the location of the casualty; occurring within its territorial sea and internal waters as defined in UNCLOS, irrespective of the flag of the ship or ships involved in the casualty; or involving a substantial interest of the Member State, irrespective of the location of the casualty and of the flag of the ship or ships involved.

In addition, in the case of serious casualties, the investigative body shall carry out a preliminary assessment. In the case of any other marine casualty or incident, the investigative body shall decide whether or not a safety investigation is to be undertaken.

A Member State shall require, in the framework of its legal system, that its investigative body be notified without delay by the responsible authorities and/or by the parties involved of the occurrence of all casualties and incidents falling within the scope of this Directive. Moreover, Member States shall ensure that safety investigations are conducted under the responsibility of an impartial permanent investigative body, endowed with the necessary powers, and by suitably qualified investigators, competent in matters relating to marine casualties and incidents.

Safety investigations carried out under this Directive shall result in a published report presented in a format defined by the competent investigative body. Member States shall ensure that safety recommendations made by the investigative bodies are duly taken into account by the addressees and, where appropriate, giving an adequate follow-up in accordance with Community and international law.

In accordance with their national law, Member States shall take into account the relevant provisions of the IMO guidelines on the fair treatment of seafarers in the event of a maritime accident in the waters under their jurisdiction.

2 LEGAL REFLECTIONS ON MARINE ACCIDENT INVESTIGATION

Human factors which contribute to marine casualties and incidents may be defined as the acts or omissions which adversely affect the proper functioning of a particular system, or the successful performance of a particular task. Current procedures are by tradition oriented towards guilt-finding. Even in independent investigation with a mandate to investigate the causes and make recommendations, legal proceedings are initiated if the investigation reveals violations of rules and regulations.

Stakeholders in maritime policy formulation process very often adopt measures in aftermath of marine casualties. A decision-making process should focus on the objective level of risk and provide for a balanced solution to bring down the risk to as low as reasonably practicable and the legislator should implement the corrective measures before an accident could occur.
It is true that very analyses of past performances of a system cannot give a reply on how the system will perform with its new features. Ship safety should be understood as a constant process of monitoring and improving all the related system. An accident analysis in this respect is a supporting tool.

Consequently, States have to establish, in the context of their national legislation, an adequate legal status to conduct technical investigation on marine casualties. This legal status should clearly differentiate technical investigation from other types of parallel investigation conducted to determine responsibility or blame. Investigation should be conducted by competent, well trained investigators with a support of an administrative structure. A suitable report with the findings and conclusions of investigators should be produced in a reasonable period of time.

3 ENHANCING THE PROACTIVE APPROACH IN MARINE ACCIDENT INVESTIGATION

Existing deficiencies in marine accident investigation are related to human and organisational error and highly differing investigation practices in different countries. Thus, in the enforcement of proactive approach the regulator need not and should not await an accident before putting requirements into place. A proactive approach should be understood as a constant monitoring and improving of all the related features and not only as a work of legislator or regulator looking for progress of the present situation in the field of marine accident investigation.

In the European region casualty investigation will be based on the fundamental principle of permanent cooperation framework between investigation bodies and the European Maritime Safety Agency with the obligation to produce a suitable report. The European Maritime Safety Agency is developing the European Marine Casualty Information Platform to provide objective, reliable and comparable information on maritime safety as to facilitate cooperation and analysis. The European Marine Casualty Information Platform is a common European platform which, as core elements, contains database and a network of data provider with the aim of ensuring the new system enforcing proactive measure in standardized marine accident investigation.

4 CONCLUSIONS

Current significant differences between marine incident investigation activities and databases resulting from various legal systems, in author’s view, support the need for establishing a comprehensive legal framework as a response mechanism. The regulator need not, and indeed should not, await an accident before putting requirements into place. In the ideal situation it should be possible to assess risk in a system proactively and to start corrective action well before an accident could occur.

In author’s opinion all stakeholders should be called for conducting standardized marine casualty investigation, analysis and reporting in accordance with recognized best practice and to permit the implementation of improved environmental standards based on standardized casualty-related data.

Foreseen is a marine investigation entity with proper legal status, well trained investigator to conduct marine accident investigation, and producing suitable and timely report with findings, conclusions and, where appropriate safety recommendations, with the sole scope of promoting safety transport and environmental protection.
The implementation and enforcement of standardized marine accident investigation based on a proper legal framework in the global shipping community are key issues. When a state enters into obligation of an international character, it is not allowed to adduce any inadequacy or incompatibility of its legislative acts or in human resources as an excuse for the non-performance of the international obligation with a goal of ensuring adequate safety and environmental standards.

REFERENCES


5. IMO Resolution A.849 (20) Code for investigation of marine casualties and incident

6. Resolution A.884 (21) Amendments to the Code for investigation of marine casualties and incident (Resolution A.849 (20))


