

Bundesstelle für Seeunfalluntersuchung

Federal Bureau of Maritime Casualty Investigation
Federal Higher Authority subordinated to the Ministry of Transport,
Building and Urban Affairs

2007 Annual Report



May 2008



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The Federal Bureau of Maritime Casualty Investigation hereby publishes its statistics about casualties and serious incidents at sea together with a report of its activities in the last operating year.

1 Foreword

Safely and certainly

Accidents are part of the facts of life, regardless of where they happen, and the shipping industry is no exception. With the help of their safety management systems, owners and operators of seagoing vessels try to prevent accidents or at least minimise the consequences in the event of a casualty at sea. Similarly, the Shipping Administration has taken preventive action with its Traffic Safety concept for the German Coast. Nautical training facilities and other basic and further education facilities as well as a broad range of other institutions are working towards the goal of preventing accidents and limiting the scope of their consequences.

In spite of diligent efforts from all sides, as initially mentioned, the reality is that it is never entirely possible to prevent an accident. In the last year, 2007, 76 marine casualties – as defined by the Maritime Safety Investigation Act [Seesicherheits-Untersuchungs-Gesetz (SUG)] and the Ordinance Concerning Maritime Safety [Verordnung über die Sicherung der Seefahrt] – having taken place in German territorial waters (including the Exclusive Economic Zone – EEZ) were reported to the Federal Bureau of Maritime Casualty Investigation (BSU) independently of the flag of the vessel(s) involved. At a total number of more than 275,000 ship movements in the pilotage areas of the Federal Republic of Germany's territorial waters (not counting transit traffic off the German coast outside the pilotage area)¹, the accident ratio was encouragingly low. Independently of the accident sites, 16 accidents were reported on board merchant seagoing vessels, and six on board fishing vessels sailing under German flag². With a commercial vessel register of approximately 550 ships as well as more than 80 sea fishing vessels³ sailing under German flag, the ratio of vessels involved in an accident was low also from this perspective.

The figures clearly show that accidents either in German waters or on board German ships are the exception rather than the rule. However, it is precisely these exceptions that define the work of the Federal Bureau of Maritime Casualty Investigation. The BSU's marine casualty investigations are not aimed at determining fault or liability issues. The concluding report of a marine casualty investigation is therefore also not drawn up by the BSU with the objective of being used by other agencies for the determination of fault or liability issues⁴. Rather, the concept of modern casualty

¹ Source: Traffic data of the Vessel Traffic Services of the Waterways and Shipping Directorates North and North-West

² The total number of accidents reported to the BSU was **91**; because of double-counting of cases concerning ships under German flag within German territorial waters, the sum total of the abovementioned figures is higher.

³ As of 31/12/2007, Source: Federal Maritime and Hydrographic Agency

⁴ Cf. in this regard item 2.5, Maritime Casualty Investigations and Reports for 2007



investigation is aimed at learning from accidents and at deriving recommendations therefrom with the sole goal of helping prevent similar events in the future. To this extent, modern accident investigation is directed at preventing future casualties. The special challenge consists in casting sufficient light on the entire depth and scope of the individual accident event. The safety recommendations then formulated, however, are intended to transcend the individual case and help improve maritime safety as a whole. These safety recommendations are addressed at those agencies that appear best suited to implement the appropriate safety improvement measures. When developing a recommendation and defining the addressee, the BSU does not contemplate individual safety management systems in isolation but as components of a global system. The uppermost goal is the improvement of maritime safety. A BSU safety recommendation can therefore also be addressed to an agency that is not directly affected by a shortcoming in the accident event actually under investigation. However, the pertinent authority can be eligible, e.g. by erecting an additional safety barrier, of preventing similar events in the future or minimising their consequences. This approach to modern marine casualty investigation is not yet current in all circles. The BSU's reports are still sometimes considered by the addressees to be an assignment of blame and not simply a statement of "lessons learnt", which is what they are supposed to be.

Another part of the facts of life is that, again and again, it is also and precisely routine work procedures that cause accidents. Thus in 2006 the BSU investigated a number of person overboard accidents, while in 2007 the most salient accidents involved line and lifeboat handling. In fact these are events that have already constituted the subject of investigations many times in the past and in relation to which comprehensive international, European and national regulations, recommendations and instructions have been developed over time. Some of the recommendations out of the BSU's casualty at sea investigations therefore frequently consist in repeated reference to existing regulations, and recommendations for compliance therewith. Some readers of the BSU's reports may consider it superfluous once again to recommend already familiar practices. However, the occurrence of these "simple" routine accidents, which in the abovementioned domains often also result in fatal or serious injuries, renders it unavoidable in the BSU's view to build on a sustained positive effect based on repetition. In this connection, we also make reference to the safety study begun by the world-wide MAIIF (Marine Accident Investigators International Forum) concerning accidents related to entering confined areas (CSE confined space entry). In this domain, the BSU has only had to investigate one case since its foundation (Investigation Report 329/03, "Fatal accident in a scavenge air receiver", published on 15 October 2007). Nonetheless, on a world-wide basis, as was established at last year's MAIIF in Beijing, fatal accidents in confined spaces continue to represent one of the principal causes of death in the maritime industry. These cases, too, mostly occur in the course of routine work procedures (cleaning or inspection activities); the risks connected with entering confined spaces are sufficiently known; procedures and work instructions are incorporated into the operators' safety management systems; and the necessary safety equipment, in particular gas detection devices and breathing apparatus, are usually present on board. And yet, accidents, sometimes even multiple accidents, do occur when crew members try to save a first accident victim but neglect their own safety in doing so.

Ref.: 2007



This in itself is sufficient cause to point out that safety aspects should not be neglected even or especially in connection with routine work processes. With those considerations in mind, the overall encouraging accident statistics for the German fleet and German waters could certainly still become even better.

Head of Bundesstelle für Seeunfalluntersuchung Federal Bureau of Maritime Casualty Investigation

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2 Marine Casualties

2.1 Competence

The German Maritime Safety Investigation Law (SUG) builds on the Code for the Investigation of Marine Casualties and Incidents published by the International Maritime Organisation (IMO) in 1997 with its Resolution A.849(20).

This Act regulates the competence and jurisdiction of the Federal Bureau of Maritime Casualty Investigation (BSU) for the investigation of accidents on seagoing vessels of all flags occurring within German territorial waters. This also includes traffic to and from ports on the maritime waterways as well as incidents within the Exclusive Economic Zone (EEZ). The BSU also investigates marine casualties on or involving the participation of ships sailing under German flag world-wide. Additional rights of participation and co-operation in international investigations result when the BSU claims a "significant German interest in the investigation" of such events.

Seagoing vessels as defined by the SUG also comprise seagoing leisure craft, so that the BSU will also perform investigations on this vessels following incidents that have caused damage or danger.



Figure 1: Ferry leaving Lübeck-Travemünde (Photo: WSP)



2.2 Accident reports

According to the SUG, the Ordinance Concerning Maritime Safety and the Additional Agreement between the Federal State and the five Coastal States concerning shipping police law-enforcement (Coastal Protocol), there is a duty of reporting incidents to the BSU that have caused damage or danger.

These obligations concern in particular vessel commands on board ships sailing under German flag, the Waterways Police structures of the Federal States, the German Federal Police and a number of other authorities.

The IMO Code stipulates that reports from the agencies investigating marine casualties of the relevant coastal state be internationally forwarded to the pertinent authorities of the respective flag state(s) of vessel(s) involved in an accident.



Figure 2: Serious marine casualty on board the MV "Wilma"

Joint investigation with the flag state, Antigua & Barbuda (Photo: A&B)
Investigation report 607/06 published on 1 October 2007



Because of its on-call duty routine the BSU can be reached at all times.

BSU telephone numbers and office hours:

Monday to Thursday: 07:30 to 16:00 Friday: 07:30 to 14:30

Telephone numbers

for the Office of the Secretary: **+49 (0)40-3190 -8311**

-8312 -8321

Fax number: +49 (0)40-3190 -8340

After office hours:

Mobile telephone number of the

BSU investigator on duty: <u>+49 (0)170-58 65 675</u>

Email reports: posteingang-bsu@bsh.de

In addition, on the BSU's website: www.bsu-bund.de

there is also a questionnaire available under the "Downloads" with the title "Sea/Marine Accident Report Form" that contains the most important details as a guideline for the formulation of a marine casualty report to the BSU.

2.3 Marine casualties reported in 2007

The definition of a marine casualty is set out in § 1 Para. 2 SUG, where it is stated:

"Incidents that have caused damage or danger" shall be events caused in the context of the operation of a ship in maritime navigation that have, in turn, caused or have led to

- 1 the death or disappearance of, or serious injury to, a human being;
- the actual or presumed loss, constructive total loss, grounding, abandon, or collision of a ship;
- damage to the marine environment as a result of damage caused to one or more ships, or any other kind of material damage;
- 4 danger to a human being or a ship; or
- the risk of heavy damage to a ship, an off-shore structure or installation, or the marine environment. (cf. § 1 Para. 2 SUG)



Depending on the <u>consequences</u> of a marine casualty, the IMO Code classifies such incidents that have caused damage or danger as a **Very Serious Marine Casualty (VSMC)**, **Serious Marine Casualty (SMC)**, **Marine Casualty (MC)** or **Marine Incident**. The majority of reports made to the BSU concern near accidents with concomitant risk generating phenomena or cases of minor importance with only negligible property losses. These cases are classified as **Incidents** and are generally entered in the BSU's database and statistically evaluated. Marine casualties on the other hand are of significance for the BSU's investigative work. This concerns in particular the **Very Serious Marine Casualties** resulting in death, total loss of a vessel or severe environmental pollution with spillage of more than 50 t of harmful substances, as well as the **Serious Marine Casualties**, in which fighting the consequences requires assistance from outside the vessel (medical assistance, towing, fireboat intervention and similar).

A total of 91 marine casualties were reported to the BSU in 2007. They break down into 52 marine casualties, 29 serious and 10 very serious marine casualties. The number of marine casualties reported to the BSU declined by 61 as compared to 2006, with the number of very serious casualties falling by seven, and that of serious casualties, by four.

Marine casualties 2006 - 2007

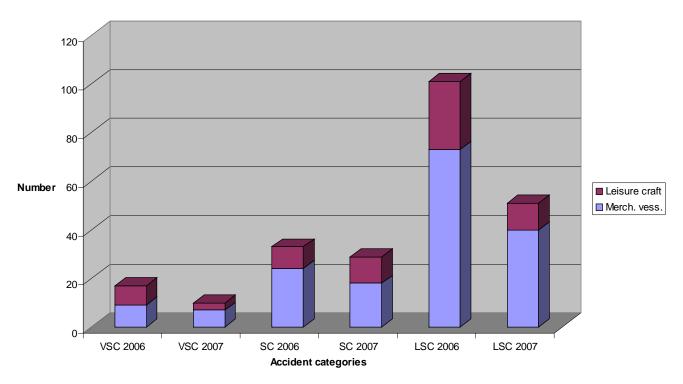


Figure 3: Marine casualties reported to the BSU 2006 - 2007



Within German waters and independently from the flag and type of business of the vessel(s) involved, there were 76 marine casualties, subdivided into 45 marine casualties, 25 serious marine casualties and 6 very serious marine casualties. 54 of the 76 reported casualties concerned merchant vessels including fishing vessels.

45 11 40 35 30 25 ■ Leisure craft Number 9 ■ Merch. Vess 20 34 15 10 16 VSC Accident category

Marine casualties within German waters

Figure 4: Marine casualties for 2007 within German waters

On board vessels sailing under German flag and independently from the scene of the accident, there were 16 marine casualties, subdivided into nine marine casualties, four serious marine casualties and three very serious marine casualties as well as six marine casualties on board fishing vessels (two marine casualties, three serious marine casualties, one very serious marine casualty). On 31 December 2007 there were approximately 550 merchant ships and easily 80 sea fishing vessels registered under German flag⁵. In one of the very serious marine casualties on board a fishing vessel a fire led to total loss. There were no personal injuries.

Twenty-two marine casualties took place on leisure craft sailing under German flag (nine marine casualties, ten serious and three very serious marine casualties). The three very serious marine casualties included two deaths due to heart failure and an unexplained person overboard on the high seas.

⁵ Source: Federal Maritime and Hydrographic Agency



A serious marine casualty with eight people injured took place on board a traditional ship sailing under Dutch flag in the German Baltic Territorial Seas.

Overall, the reported accidents included eight incidents with nine dead and 33 incidents with 51 people injured. In addition to the abovementioned three fatalities on leisure craft, five cases took place on board merchant vessels. One was a suicide, another took place on board a ship sailing under foreign flag and outside of German waters. This case had been reported to the BSU because the shipping company is domiciled in Germany. It was onward reported to the pertinent flag state and not investigated as a marine casualty by the BSU. The remaining three cases involved

- ◆ a fatality during line handling on board a German ship,
- ◆ a fatality while deploying the pilot boarding gear on board a foreign ship in German waters
- and two fatalities that occurred while launching a lifeboat from a foreign ship in a German port.

These three very serious marine casualties were investigated by the BSU.

The distribution of the 33 cases involving injuries was as follows

- Seven on board merchant vessels sailing under German flag,
- ♦ Seventeen on board merchant vessels sailing under foreign flag in German waters,
- ◆ Two on board German fishing vessels,
- ♦ Six on board leisure craft,
- and one, as mentioned above, on board a foreign traditional ship.

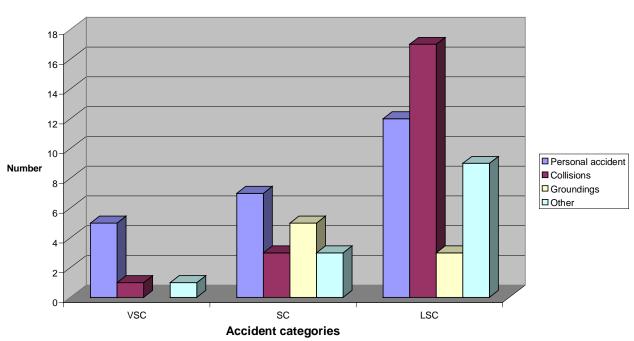
These statistics are global, independently of the nationality of the casualties. Eight of the cases were investigated by the BSU, one is still at the preliminary investigation stage, two others were discontinued after a preliminary investigation. All cases that were investigated had taken place on board merchant vessels.

As of 31 December 2007, 6,903 German nationals, and 5,658 foreign shipboard personnel were employed aboard commercial ships recorded in German registers⁶.

The emphasis of the BSU's investigative activities during 2007 was on personal injury cases in connection with marine casualties in professional shipping, including fisheries.

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⁶ Source: Marine Insurance and Safety Association



Type of marine casualties concerning merchant ships (including fishing)

Figure 5: Most frequent types of accident on merchant vessels in 2007

2.4 Marine casualties reported in the period 2004 - 2007

The four-year overview clearly shows that the situation has remained at the same level as in past years. An encouraging development in 2007 was the distinct decline in **Marine Casualties** (MC), combined with another decline in the **Very Serious** (VSMC) and **Serious Marine Casualties** (SMC).

160 140 120 100 **←**LSC Numbe SC 80 VSC 60 40 20 0 2004 2005 2006 2007

Marine casualties reported to the BSU

Figure 6: Marine casualties reported since 2004

Years 2004 - 2007

2.5 Marine Casualty Investigations and Reports in 2007

According to the IMO Code, flag states should ensure that a marine casualty investigation is carried out after every very serious marine casualty occurring on board one of their vessels. If the accident occurs in another country's waters, that coastal state is also entitled to carry out the marine casualty investigation. The flag state should then preferably also participate in this investigation. These rules define the marine casualties that can be investigated.

Official investigations shall serve neither the detection or identification of facts for the purpose of assigning fault so as to create disadvantages to an individual or individuals nor the determination of anybody's faulty behaviour, liability, or claims. However, no investigation should stop short of an unrestricted presentation of causes merely for the reason that from the outcome of the investigation conclusions may be drawn on anybody's faulty behaviour or liability."⁷This cause representation is indeed carried out in the BSU's investigation reports. The conclusions presented in an investigation report therefore enable inferences to be drawn in individual cases in respect to tortuous conduct or responsibility of the parties involved where this is necessary for the unlimited representation of the causes of the accident. The special intention of the investigation nonetheless consists not in sanctioning the parties

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⁷ cf. § 9 (2) SUG



involved, but in providing them with incentives to prevent future accidents and in involving them in a safety partnership. The concluding report of a marine casualty investigation is therefore not drawn up by the BSU with the objective of being used for the determination of fault or liability issues.

Authorities whose procedures are oriented towards the allocation of penalties for erroneous conduct and/or the determination of liability fundamentally pursue goals that are different from the BSU's.

The initiation and scope of an investigation are decided by the Head of the BSU, or by his deputy in his absence, without being subject to directives.



Figure 7: Very serious marine casualty, TMV "Oliver Jacob"
Investigation in den USA together with the USCG
Investigation report 21/06 published on 3 December 2007

In 2007 the BSU initiated the investigation of 24 marine casualties. Of these, 19 investigations were carried out by the BSU alone, and five together with other countries. Three very serious marine casualties reported to the BSU were not investigated. The fishing vessel that had become a total loss due to a fire could not be salvaged. As, in particular, there had been no personal injuries, the BSU discontinued the investigation further to a preliminary investigation. The three very serious marine casualties on leisure craft included two deaths due to heart failure and an unexplained person overboard on the high seas. As concerns the latter, the preliminary investigation did not reveal sufficient results to warrant a more in-depth



investigation. Of the two heart failures, one unequivocally did not relate to the operation of the leisure craft, and the case was therefore discontinued after the preliminary investigation. The second case is under investigation by the BSU. A report of a very serious marine casualty outside of German waters and on board a vessel sailing under foreign flag was forwarded to the pertinent flag state and not further processed by the BSU.

Twenty-six investigations from previous years had not yet been completed.

Twenty-nine investigations were completed in 2007, while as of 31 December 2007, 21 still remained at the investigation stage.

All accident reports are, regardless of the decision concerning a potential investigation, in any event entered in the BSU's database and at least statistically evaluated.



Figure 8: Very serious marine casualty FV "Hoheweg" BSU marine casualty investigation still pending as of 31 December 2007

According to the IMO Code, marine casualties are to be reported to the IMO with specific data corresponding to their category.

In addition, the BSU prepares its investigation reports, which are as a rule open to public access, and which are then also sent to the IMO. These reports can be limited to the description of the course of the accident and then be published in summary form without further collaboration from the parties involved. In most cases, the BSU draws up a full report with a comprehensive analysis of the course of the accident and the safety recommendations derived therefrom, which is then sent to the parties



involved in the form of a confidential draft, who then have 60 days to state their position concerning the draft. The BSU takes such opinions, if warranted, into account in the final report.

Of the 29 investigations completed in 2007, 14 were completed with a full report and seven with a summary report, and the reports were published. In addition, two joint investigations of other countries in collaboration with the BSU were completed with the publication of a report, as well as six cases that were discontinued with an internal completion memorandum.

Of those procedures that were completed in 2007, the report on the very serious marine casualty on board the CMS "London Express" carries particular weight. Although the accident had already taken place in October 2003, the concluding report could only be published four years later. In addition to the particularly tragic circumstances of the incident, this delay was primarily due to the highly time consuming expert reports that were essential in this case. However, on 19 July 2004 the BSU had already published a preliminary safety recommendation concerning the technical safety aspects that had by then been identified.

All reports published by the BSU can be accessed, classified by their year of publication, on the organisation's website www.bsu-bund.de under the "Publications" side tab.



Figure 9: Very serious marine casualty on board the CMV "London Express"

Fatal accident in the scavenging air space of the main engine
Investigation report 329/03 published on 15 October 2007

2.6 Safety recommendations in 2007

According to the IMO Code, the goal of a marine casualty investigation is the prevention of similar accidents in the future. With this goal in mind, the lessons learnt from a casualty investigation are formulated as safety recommendations and then as a rule published with the concluding report. These recommendations are addressed at the organisation that seems best suited to implement measures to eliminate the identified safety gaps.

Preliminary safety recommendations can be issued by the BSU regardless of the stage of the investigation whenever the recognised safety gap appears to require immediate action.

In 2007 the BSU issued three preliminary safety recommendations, as well as final safety recommendations in 14 final published reports.

All recommendations published by the BSU are available for review, classified by their year of publication, on the organisation's website www.bsu-bund.de under the "Publications" side tab.



2.7 Accident highlights in 2007

Accidents involving persons in the course of apparently routine tasks on merchant ships constituted the focal point of the marine casualties reported to the BSU in 2007. This emphasis comprises a broad range of accident scenarios while handling lines, lifeboats and gangways. In the last two areas, the BSU frequently remarked that the promoting factors included an absence of operating and procedure manuals and/or poor quality of those that were available. Training to acquire the skills of a lifeboatman is part of the fundamental training for every seafarer. A training organisation can compellingly only train using the systems available to it. However, once assigned to a ship, the seamen are confronted with multiple different systems, starting with the lifeboats themselves via the davits and hooks to the release mechanisms. Crew members must have the opportunity to familiarise themselves with the equipment actually present on board by means of a manufacturer's handbook. This applies in particular to those who need to perform a specific function in connection with one of these components. Instruction by other seafarers who have already served on board for a longer period of time is necessary, but only partially able to replace familiarisation by means of the literature. However, the documentation made available on board must then compellingly be appropriate for that particular vessel and its specific systems, and certainly not, as has however frequently been found to be the case, a general documentation that does not sufficiently accurately describe the particularities of the individual components. An operations handbook must additionally be supplemented by a service and maintenance manual customised to the existing system, and, last but not least, also by clear and meaningful pictograms at the relevant stations. Another particularity found by the BSU in connection with lifeboat systems comes about when the manufacturer is no longer active and there is no successor enterprise. Qualified service of systems that will continue to exist on board, sometimes for years, appears questionable in this context, and non-qualified maintenance work can even be dangerous. Similar issues lie at the basis of gangway accidents.

In all scenarios involving personal injury accidents, not least also in connection with line handling accidents, a clear underestimation of the risks involved also became apparent. Although existing warning signals had been recognised, they did not lead to the consequence of taking measures to protect the individual's own life and health as a first priority. Whether protective measures such as donning personal safety gear or interrupting a manoeuvre were considered to be bothersome or unprofessional and therefore dispensed with could not be determined after the fact.



Figure 10: Very serious marine casualty on board the MV "Forest-1"

Fatal accident in the course of lifeboat manoeuvres (Photo: WSP)

BSU marine casualty investigation still pending as of 31 December 2007

In 2007 the leisure craft sector was not of particular significance. Overall, leisure craft accidents constituted 28% of the marine casualties reported to the BSU.

In absolute numbers, at 23 and, respectively, 25, most of the accidents were recorded on the Elbe River, including the ports of Hamburg, Bützfleth, Brunsbüttel and Cuxhaven, and in the Baltic Sea area. As the Elbe, with its river ports, constitutes the highest absolute traffic volume of the German maritime waterways, the accident rate can also be considered to be low for this area. With 13 **serious marine casualties**, a distinct increase as compared to prior years can be recognised in the Baltic Sea area; at the same time, no **very serious marine casualty** was recorded. The number of **serious marine casualties** is equally distributed over both merchant vessels and leisure craft, and over the entire Baltic Sea area. There were also no particular geographic area concentrations.

When considering the types of vessels involved in marine casualties, in 2007 it was remarkable that four personal injury accidents took place on board tugs. Three of these cases were classified as **serious marine casualties**, one of which is being investigated by the BSU. This case, too, falls within the overall focus of supposedly routine tasks, in this case in the handling of the towing gear.

Ten of the 29 **serious marine casualties** reported were groundings. However, they were evenly distributed among merchant vessels and leisure craft, and also geographically over the entire German territory, so that no particular accident focus can be established in this respect.



19 of the 52 **marine casualties** reported were collisions, which in 17 cases involved merchant vessels. However, as evidenced by their classification as **marine casualties** the losses were insignificant. This area, too, did not constitute an accident focus over the last year.

2.8 Evaluations of Voyage Data Recorders in 2007

With the progress in the requirement for commercial shipping to be equipped with Voyage Data Recorders (VDR), these instruments continue to represent an ever growing subject matter for the BSU's investigations. The BSU's experiences to date show that VDR operation on board seagoing vessels is not yet fault-free. Here, too, defects range from inadequate audio quality of bridge microphones via missing records from an individual sensor to full failure of the VDR recording function. As part of the information exchange with other investigation agencies world-wide it became apparent that such negative experiences are definitely not individual cases limited to Germany. As the VDR is not an instrument actively used by the crew, such defects and failures are not noticed in the course of everyday shipboard activities. In a best case scenario, they are detected and corrected during the annual inspection. In the least favourable case for a marine casualty investigation, they are only revealed in the actual course of an investigation by the fact that potentially decisive data are not or only insufficiently available. Another technical problem continues to reside in the difficulty to download and reproduce stored data from a VDR. The technical recommendation SN/Circ/246 published by means of an IMO circular and which aims at facilitating access to, and downloading and reproduction of such data for investigation agencies has not yet been implemented to its full extent according to the BSU's experience. As the VDR is still a "young" instrument, these may only be teething problems that will be corrected in the near future. Otherwise it may be necessary for the IMO performance requirements or also the approval, installation and testing requirements to be adapted. Current standards allow for an enormous multiplicity of types. This not infrequently results in that – as the crew's only active operating action on the VDR - even the emergency backup required after an accident turns out to be problematic. Every manufacturer or even every individual VDR type of one and the same manufacturer can be equipped with a different method for the initiation of an emergency backup. To this extent, in this context too, an accurate manufacturer's handbook, or, even better, a short set of emergency backup activation procedures on the bridge or on the VDR itself is required.



3 International, European, national developments

A review of the IMO Codes continues to be part of the agenda of the International Maritime Organisation. The goal is to change this until now purely recommended instrument into a mandatory one. For this purpose, the Flag State Implementation (FSI) Subcommittee has co-ordinated a draft revised Code as well as supplements to the Safety of Life at Sea (SOLAS) convention. According to this, in SOLAS Chapter XI-1 a new Rule 6 is intended to render Parts I and II of the revised Code binding, while Part III contains complementary instructions, still on a recommendation basis. Both the draft and the SOLAS supplements will be submitted to the Maritime Safety Committee - MSC for adoption by mid-2008.

In parallel, on the European level and under German Council presidency, political unification was obtained in the first half of 2007 via a Draft Directive of the European Commission in regard to marine casualty investigations. This Draft Directive is intended to accomplish binding and uniform investigation of marine casualties on the basis of the IMO Codes in cases involving vessels sailing under the flag of a EU Member State or taking place along Member State coastlines.

Both these developments reinforce the IMO Code as a central standard for international marine casualty investigations. The BSU's experience to date shows that joint investigation together with other states leads to more substantial results, as mutual information exchanges do, as a rule, represent greater insight. However, this requires a joint working foundation. Whenever the respective national investigation procedures are built on the IMO Code, this regularly facilitates co-operation. Strengthening of the IMO Code will lead to further harmonisation of the national investigation procedures, which will be even further reinforced within Europe by the directive proposal. This, in turn, will contribute to even better collaboration in marine casualty investigations.

This further development of the political framework towards a reinforced international collaboration in the area of marine casualty investigations, supports the BSU on the operating side by means of active participation in the world-wide marine casualty investigators organisation MAIIF (Marine Accident Investigators International Forum) and its European section, EMAIF (European Marine Accident Investigators Forum). These provide, on the one hand, the network linking to other investigation agencies. On the other hand they also give access to an information exchange concerning current developments in world-wide casualty events and to further development of investigation procedures.

On the national level, the Average Analysis, Research and Information System [*Havarie Auswerte-, Recherche- und Informationssystem* (HAVARIS; formerly the vessel accident databank [*Schiffsunfalldatenbank*] - SUDABA) project continues to be developed with the collaboration of the BSU. When an incident is not further investigated by the BSU, the data collected by other agencies are not centrally stored. This applies in particular also to the inland waterways domain, in which the BSU has no competence or jurisdiction of any kind. Central recording in HAVARIS





and a mid- to long term statistical analysis based thereon could in future provide a broader data corpus for this area. The preliminary examination of the project has been completed, and the main examination stage has begun.



4 Public Relations

All publications of the BSU are published on its website www.bsu-bund.de. In addition to the investigation reports and safety recommendations, visitors will also find the annual reports, information concerning marine casualties currently under investigation, background information concerning the BSU and its investigative procedures as well as important statute and regulation texts there. The BSU makes every effort to provide all this information in German and in English. However, the English versions usually only become available after a certain time lag. In addition, on its website the BSU also provides links to other institutions dealing with marine casualty investigations.

At present, the Newsletter informs more than 900 participants of current investigation reports and press releases. (2004: 200, 2005: 500, 2006: 760). The printed reports are only sent out in a small print run to the parties directly involved in the accident and – according to a distribution list – to the press, maritime academies and archives. It is nevertheless possible to obtain a printed version upon request from the BSU or to print or download the report from the Internet.

In 2007, an additional area of the BSU's activities was devoted to public relations. The relevant stakeholders are still often not at all or only inadequately aware of the new approach to marine casualty investigations. In this context, the BSU, as had already been the case in previous years, has made every effort to contribute to a better understanding by means of presentations at shipping companies, to pilots, the Waterways Police Departments, sailing clubs and other stakeholders. The presentation of the approach to a modern casualty investigation was also the subject of lecture held by the BSU at the World Maritime University (WMU) of the IMO in Malmö, Sweden.



5 Annual Statistics 2007

5.1 Marine casualties investigated that were concluded by means of an investigation report in 2007

Published	Report No.	Date of accident	Name of vessel	Type of vessel	Nationality	Scene of accident	Type of accident
15/01/2007	455/05	20/10/05	Doria	Container ship	Germany	Angola	Grounding
01/02/2007	495/05	05/12/05	Maritime Lady/ Arctic Ocean	Bulk carrier / Container ship	Gibraltar / Great Britain	Brunsbüttel	Collision
15/02/2007	231/06	04/05/06	Roald Amundsen/ Lass Saturn	Traditional ship / Bulk carrier	Germany / Germany	Heikendorf Roads	Collision
01/03/2007	164/06	19/04/2006	Lisa von Lübeck	Traditional ship	Germany	Hel Harbour / Gdansk	Personal injury
15/03/2007	476/05	18/11/2005	Sven/Comet	Container ship	Germany	Port of Hamburg Outer Basin	Collision
16/04/2007	586/06	17/11/06	Remo/ CMV Jilhan	General cargo vessel / Container ship	Norway / Panama	Baltic, Fehmarn	Collision
02/05/2007	230/06	16/05/06	Samoa	Single handed sailing vessel	Germany	Bornholm Island	Personal injury
15/05/2007	304/06	10/07/06	Hanjin London	Container ship	Korea	Port of Hamburg, Eurogate	Fire Explosion
01/06/2007	068/06	23/01/06	Belen	Fishing vessel	Germany	La Coruña, Spain	Personal injury
01/06/2007	399/06	15/08/06	Blitzaktion	Sailboat	Germany	Danish coast	Sinking
15/06/2007	558/06	05/11/06	Sara Maatje VII	Supply ship	Netherlands	North Sea, Mittelplate oil platform	Personal injury
01/07/2007	009/06	10/01/06	Tor Dania/ Ems Tug + Ems Ponton 7	Ro-Ro ferry / Tug and tow	Norway / Portugal	Elbe River between Buoys 1 and 3	Collision
15/07/2007	474/06	09/09/06	Klenoden/ Hanjin Cairo	Container ship / Container ship	Finland / Germany	Port of Hamburg, Waltershof	Collision
01/08/2007	415/06	23/08/06	Elbe 3	Pilot tender	Germany	Elbe, Elbe Buoy 1	Sinking
15/08/2007	638/06	30/12/06	Maike	General cargo vessel	Germany	off the Dutch coast 53°35'N 005°02'O	Personal injury
01/09/2007	190/07	05/05/2007	Emuna	Bulk carrier	Netherlands	Brunsbüttel Lock	Personal injury
15/09/2007	490/06	15/09/06	Atlantis	Sailboat	Germany	North Sea, East Frisian Islands	Grounding
01/10/2007	607/06	07/12/06	Wilma	General cargo vessel	Antigua & Barbuda	Levensauer Bridge, Kiel Canal	Collision
15/10/2007	319/03	26/10/03	London Express	Container ship	Germany	Atlantic	Personal injury
01/11/2007	028/06	25/01/06	Heinrich S	Container ship	Germany	Koper / ex Yugoslavia	Personal injury
15/11/2007	637/06	28/12/06	Cap Egmont	Container ship	Germany	Pacific, off the coast of Japan 34°12'N 146°43'O	Personal injuries
01/12/2007	021/06	21/01/06	Oliver Jacob	Tanker	Germany	Cameroon Kome-Kribi 1	Personal injury
17/12/2007	4490/7	17/09/2007	Katrine Krog	Pilot boat	Germany	Kiel Canal, Rüsterbergen	Personal injury

5.2 Investigations pending as of 31 December 2007⁸

File No.	Date of accident	Name of vessel	Type of vessel	Nationality	Scene of accident	Type of accident
101/06	13/03/2006	Jan Maria	Fishing vessel	Germany	West of Ireland	Personal injury
		Lass Uranus/ Xin Fu Zhou	Container ship / Container ship	Germany / P.R. China	Port of Hamburg (Finkenwerder)	Collision
	27/10/2006	Stimulation	Container ship	Germany	German Bight, Weser	Personal injury
564/06	08/11/2006	Hoheweg	Fishing vessel	Germany	Nordergründe	Sinking
601/06	02/12/2006	Vera/ British Cygnet	Container ship / Tanker	Germany / Isle of Man	Baltic sea, north of Fünen	Collision
23/07	19/01/2007	Lena	Bulk carrier	Belize	Elbe River	Personal injury
45/07	12/01/2007	JRS Canis	Container ship	Cyprus	Elbe, Nordergründe	Cargo loss
215/07	16/05/2007	Forest-1	Bulk carrier	St. Kitts & Nevis	Emden Harbour	Personal injury
253/07	11/06/2007	Grande Nigeria	Ro-Ro Cargo	Italy	Elbe, Wittenberg	Swell damage
290/07	04/07/2007	MSC Martha	Container ship	Panama	Port of Bremerhaven	Personal injury
302/07	04/07/2007	Northern Faith	Container ship	Germany	Port of Koper / Slovenia	Personal injury
		Kleiner Lump	Sailing yacht	Germany	Elbe, Light Buoy 37	Personal injury
416/07	31/08/2007	Bahago II	Motorboat	Germany	Baltic Sea / 3 nm northwest of Mövenort	Water ingress
450/07	15/09/2007	Hanjin Gothenburg/ Chang Tong	Container ship / Bulk carrier	Germany / Panama	Yellow Sea	Collision
544/07	06/11/2007	Duncan Island	Container ship	Bahamas	Dutch territorial waters	Cargo loss
553/07	07/11/2007	OOCL New York/ Wan Hai 501	Container ship / Container ship	Germany Singapore	Indian Ocean	Collision
		MSC Grace	Container ship	Panama	Weser / Neue Reede [New Roads]	Personal injury
558/07	16/11/2007	Ladoga-3	Bulk carrier	Belize	Darß	Grounding
	23/11/2007		Bulk carrier	Spain	Kiel Canal, Kiel Lock	Collision
607/07	17/12/2007	Bugiser 11	Tug	Germany	Brunsbüttel	Grounding
			•			

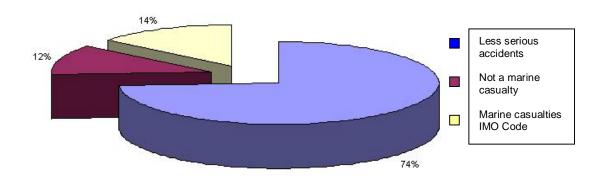
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⁸ Also under investigation is the serious marine casualty of the MV "Baltic Champion" of 9 July 2004; the joint investigation is being conducted under the aegis of the flag state, the Isle of Man

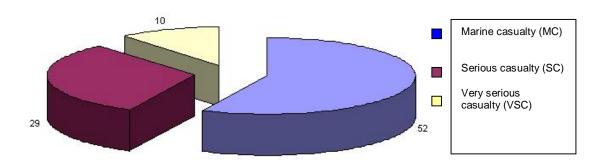


5.3 Overall reports and marine casualties reported in 2007

Overall reports to the BSU

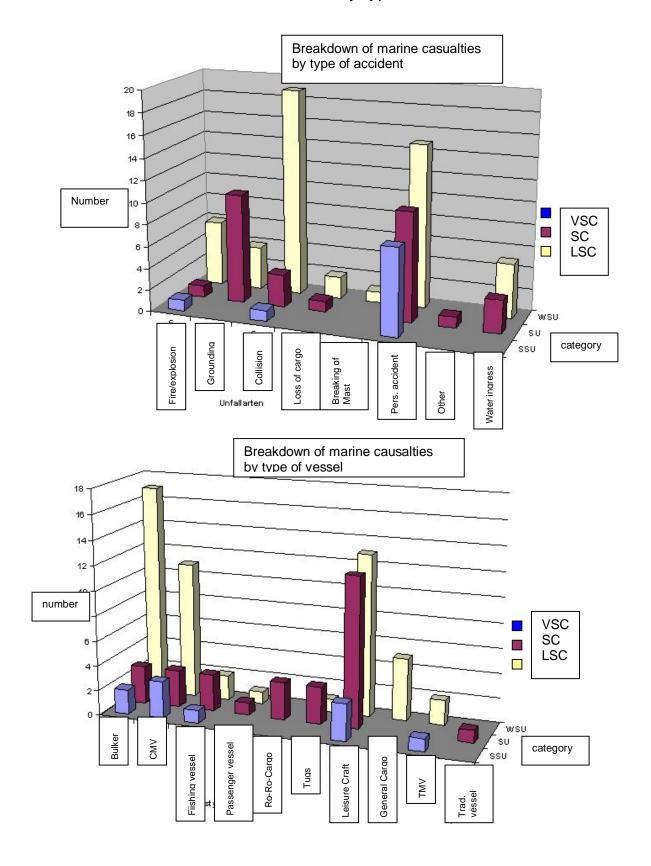


Marine casualties according to IMO Code



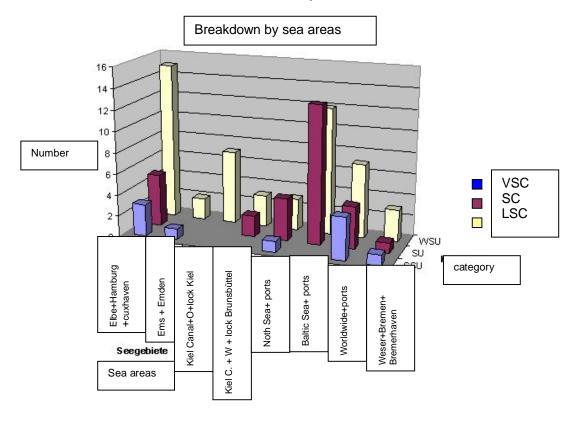


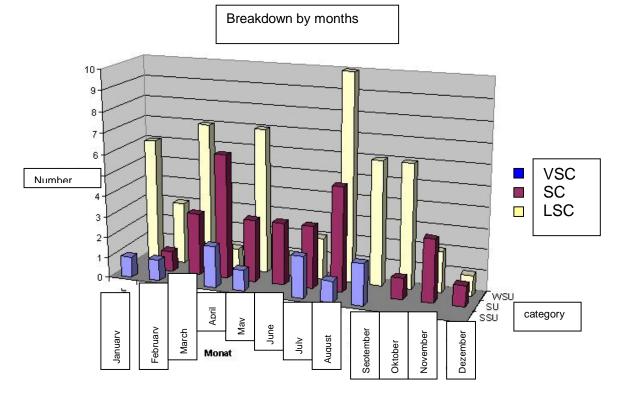
5.4 Breakdown of marine casualties by type of accident and of vessel





5.5 Breakdown of marine casualties by sea areas and months







5.6 Breakdown of marine casualties by causes of death and injuries

