



SMAIC

STATE MARINE ACCIDENT
INVESTIGATION COMMISSION

ANNUAL ANALYSIS

2016

MARINE CASUALTIES AND INCIDENTS



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1. Introduction

The State Marine Accident Investigation Commission (SMAIC) was established by the Act of 31 August 2012 on the State Marine Accident Investigation Commission (Journal of Laws, item 1068). The Commission began its activity in May 2013 upon the appointment by the Minister of Transport, Construction and Maritime Economy of a third one of the statutory five members of the Commission.

The investigation of marine casualties and incidents has been conducted by the Commission under the Act and the Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident adopted by the Maritime Safety Committee of the International Maritime Organisation (Casualty Investigation Code). The objective of the investigation of a marine casualty or incident is to determine its causes and circumstances to prevent future casualties and incidents and to improve the state of the safety at sea.

In the course of an investigation the Commission does not determine liability nor apportion blame to persons involved in the marine accident or incident and the investigation reports shall be inadmissible in any judicial or other proceedings whose purpose is to attribute blame or liability for the accident referred to in the report. It means that none of the organs adjudicating in such proceedings can refer to the information included in the report of the Commission. The Commission shall examine any very serious or serious marine casualty. A very serious marine casualty means an accident involving the total loss of a vessel, loss of life, or severe pollution (damage to the environment). A serious marine casualty is an accident which results, among other things, in the damage to the propulsion of a vessel, an extensive damage to the superstructure, changes in the ship's stability, a damage to the underwater part of the hull, a damage to the environment, including pollution and a breakdown necessitating towage or shore assistance.

In the event of a serious marine casualty the Commission may withdraw from the investigation after a preliminary assessment of the reasons for its occurrence. In the event of an accident other than a very serious or serious marine casualty or in the event of an incident, the Commission decides to undertake the investigation or to renounce it. When making the decision the Commission shall take into account the gravity of the occurrence, the type of a vessel or cargo, and whether the results of the investigation shall contribute to the prevention of marine casualties and incidents in the future.



The Commission shall investigate marine casualties and incidents, which involve vessels of Polish nationality, and vessels of foreign nationality if the accident occurred on the Polish internal waters or the territorial sea. The Commission is obliged to initiate the investigation of the accident in relation to which Poland is a substantially interested state, i.e. in the event when Polish seafarers lost their lives in a marine casualty.

2. Information about the Commission

In 2016 the SMAIC was composed of the following persons:



Cezary Łuczywek – the Chairman of the Commission



Marek Szymankiewicz – the Secretary of the Commission



Krzysztof Kuropieska – the Member of the Commission



Tadeusz Gontarek – the Member of the Commission

The SMAIC is an independent body. It acts at the minister competent for the maritime economy but it is not a section of the Ministry of the Maritime Economy and Inland Navigation.

The Commission has its headquarters in the capital city of Warsaw.

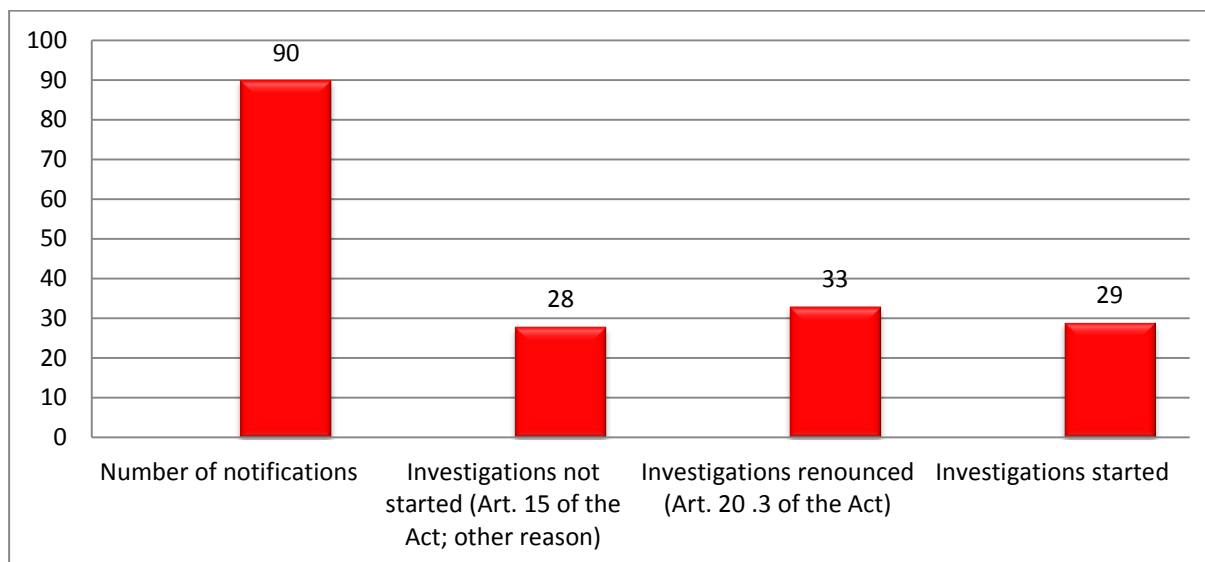
The mailing address and contact data of the Commission are the following:

State Marine Accident Investigation Commission
4/6 Chałubińskiego Str.
00-928 Warszawa, POLAND
tel. +48 22 630 19 05, mob. +48 664 987 987 (24h)
e-mail: pkbwm@mgm.gov.pl
www.pkbwm.gov.pl



3. A number of notifications about marine casualties and incidents and a number of initiated investigations

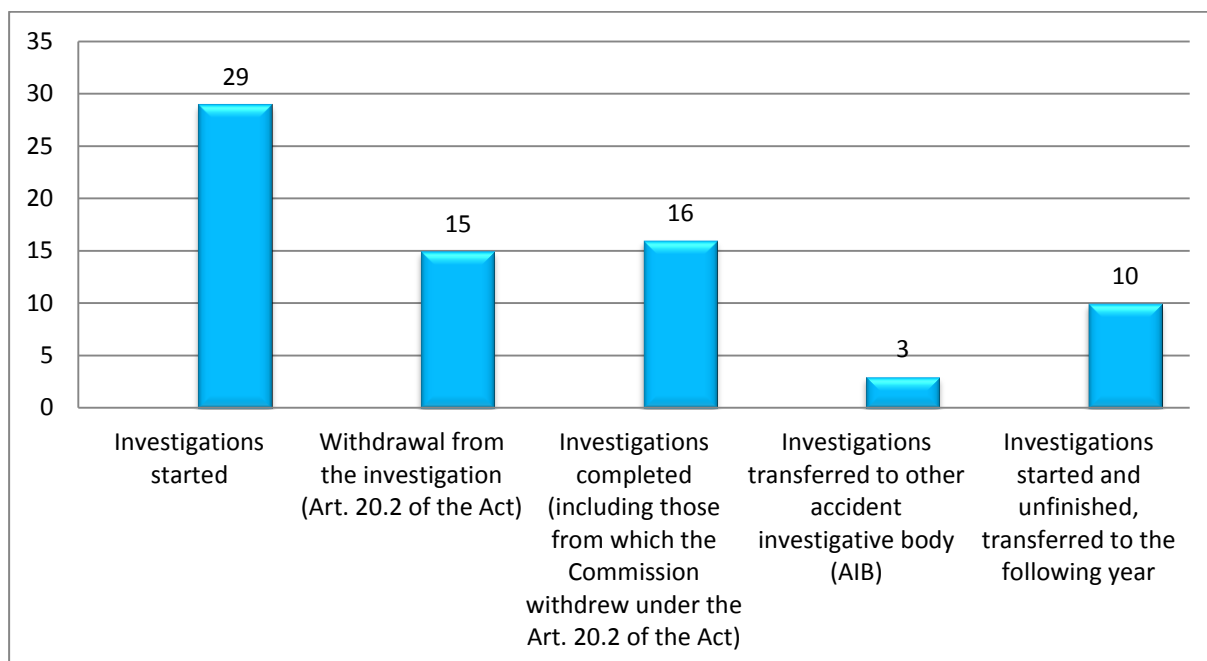
In 2016 the Commission received notifications about 90 marine casualties and incidents.



The Commission did not start the investigation in 28 cases. Among them, in 4 cases the Commission considered that the event, of which the Commission had been informed, did not meet the criteria of a marine casualty included in the definition of a marine casualty in the Act on the State Marine Accident Investigation Commission. In the remaining 24 cases the accidents were not investigated by the Commission because they were not very serious casualties and they involved either State vessels or small fishing vessels (less than 15 m), or recreational yachts, i.e. vessels excluded from the investigation within the purview of Art. 15.2 subparagraph 2, points (b) and (c) of the Act on the State Marine Accident Investigation Commission.

Considering the gravity of the occurrence, the type of a vessel or carried cargo, the Commission renounced the investigation in 33 cases, recognizing that the results of the investigation would not prevent similar marine casualties and incidents in the future.

In the remaining 29 cases, the Commission initiated the investigation.



After making the initial assessment of the causes of each of these 29 cases, in 15 cases the Commission decided to withdraw from the investigation recognizing that further examination would not contribute to the improvement of the safety at sea. These investigations were considered completed by the Commission. In 1 case (the casualty of the vessel *Slaggo*) the Commission completed the investigation and published the final report. In 3 cases the Commission decided to transfer the investigation to a competent accident investigative bodies (AIB) of other states.

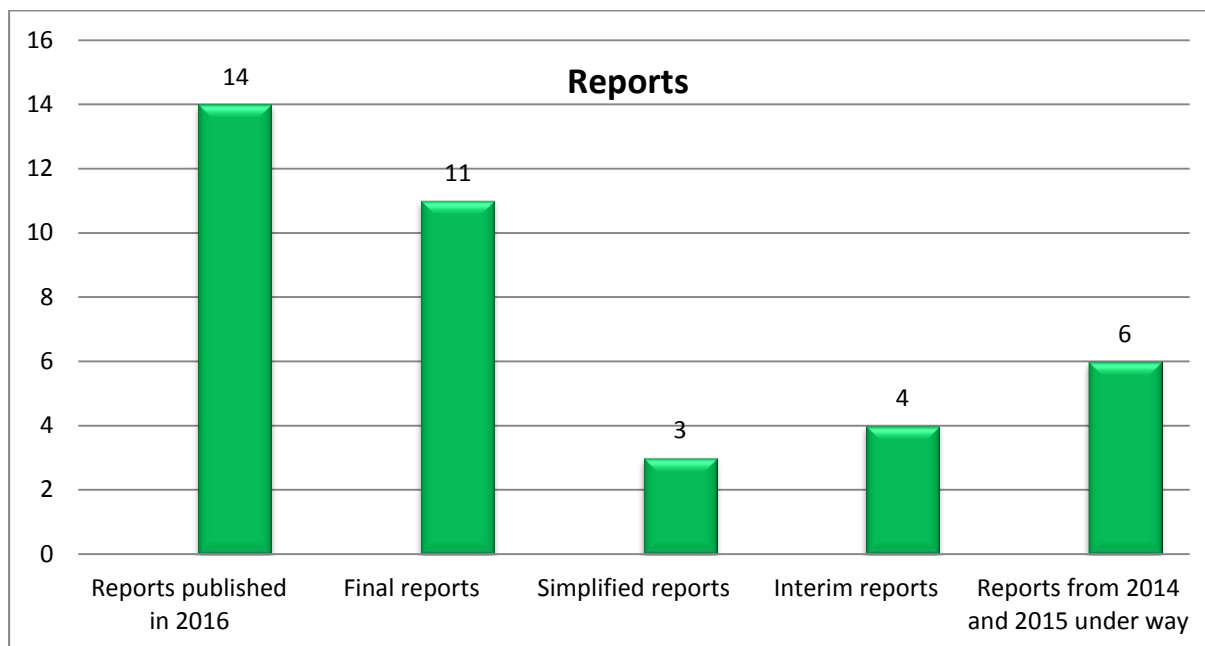
In the remaining 10 cases the Commission decided to continue investigations.

4. A number of investigations completed in 2016 and a number of published reports

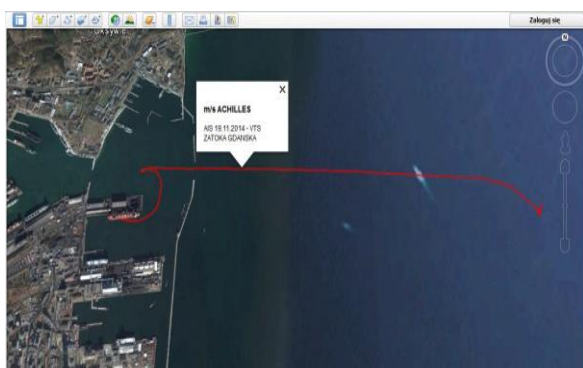
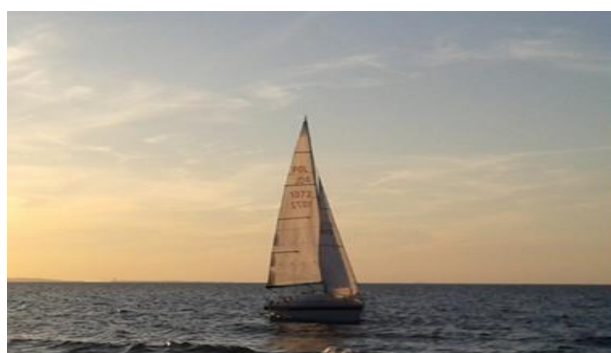
In 2016 the Commission completed 14 investigations and published 3 simplified reports (on the accident of a tug boat *Amon*, a yacht *Polonus* and a collision of vessels *Fast Jef* and *Alora*) and 11 final reports. The investigations completed with final reports concerned 10 casualties which occurred in 2015 and 1 casualty which occurred in 2014 (concerning the vessel *Achilles*). In 4 cases (the collisions of a vessel *Transforza* with a tug boat *Kuguar* and a tug boat *Virtus* with a vessel *Bomar Victory*, spillage of oil by a vessel *Green Egersund* and a fire on a tug boat *Zeus*) the Commission has not managed to develop reports in the time limit set by law and published interim reports.



The Commission has started works over 10 reports from investigations of accidents which happened in 2016 and has continued works over 5 reports from the accidents of 2015 and one from 2014. The publication of that last report (on the accident of a sailing yacht *Prodigy*) was planned, following consultations concerning its contents, for the first quarter of the following year.



The reports published in 2016 refer to such accidents as, among others, sinking of a sailing yacht *Down North* at the Bay of Pomerania (an upper left photograph below); drowning of a fisherman and sinking of a fishing boat *ŁEB-94* at the Baltic Sea (an upper right photograph below), poisoning with PH₃ of the crew of a vessel *Nefryt* at the Gulf of Guinea (from top to bottom a second left photograph below); falling overboard of the captain of a sailing yacht *Ichtiander* (from top to bottom a second right photograph below), grounding of m/v *Achilles* at the roadstead of the Port of Gdynia (from top to bottom a third left photograph below), sinking of the tug boat *Kuguar* in Świnoujście (from bottom to top a second right photograph below), loss of tightness of the hull of a yacht *Zjawia IV* in the Baltic Sea (a lower left photograph below), fatal poisoning with carbon monoxide of a member of the crew of a vessel *Corina* (a lower right photograph below).



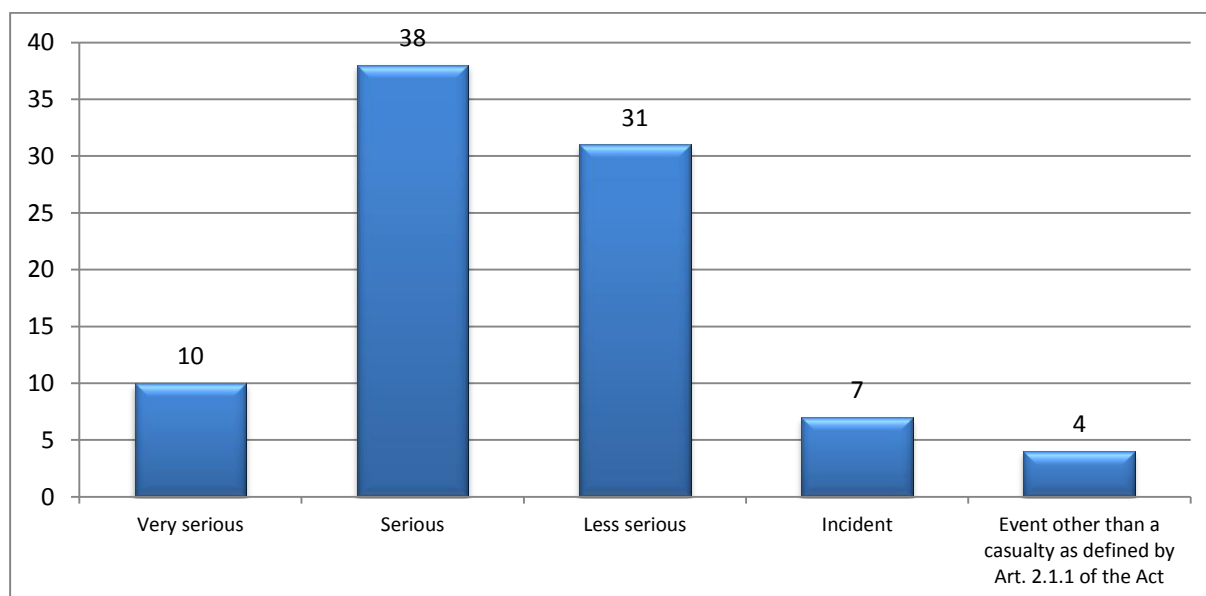


5. A list of marine casualties and incidents according to type

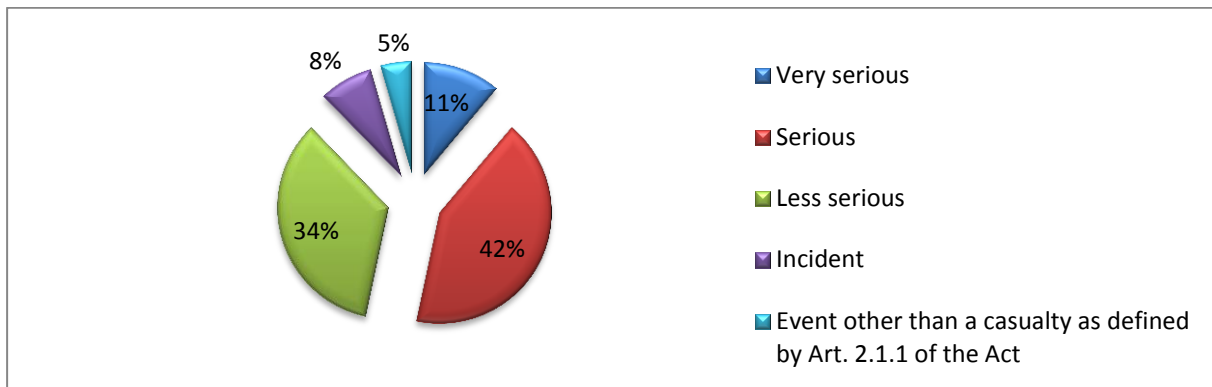
From among 90 events reported to the Commission, as many as 10 turned to be very serious marine casualties as stipulated in the Casualty Investigation Code and the Act on the State Marine Accident Investigation Commission.

Four events – a fire on a vessel *Green Clipper* in the floating dock of the Gryfia Shipyard in Szczecin, sinking of a yacht *Incentive* in the Port of Gdańsk, drowning of an intoxicated person when a boat *KUŻ-18* sank at the Bay of Puck and the death of a chief engineer officer at a vessel *Aquitania* in Indonesia – the Commission qualified as occurrences which have not fulfilled the criteria of a marine casualty as defined in Article 2 of the Act on the State Marine Accident Investigation Commission.

38 notifications referred to serious marine casualties, 31 events were qualified by the Commission as less serious marine casualties. Seven notifications were classified as marine incidents.



The percentage specification of particular types of accidents is presented below.



Among very serious marine casualties the Commission was investigating 4 cases of a death of a crew member on board a vessel, 4 cases of the total loss of a vessel, 1 drowning, and 1 case of sinking of a sea-going yacht.

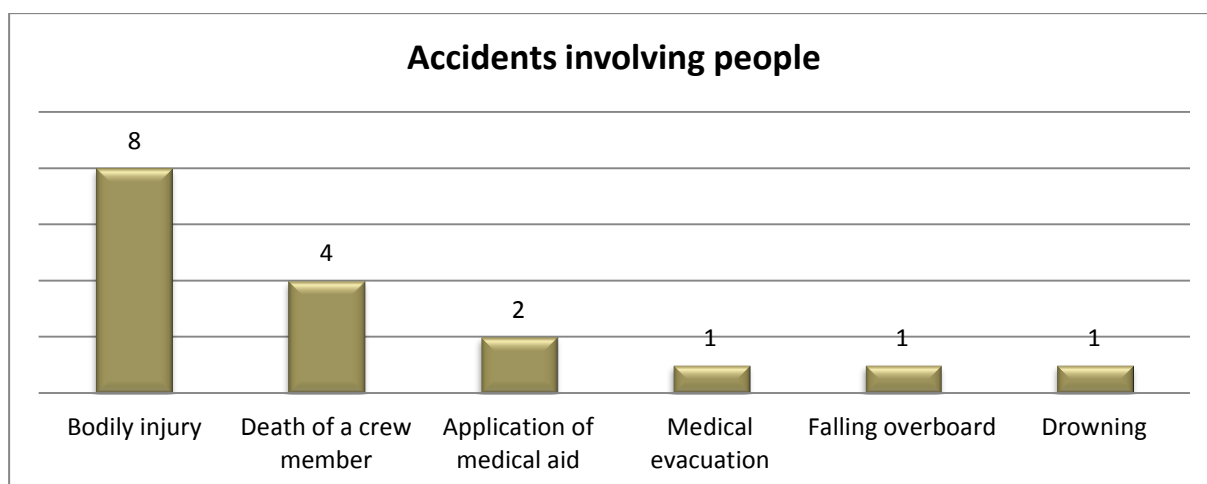
The investigations of the total loss of a vessel referred, among others, to the sinking of *Slaggo* under the Swedish flag (an upper left photograph below). The Commission investigated the following cases: of the death of a seafarer aboard *Daan* under the Dutch flag in the port of Szczecin (an upper right photograph below), of the death of a chief engineer officer aboard the tug boat *Ikar* under the Polish flag at the exit from the port of Rotterdam (a lower left photograph below), and drowning of a fisherman from the boat *KOL-28* in the Baltic Sea at a distance of ca 6 Nm from Kołobrzeg (a lower right photograph below).



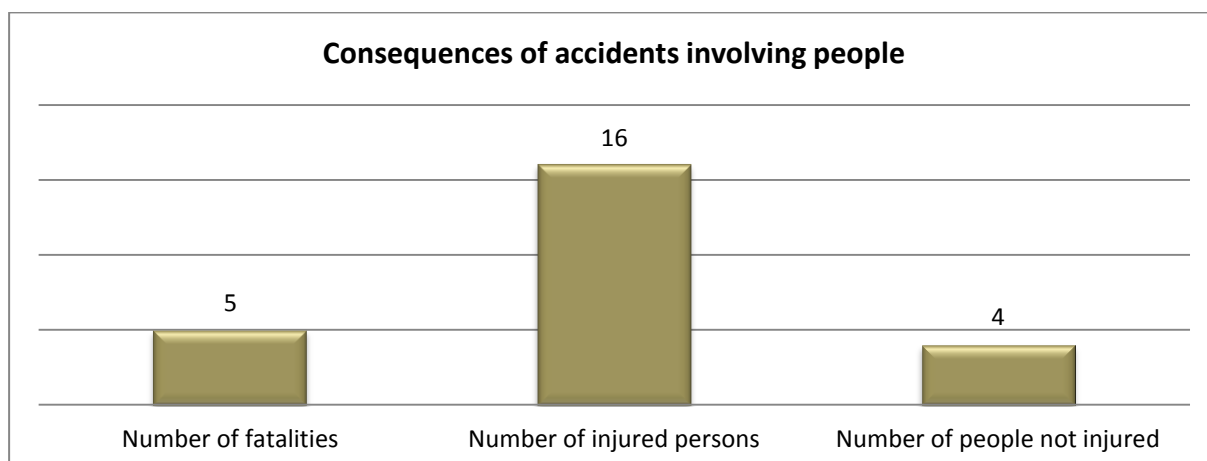


5.1. Accidents involving people

In 2016 the Commission was investigating 17 accidents involving people (*occupational accidents*). As many as 5 people died in these casualties, and 20 people were injured. The cases of death of seafarers took place on board of a tug boat *Odissey* (under the Russian flag) in the port of Gdańsk, on board of the *Daan* (under the Dutch flag) in the port of Szczecin, on board of the *Fast Herman* (under the Belgian flag) at the Baltic Sea and on board of the tug boat *Ikar* (under the Polish flag) at the exit from Rotterdam. One of the crew members of the fishing boat *KOŁ-28* (under the Polish flag) drowned after falling overboard on the fishery at the Baltic Sea ca 6 Nm to the north of Kołobrzeg. The diagram below presents the number of casualties involving people and their consequences.



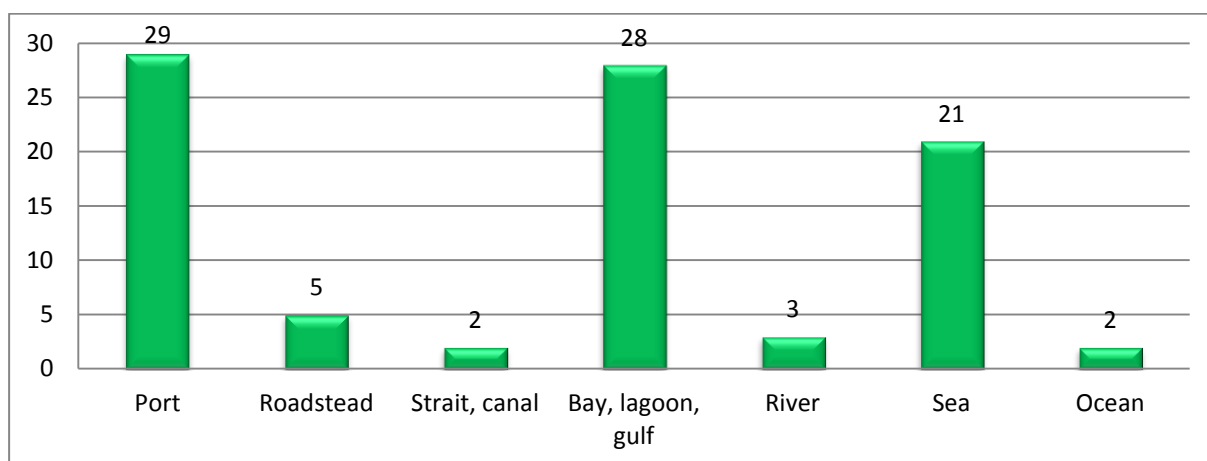
In 8 casualties involving people 16 of them were injured. In 4 cases these people did not suffer internal injuries but they required medical assistance (3 cases) or assistance of the other people (a person fell overboard a yacht *Kneż* and was taken by its crew).



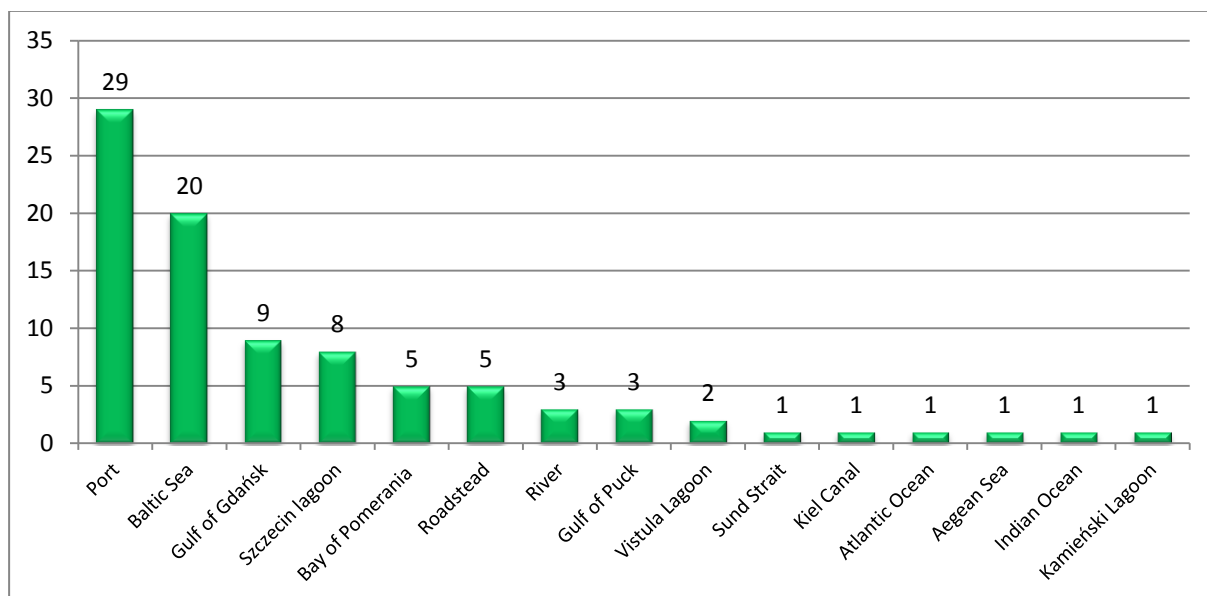


6. Regions where marine casualties and incidents occurred

From among all marine casualties and incidents which were registered by the Commission, the greatest number of as many as 29 accidents took place in ports; 28 accidents took place in gulfs, bays and lagoons; 21 accidents took place at sea; 5 accidents took place at the ports roadsteads; 3 in rivers; 2 in oceans and 2 accidents took place in straits or canals.

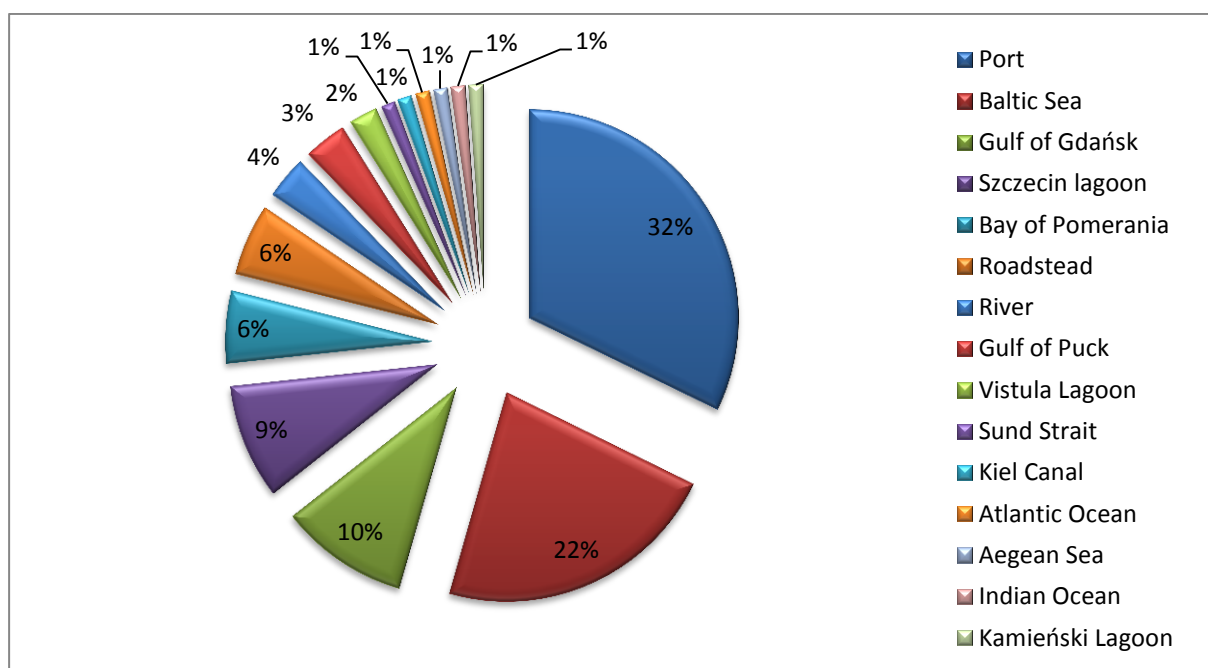


A detailed list of water regions where casualties and incidents involving sea-going vessels took place is presented in the following diagram.



20 accidents took place in the Baltic Sea. As many as 17 accidents took place in the Gulf of Gdańsk (9), in the Bay of Pomerania (5) and in the Gulf of Puck (3). 11 accidents took

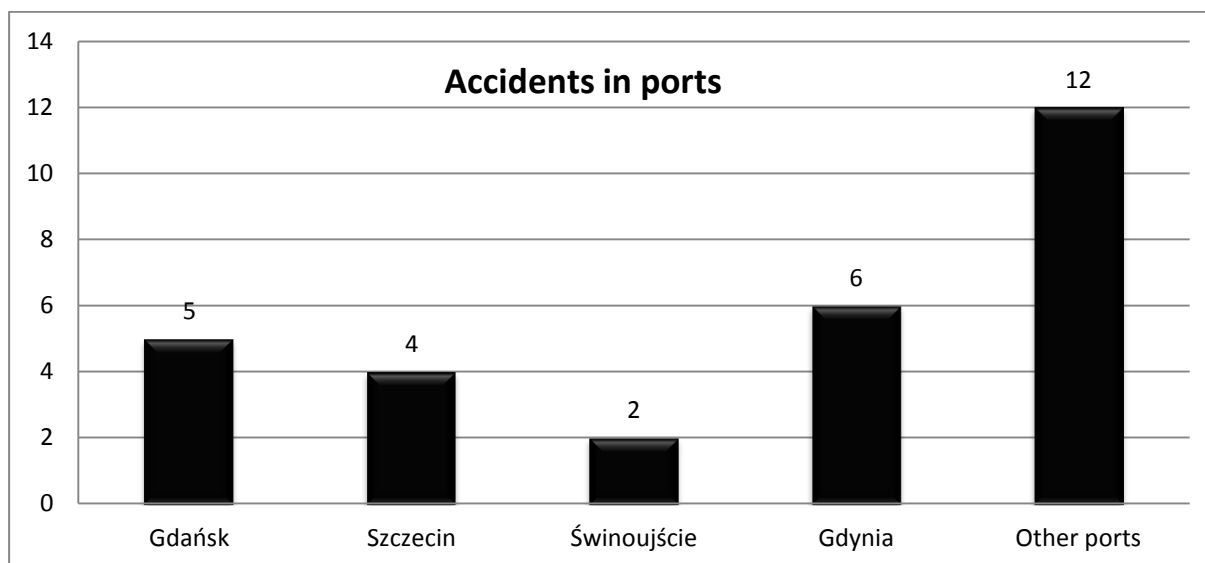
place in the Szczecin Lagoon (8), the Vistula Lagoon (2) and the Kamieński Lagoon (1). Five accidents took place at the roadsteads of Polish ports – in two cases in Gdańsk, and in one case in Gdynia, one in Ustka and one in Świnoujście. 2 marine casualties took place in the oceans: one in the Atlantic Ocean (a yacht *Miracle*) and the other one in the Indian Ocean (a sailing yacht *Perła Gdynia*). 3 casualties took place in rivers: in the Humber river (a vessel *Kopersand*), in the Śmiała Wisła (a tug boat *Tytan*) and Dziwna river (a motor yacht *Mariah* under the German flag). Accidents, one in each of the following places occurred in the Sund Strait (a sailing yacht *Perła Gdynia*), in the Kiel Canal (a tug boat *Amon*) and in the Aegean Sea (a vessel *Cabrera* under the flag of Antigua & Barbuda).



The diagram presented above shows the per cent share of each of the enumerated regions in the total number of 90 occurrences reported to the Commission.

6.1. Casualties in ports

From among 29 casualties in ports 17 ones took place in major Polish ports and 12 in other ports, including 3 cases in foreign ports (Rotterdam – the Netherlands, Copenhagen – Denmark, and Gresik - Indonesia). The distribution of casualties in four major Polish ports is presented below.



Accidents in ports accounted for more than one third (32%) of accidents which occurred in 2016. They concerned situations in which vessels which caused the accident or aboard which the accident took place:

- 1) were in motion (the collisions of *Poroniec* and *Angon* in the port of Copenhagen, the yacht *Impression* with the yachts *Polaris* and *Kwazar* in the port of Gdynia, the vessel *Poroniec* with the coast guard vessel *ICGV Thor* in the port of Gdańsk, a dump barge *SM-PRC-7* with a fishing boat *JAR-30* in the port of Darłowo, the vessel *Daan* with a barge *BA ZPS 20013* in the port of Szczecin, grounding of a vessel *Onego Rotterdam* in the port of Świnoujście and the accident aboard the tug boat *Ikar* at the exit from the port of Rotterdam);
- 2) were approaching the quay (hitting the quay by the following vessels: *Zourite*, *Blue Carmen* and *Emerald Star* in the port of Gdynia, a vessel *Roza Weneda* in the port of Świnoujście, a vessel *Anja* in the port of Szczecin, a vessel *Omskiy 141* in the port of Police and leaning against the wharf by the hull of a vessel *B103/1* which came off the tow-line in the port of Gdańsk);
- 3) were moored in the port (fishing boats: *DAR-55* and *CHY-15* in Darłowo, *KOL-288* in Kołobrzeg and *HEL-37* in Hel, vessels: *Grona Marsum*, *Conmar Island* and *Daan* in Szczecin, *Theodosia* and *Stena Spirit* in Gdynia, *ESL Africa* in Gdańsk, a yacht *Passadenia* in the port of Ustka and the occurrence aboard *Aquitania* in the port of Gresik on the Java island in Indonesia).

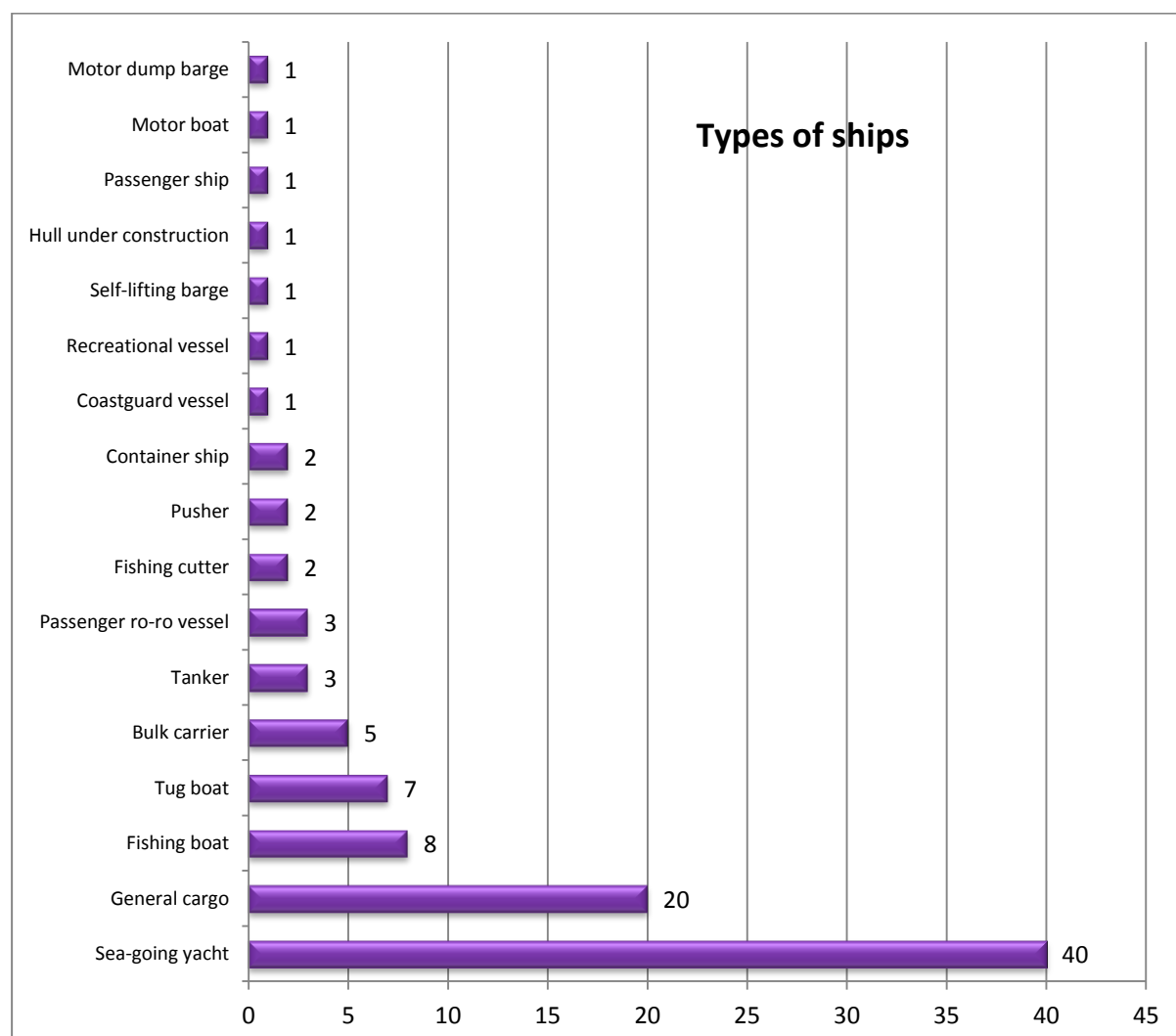


7. Types of vessels involved in marine casualties or incidents

There were involved 99 vessels of all types in 90 marine casualties and incidents reported to the Commission in 2016. The largest group of vessels involved in the accidents was composed of sea-going yachts (40), and then general cargo vessels (20), fishing boats (8) and tug boats (7). Among merchant vessels the largest group was composed of bulk carriers (5), and then ro-ro passenger ships (3), and oil carriers (3).

On container vessels, fishing cutters and pushers there were two accidents on each type of a vessel. In the remaining 7 accidents involved a passenger vessel, a motor dump barge, a recreational vessel, a motor boat, a self-lifting barge, a vessel of the Icelandic Coastguard as well as a hull of a vessel under construction.

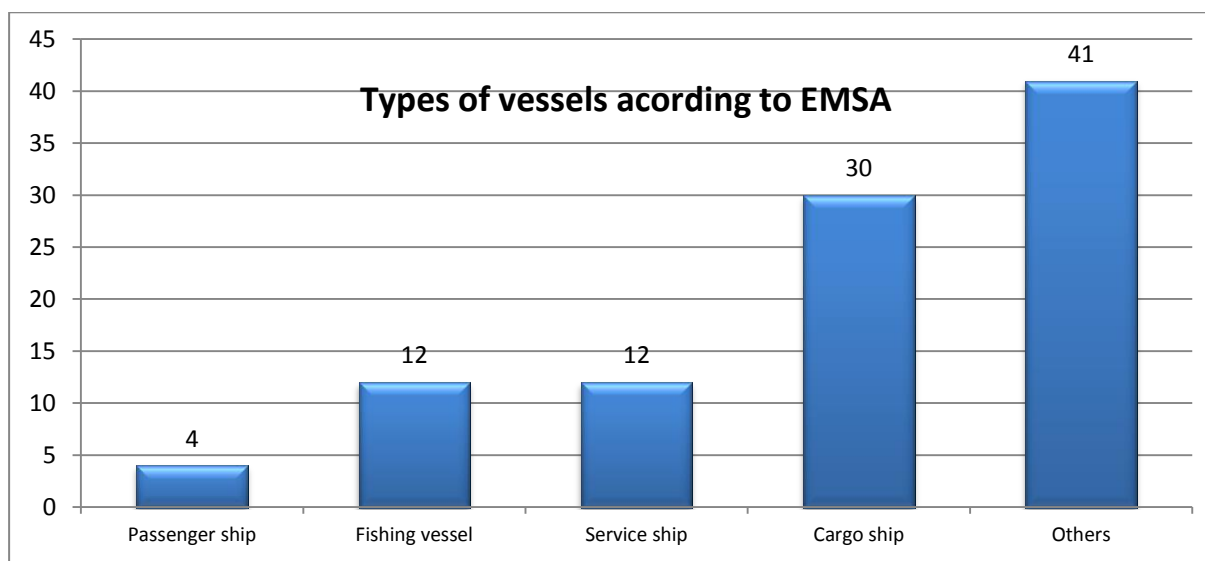
From among 8 accidents involving fishing boats the Commission recorded only one fatal accident of a fisherman but none of the boats sank.





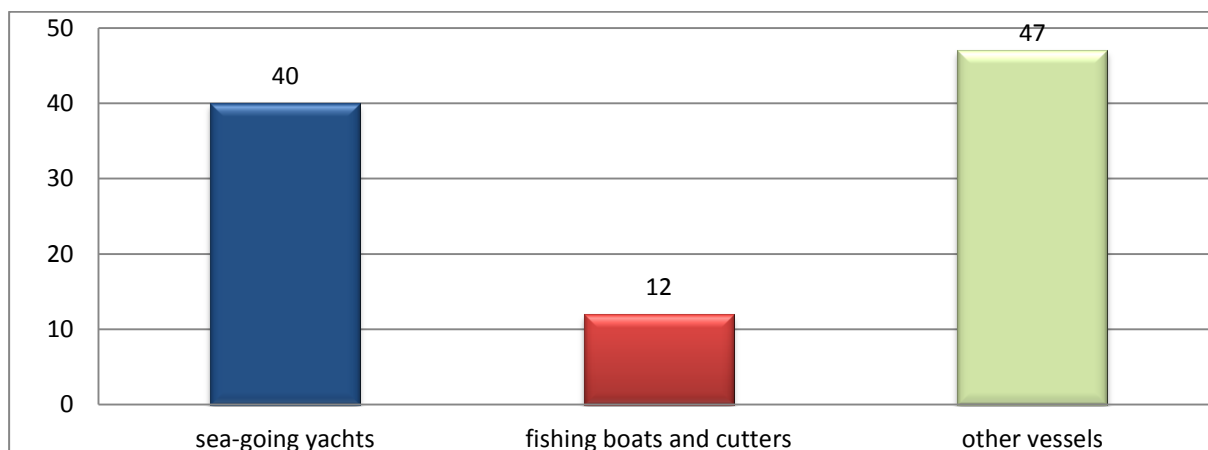
7.1. Division of vessels according to EMSA classification

The Commission divided the vessels involved in the investigated accidents in 2016 according to the classification adopted by the European Maritime Safety Agency (EMSA). The vessels were divided into the following groups: cargo ships, fishing vessels, passenger ships, service ships (such as tug boats, dredgers, SAR crafts, floating cranes) and other vessels (including yachts).

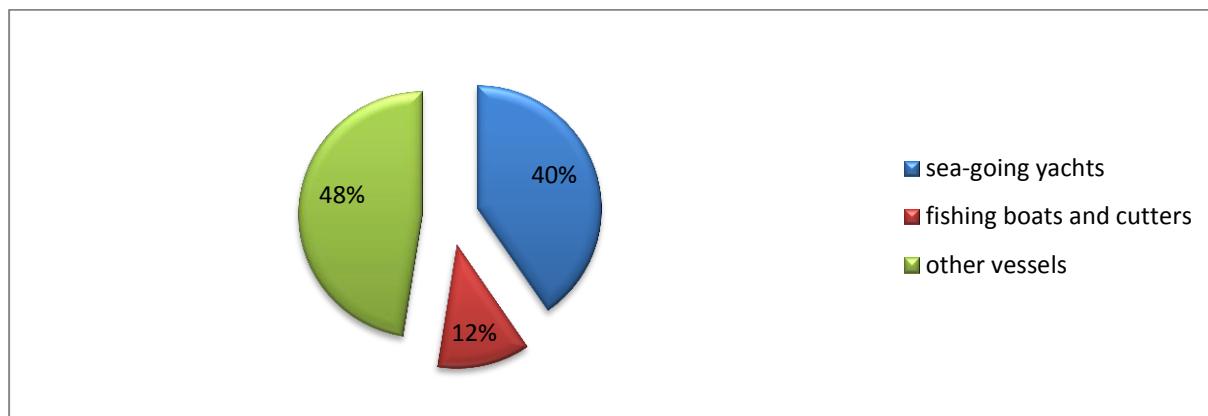


7.2. Casualties of sea-going yachts

In 2016 the Commission received notifications of 37 events involving sea-going yachts. The graph below presents the comparison of the number of yachts, fishing boats and cutters and other vessels (totally 99 vessels) which were involved in the events reported to the Commission.



The per cent share of yachts in comparison to fishing vessels and other vessels is presented in the diagram below.



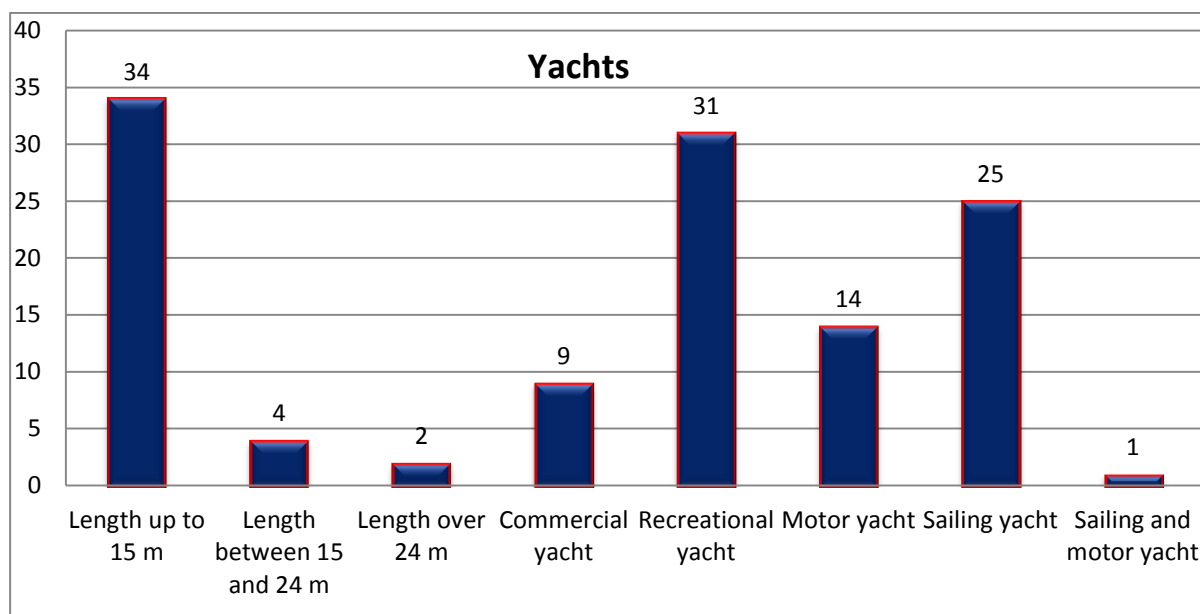
In 2 cases the Commission classified the events as non-marine casualties. They were the following: sinking of the yacht *Incentive* at the wharf in the port of Gdańsk and drowning of an intoxicated person, who fell overboard a boat *KUŹ-18* in the Bay of Puck. The remaining events were the following: 3 very serious marine casualties (fire and sinking of yachts *Miracle* and *Sunrise* and capsizing and sinking of the yacht *Perła Gdynia*), 26 serious marine casualties and 6 less serious marine casualties.

In 25 cases the Commission did not start the investigation of a casualty of a yacht, since it had no such obligation (they were not very serious marine casualties in the purview of the Act of the State Marine Accident Investigation Commission). In 10 cases the Commission initiated the investigation and after preliminary assessment in 7 cases the Commission withdrew from the investigation recognizing that it would not contribute to the prevention of such type of casualties in the future. In the remaining 3 cases the Commission decided to continue the investigation and complete it with preparing and publishing the final report.



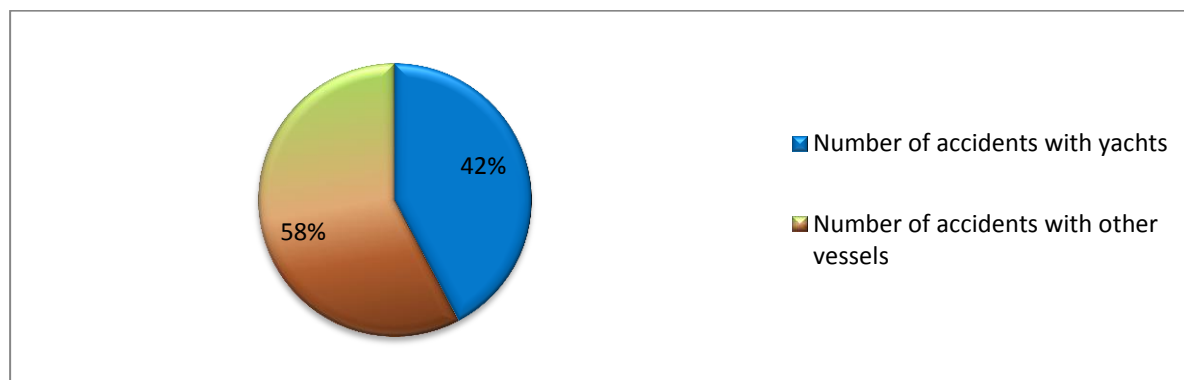
The investigation of very serious marine casualties of the sea-going vessels *Quark*, *Zita* and *Alboran XIX Sabor* which took place in 2015 and were not completed in 2016 and the publication of final reports from these investigations was postponed until the first half of the next year.

Among sea-going yachts which were involved in the casualties there were 2 big yachts (of the length over 24 m), but the majority were yachts of the length up to 15 m (34). 4 yachts involved in the accidents were between 15 and 24 m long.



Almost one fourth of the total number of yachts were commercial ones (9). The remaining yachts were recreational crafts (31). More yachts with sail propulsion (25) were involved in the accidents than those with motor propulsion (14).

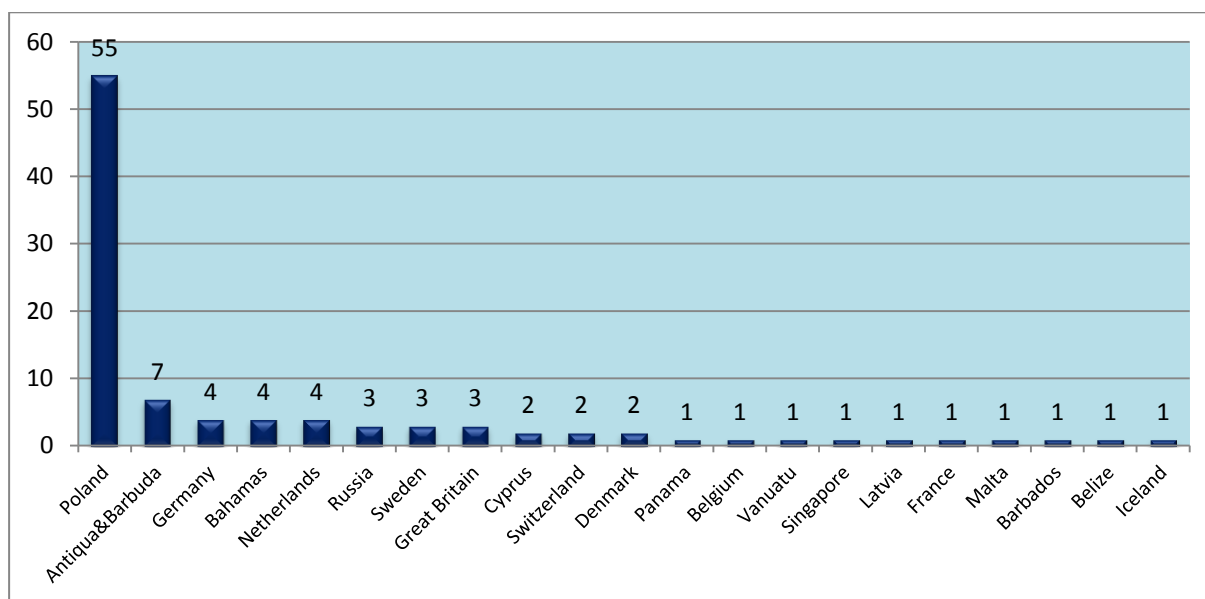
The number of accidents involving sea-going yachts constituted 42% of the total number of accidents reported to the Commission in 2016.



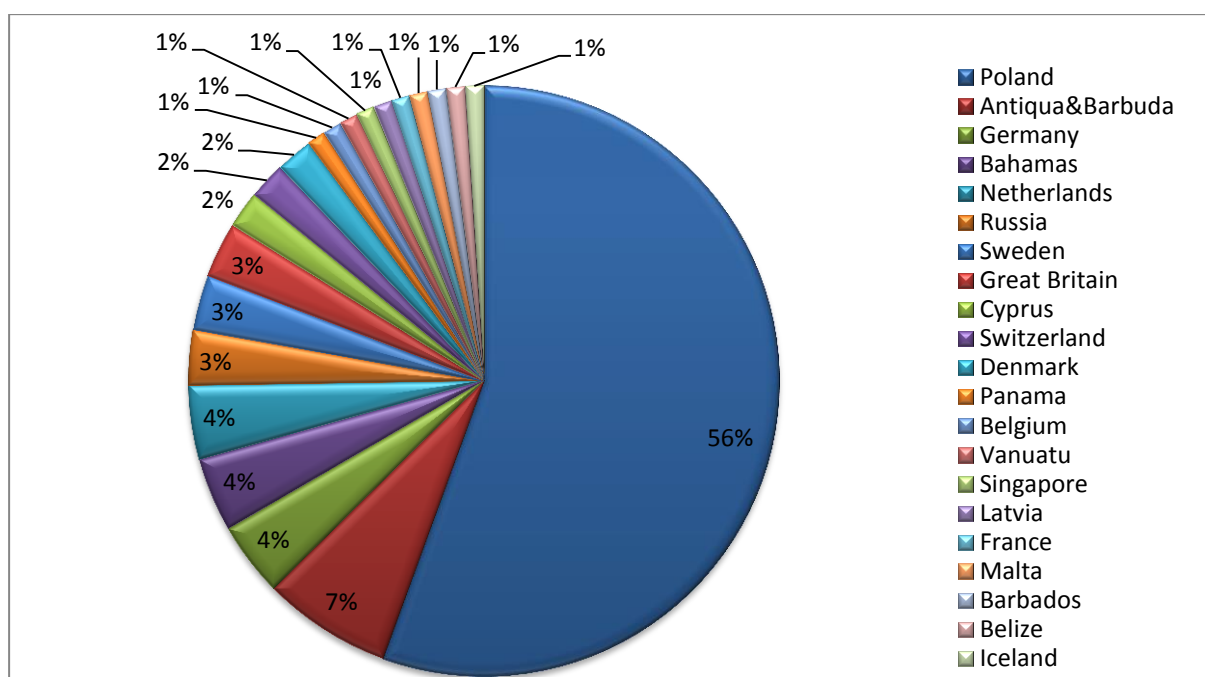


8. Division of vessels according to the flag

From among 99 vessels involved in the marine casualties and incidents registered by the Commission, more than a half, i.e. as many as 55 vessels were flying the Polish flag. 22 vessels belonged to the European Union Member States. 3 vessels were flying the Russian Federation flag, 2 vessels belonged to Switzerland, 1 to Iceland, and the remaining 16 vessels belonged to countries considered to be the so called “flags of convenience”.



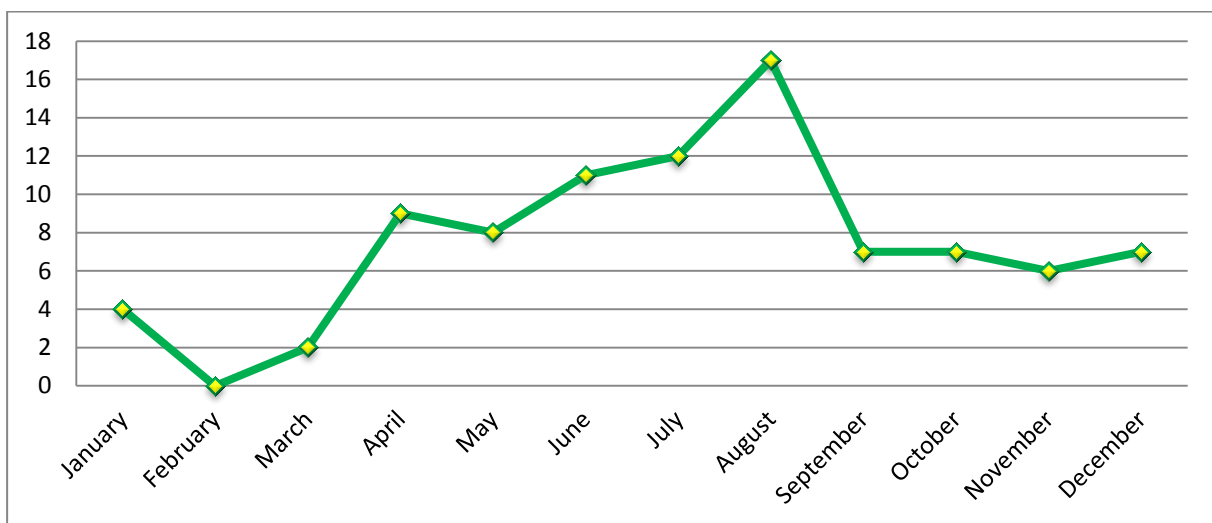
The per cent share of particular flags is presented below.





9. Distribution of marine casualties and incidents over a year

The Commission compared the number of marine casualties and incidents in each month over a year and found out that the greatest number of accidents occurred in the middle of the year. The greatest number of accidents (17) took place in August and in the whole period from April till September (due to a large number of sea-going yachts used for navigation during the sailing season). In January there were only 4 and in March – 2 accidents, whereas in February 2016 there were no accidents at all.



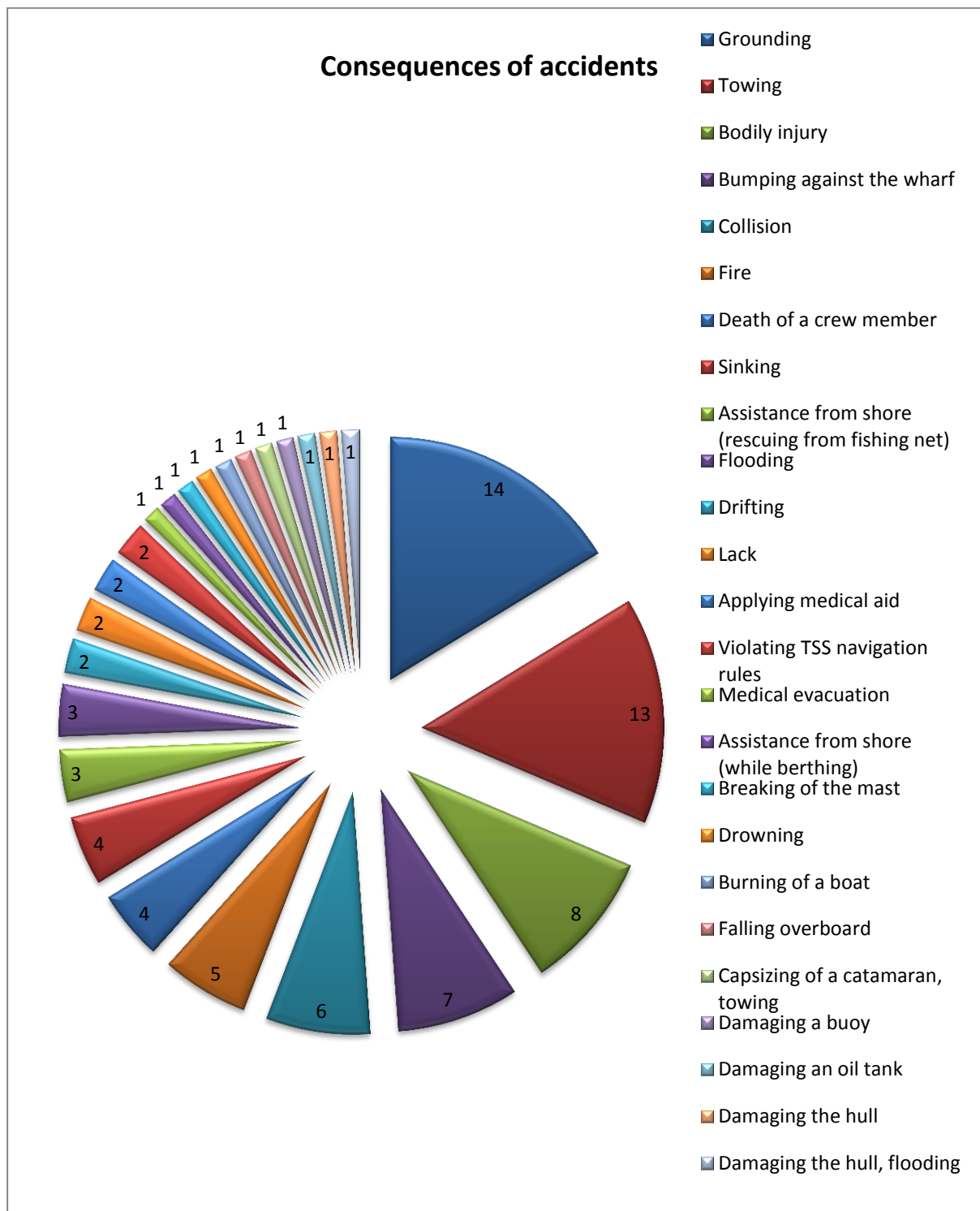
10. Consequences of marine casualties

From among 86 events other than those which had not been marine casualties and incidents, reported to the Commission, the Commission established the following: 14 groundings of vessels (of which nine times there were sea-going yachts), 13 cases of necessary towage, 8 accidents in which the crew members were injured, 7 impacts against the berth while mooring, 6 collisions, 5 fires, 4 cases of death on board a vessel, 3 cases of necessary assistance from shore due to getting entangled in the fishing net, three times flooding and sinking of a vessel.

The Commission noted 2 cases each of the necessity to apply medical first aid to the crew. In case of 7 reported incidents, there were violated twice the principles of navigation in the TSS, twice the vessel was forced to lay adrift temporarily, in one case a crew member with



symptoms of mental and somatic imbalance was evacuated from a fishing boat, and in two cases there were no consequences of a reported event.



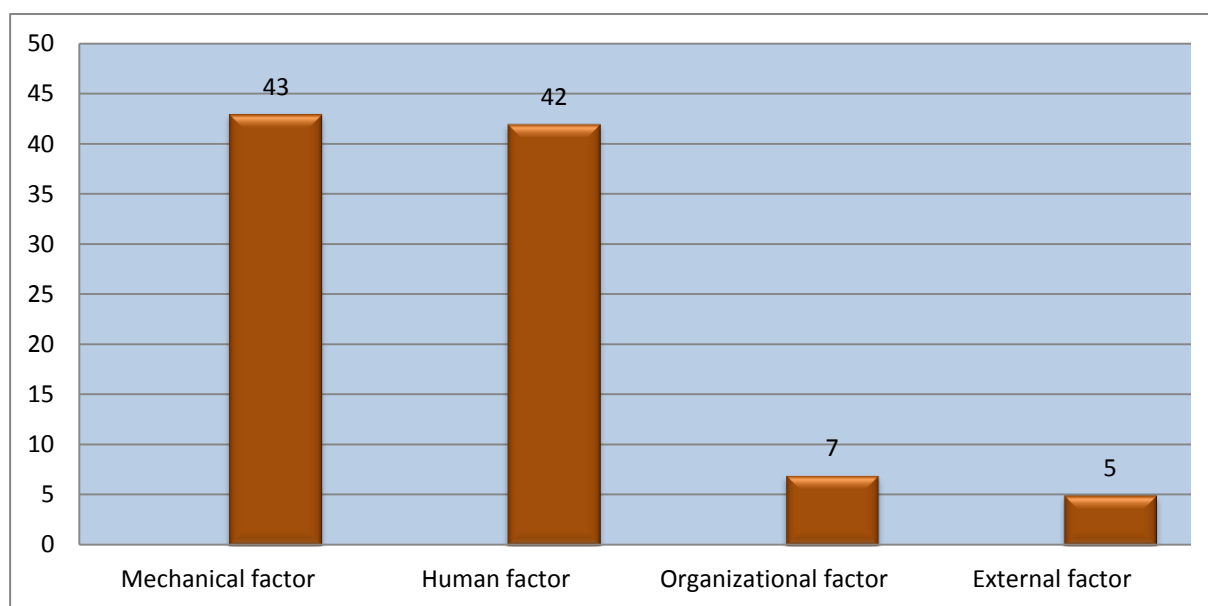
Also, the Commission found out about other individual events, which were the following: capsizing of a yacht (a catamaran *Nacra*), breaking of the mast (a sailing yacht *Fordewind*),



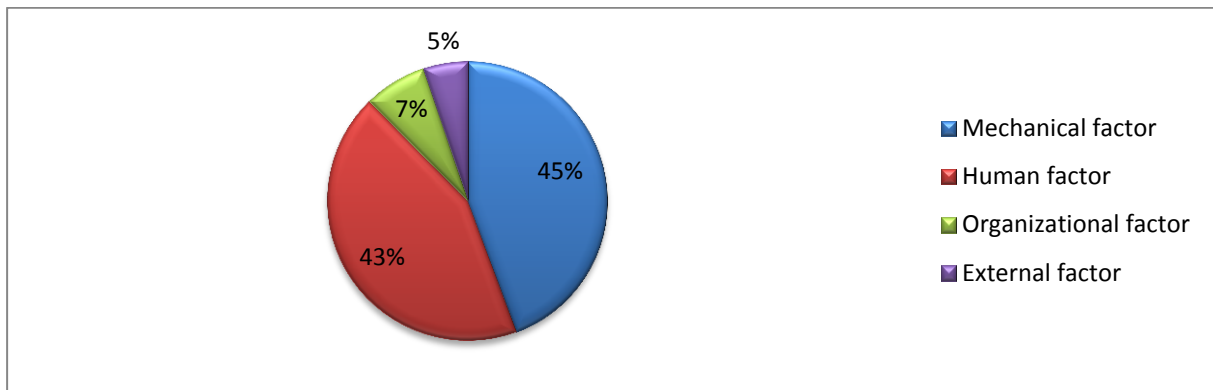
burning of a boat (a sailing yacht *Viktoria*), damaging of the hull (the hull of a vessel *B 103/1*), falling overboard (a sailing yacht *Kneź*), damaging of the hull and flooding (a motor yacht *Turkan*), a necessity to seek assistance from shore while mooring (a sailing yacht *Waitearoa*), damaging a sea mark (a vessel *Ark Futura*), damaging a fuel tank inside the hold (a vessel *ELS Africa*), a necessary medical evacuation (a fishing boat *TRB-33*), drowning as a result of falling overboard (a fishing boat *KOŁ-28*), and a case purposeful sinking of a yacht by the navy (a sailing yacht *Perła Gdynia*).

11. Causes of marine casualties and incidents

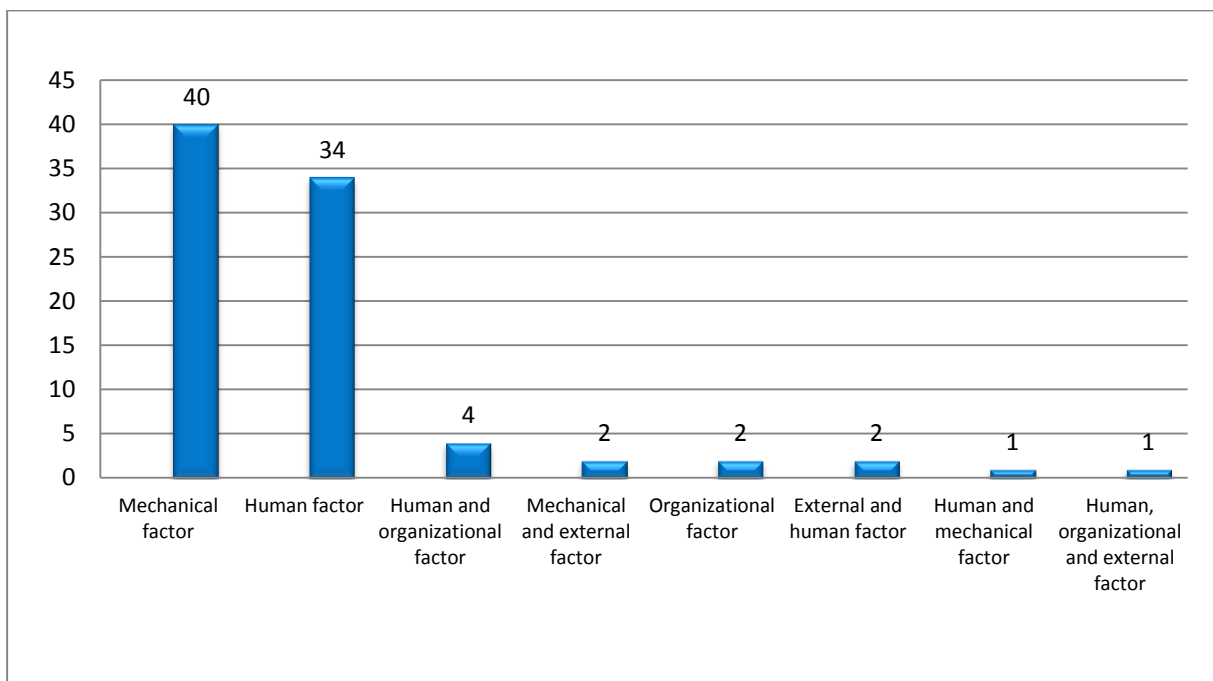
From among 86 casualties and incidents reported to the Commission, 43 cases were influenced by a mechanical factor and 42 cases by a human factor. In 7 cases, there was an organizational factor involved, and in 5 cases the accidents were caused by external factors, mostly unfavorable weather conditions.



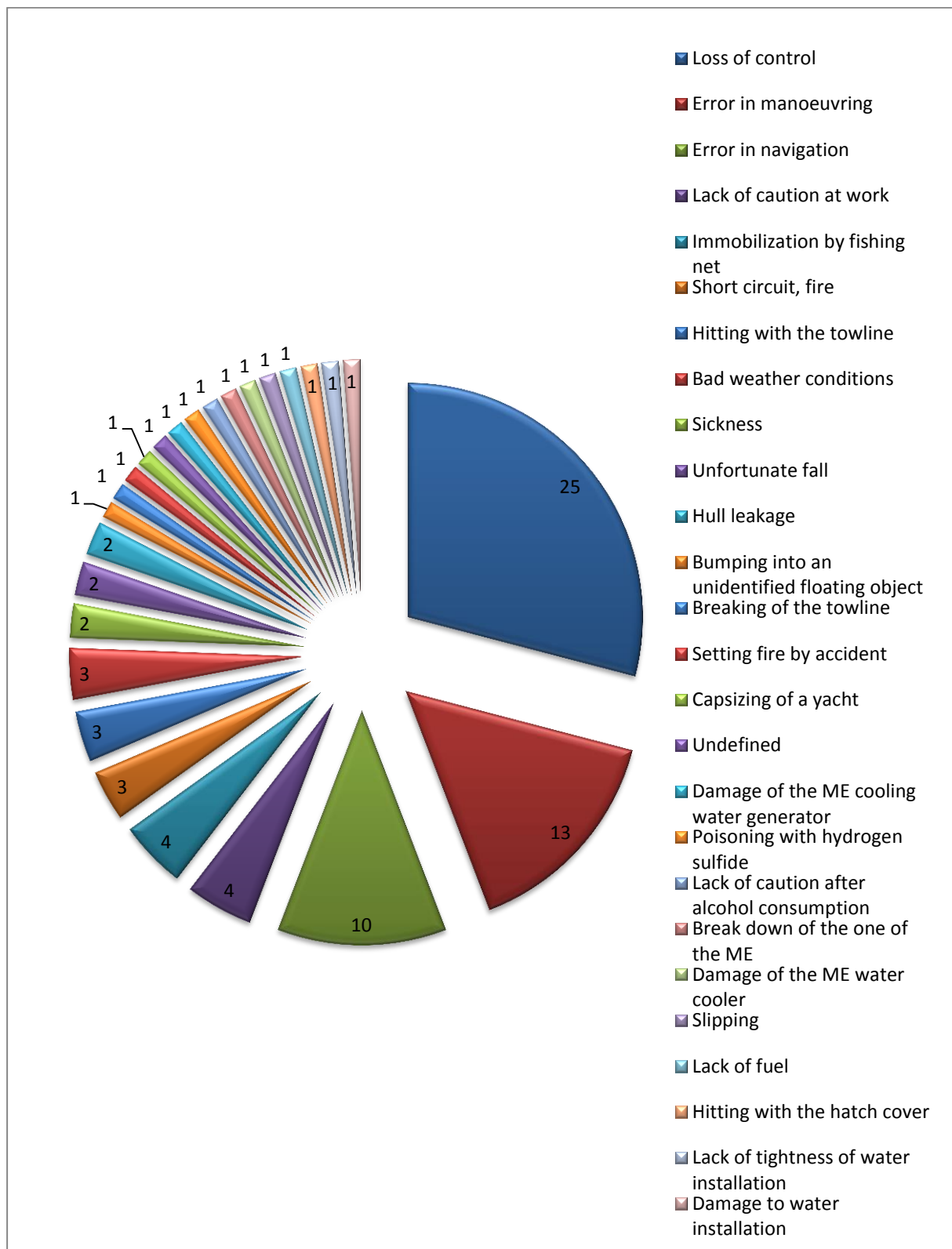
The percentage of particular factors influencing the occurrence of the accident in the total number of accidents is presented in the diagram below.



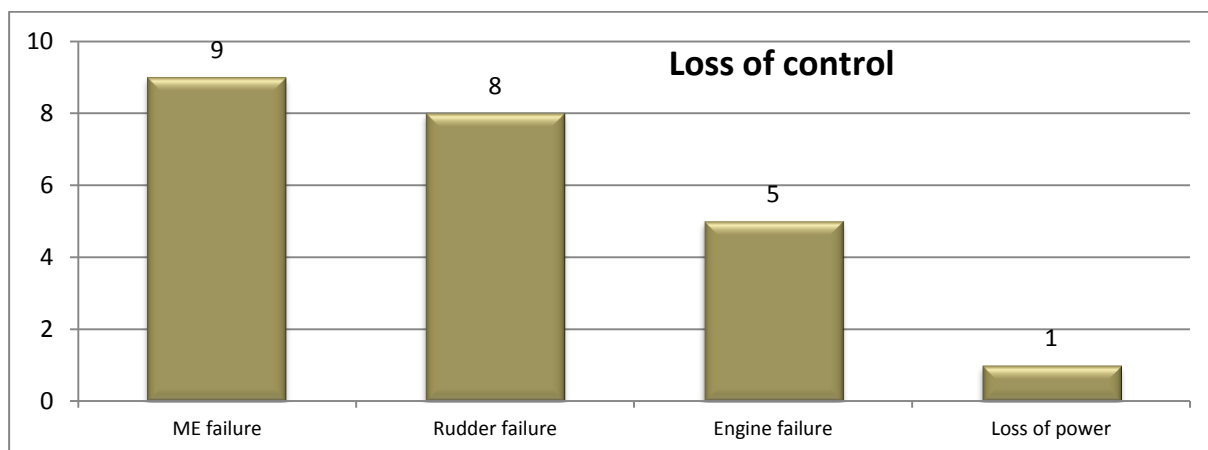
In 40 investigated accidents the Commission stated that a mechanical factor was the only factor that contributed to their occurrence. In 34 cases the cause of the accident was just a human factor, and in 2 cases it was only an external factor. Not once weather conditions were the only (external) factor contributing to the accident. In the remaining cases there were usually several factors that altogether contributed to the occurrence of a given accident.



The diagram below presents descriptions of causes of all marine casualties and incidents which were investigated by the Commission in 2016.



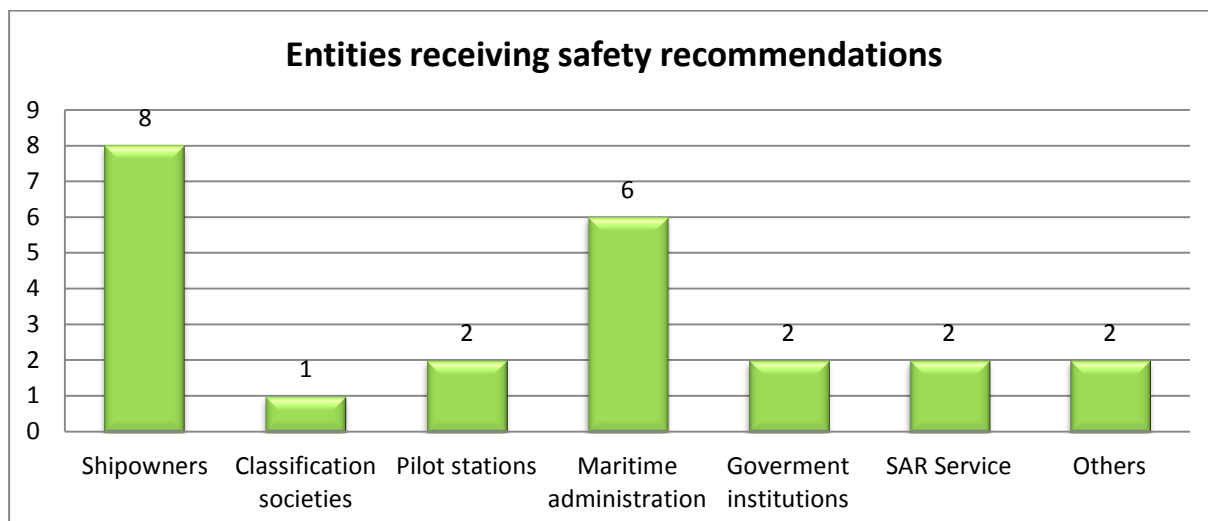
The most common cause of accidents was loss of control over the vessel (23 accidents) which should be understood as a damage to the main engine (ME) of the vessel, a damage to the rudder, to the yacht's engine or loss of power.



Faulty maneuvering of a vessel and errors in navigation (14 and 9 cases respectively) are placed on top of a long list of detailed causes of casualties in 2016. In 4 cases there were fishing nets and lack of precautions at work which contributed to the accident. In 3 cases bad weather conditions, short-circuit in electric installation and hitting of a crew member with a towline contributed to the accidents. In 2 cases the accident took place as a result of setting fire by accident, unfortunate fall, disease and loss of tightness of the hull. Other, individual causes of accidents are shown in the diagram above (previous page).

12. Safety recommendations

In 2016 the Commission sent safety recommendations to 23 entities, which in the view of the Commission could contribute to the prevention of marine casualties and incidents in the future.



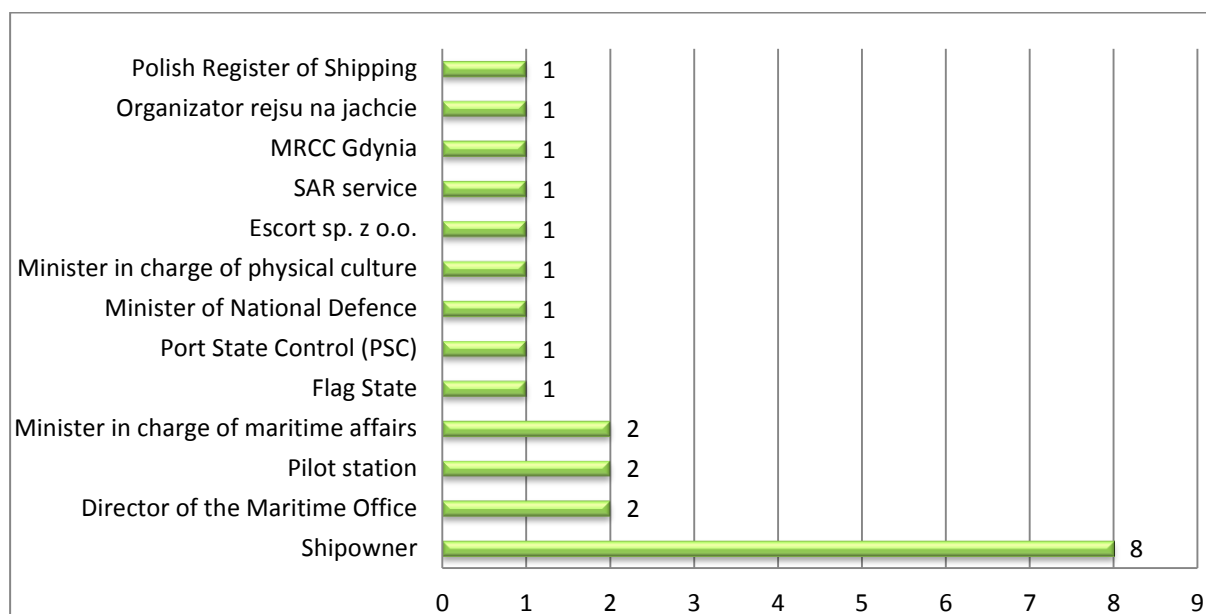


All recommendations were expressed in final reports of the Commission. In the total number of 14 reports published by the Commission in 2016, eight included safety recommendations. They referred to the following casualties:

- 1) WIM 13/15 - a general cargo vessel *Corina*,
- 2) WIM 16/15 - a sailing yacht *Zjawą IV*,
- 3) WIM 07/15 - a vessel *Transforza* and a tug boat *Kuguar*,
- 4) WIM 48/14 - a bulk carrier *Achilles*,
- 5) WIM 32/15 - a sailing yacht *Ichtiander*,
- 6) WIM 47/15 - a vessel *Nefryt*,
- 7) WIM 17/15 - a fishing boat *MIZ-20*,
- 8) WIM 15/15 - a sailing yacht *Down North*.

The largest group of entities advised by the Commission were the owners of vessels that had been involved in the casualties (8 entities). Two recommendations were sent respectively to the minister responsible for maritime affairs, to directors of maritime offices and managers of pilot stations.

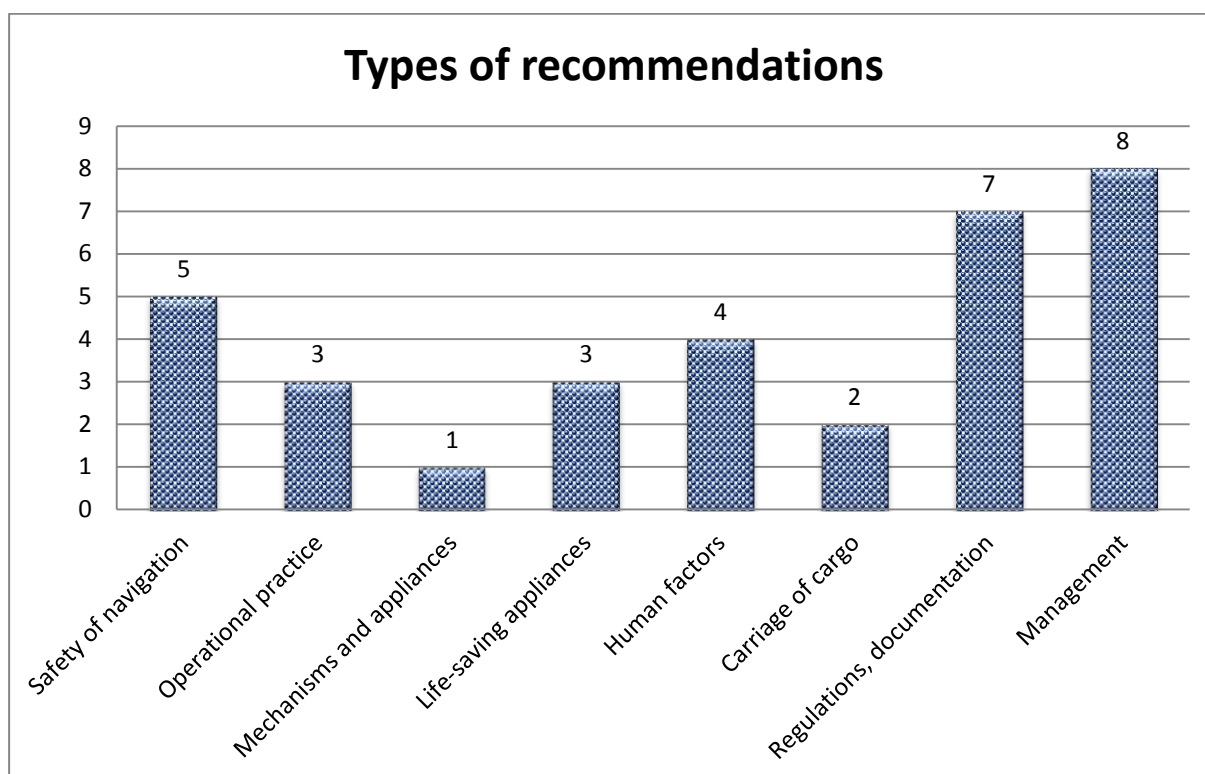
In the remaining cases the Commission sent recommendations to the administration of the flag State of the vessel (Malta), to the coordinator of the Port State Control (PSC), to the Minister of National Defense, to the minister responsible for physical culture, to the company certifying EPIRBs, to the Director of the Maritime Search and Rescue Service (SAR),





to the manager of the Maritime Rescue Coordination Centre (Gdynia), to the organizer of a training voyage on the sailing yacht *Down North* – Navigare Yacht Club company and the classification society – Polish Register of Shipping.

Among safety recommendations formulated by the Commission, the majority referred to management issues (in the shipping companies and on board vessels, and with regard to organizational matters in ports by maritime administration organs and pilot stations whereas at sea by SAR service) and documentation and regulations (both internal issued by the ship owners as well as generally applicable. A third place took issues related to safety of navigation and the next one – to the human factor. In three cases, the recommendations concerned the operational practice of ships and equipment of crafts in the life-saving devices, in two cases to loading issues and in one case to mechanisms and appliances on board a vessel.



A detailed description of recommendations issued by the Commission in 2016 can be found on the website of the Commission: www.pkbwm.gov.pl/recommendations



12.1. Specification of recommendations, description of measures taken by the entities receiving recommendations and description of reasons why the recommendations failed to be followed

Pursuant to Art. 44 of the Act on the State Marine Accident Investigation Commission, the entities receiving recommendations from the Commission are obliged to notify the Chairman of the Commission within 6 months from the date of delivery of the final report on the acceptance of recommendations or give reasons for their rejection.

The received notifications referred to the following casualties:

- 1) WIM 13/14 - a motor yacht *Never Satisfied*,
- 2) WIM 30/14 - a general cargo vessel *Langballig*,
- 3) WIM 14/14 - a motor yacht *Nitrox*,
- 4) WIM 29/14 - a motor yacht *BGSPORT*,
- 5) WIM 34/14 - a sailing boat *FJ/420*,
- 6) WIM 53/14 - a tank barge *BA-MSR-7*,
- 7) WIM 54/14 - a bulk carrier *Marichristina*,
- 8) WIM 13/15 - a general cargo vessel *Corina*,
- 9) WIM 16/15 - a sailing yacht *Zjawia IV*,
- 10) WIM 07/15 - a vessel *Transforza* and a tug boat *Kuguar*.

Notifications related to the recommendations of the first seven casualties came from final reports published in 2015, and the last three - from the reports of 2016.

The Chairman of the Commission received first two notifications of taking into account the recommendations issued by the Commission at the beginning of January 2016. They concerned sinking of the sailing boat *FJ/420* and the death of two crew members in the Vistula Lagoon, and grounding of *Marichristina* in the Bay of Pomerania.

In case of recommendations concerning the boat *FJ/420*, in which the Commission asked the Minister of National Defence to supplement the equipment of helicopters used for rescue operations at sea, the Minister informed the Chairman of the Commission about the modifications being in progress to five W-3 helicopters of the Navy to create a uniform version of W-3 WA RM (dedicated to marine rescue) designed to fit out the helicopters with equipment recommended by the Commission in its report. The deadline for acceptance of helicopters was stipulated by the Ministry of National Defence for 30 April 2016.



In case of recommendations following the casualty of *Marichristina*, which were sent by the Commission, apart from the final report, to the Hydrographic Office of the Polish Navy (BHMW), and which concerned the explanation of the discrepancies in the bathymetric information on the Polish charts and the British Admiralty chart BA 2150 at the approach to the port of Świnoujście, BHMW informed the Commission about the correction of the depth made by the UK Hydrographic Office (UKHO) and marking it on the BA 2150 chart in the issue of 18 December 2014, i.e. a few days after the Commission had published its final report on that casualty.

Other notifications of acceptance or failure to accept the recommendations concerned the following cases: sinking of the yacht *Never Satisfied* near the pier in Sopot, contact of the stern of *Langballig* (under the Cypriot flag) with the underwater part of the central breakwater embankment in the port of Świnoujście, drowning of a scuba diver diving to the wreck of the steamer *Protector* from the motor yacht *Nitrox* in the Baltic Sea near Bornholm, the fire of the motor yacht *BGSPORT* in the Gdynia Marina, drowning of the pump man from the barge *BA-MSR-7* berthed in the Gryfia Shipyard in Świnoujście, fatal poisoning with carbon monoxide aboard *Corina* in the port of Hanstholm, Denmark, loss of tightness of the forebody and taking water by the sailing yacht *Zjawą IV* in the Baltic Sea and the collision of the vessel *Transforza* with the tugboat *Kuguar* on the waterway in Świnoujście.

Regarding the yacht *Never Satisfied*, the Commission made recommendations to the minister responsible for transport and to the Polish Motorboat and Water Ski Association (PZMWiNW). Recommendations to the minister concerned changes in the law regulating authorizations granted to entities carrying out technical inspections of vessels pursuant to the Act on Inland Navigation and the information contained in the simplified inland navigation certificates. Recommendations addressed to the Polish Motorboat and Water Ski Association concerned the publication of technical regulations of the Association, the entries in the Association's technical documents, and the improvement of the effectiveness of supervision of technical inspectors carrying out technical assessments of yachts.

The Minister of Maritime Economy and Inland Navigation (MGMiŻŚ) informed the Chairman of the Commission that there was being prepared a new law on inland navigation, which regulated issues concerning the authorization to carry out technical inspections of vessels used in inland navigation. In addition, the Commission received information from the Department of Inland Navigation of the Ministry of Maritime Economy and Inland



Navigation that changes were being planned with regard to the obligation to register sport and recreational vessels and the obligation to carry out technical and equipment inspections, and that these changes would be introduced under a new act on the registration of yachts and other watercrafts up to 24 m in length, as well as under the amended Regulation of the Minister of Infrastructure on technical requirements and equipment of vessels of inland navigation and authorizations for entities to carry out technical inspections of vessels (of 2010).

The Polish Motorboat and Water Ski Association partially implemented the recommendations of the Commission and stated that it was not possible to publicize in full the technical regulations of the Association, as they were reserved for the needs and use of technical inspectors of the Association, however it undertook to post on its website technical requirements for vessels intended solely for sport and recreation. The Commission accepted these explanations.

The Commission issued to the shipowner of *Langballig* detailed technical recommendations for incorporating the oil pump of the propeller with the electric motor in the maintenance and repair system (PMS) of the vessel and maintaining them in good working order and respecting the maintenance intervals and inspections of all propulsion components of the vessel, along with the components to operate the system, according to the manufacturer's recommendations, but the shipowner did not respond to the Commission's recommendations.

The report of a very serious marine casualty of a scuba diver diving from the motor yacht *Nitrox* included recommendations directed to five entities: the minister responsible for maritime economy, the minister responsible for physical culture and to the three directors of maritime offices. The recommendations concerned mainly changes in law, which, according to the Commission, should contribute to improving the safety of scuba diving and the equipment used for diving.

In response to recommendations, the Commission received explanations from the Minister of Maritime Economy and Inland Navigation that due to the necessity of ensuring the safety of divers, the Ministry of Maritime Economy and Inland Navigation did not negate the need to provide adequate equipment for diving expeditions but was of the opinion that recommendations concerning the determination of additional obligatory equipment of vessels used for scuba diving should be the duty of the dive organizer. According to the explanations, the organizer should provide additional equipment for the means of transport, i.e. the vessel.



Minister of Maritime Economy and Inland Navigation passed the above-mentioned opinion to the minister competent for physical culture in order to take into account the recommendations of the Commission.

The Minister of Sport and Tourism sent to the Chairman of the Commission explanations from which it was clear that accidents involving scuba divers were incidental and that he did not see the need for additional, detailed legal regulations aimed at increasing security in the discussed scope and the conditions in that regard were defined in general terms in the Act on Safety of People in Water Areas and the regulations of relevant organizations within the area of diving and they seem to be sufficient.

The directors of particular maritime offices, in response to the recommendations of the Commission pointed out that yachts used for diving expeditions were not specialized crafts but merely means of transporting scuba divers to the site and therefore additional equipment or additional crew members trained in the organization of diving, recommended by the Commission, should rest with the organizers of the diving expedition rather than the shipowners of these vessels. The Commission accepted these clarifications.

The Commission sent recommendations following the fire of the motor yacht *BGSPORT* in the marina in Gdynia to 5 entities: the minister responsible for maritime economy, the Director of the Maritime Office in Gdynia, the Polish Yachting Association (PZZ), the Polish Motorboat and Water Ski Association and the Gdynia Sports Center.

Taking into account the fire hazard to sea-going and inland yachts created by gasoline engines permanently incorporated into the hull that, the Commission recommended to the minister responsible for maritime economy to amend the Regulation on Safe Navigation of the Sea-going Yachts and The Act on Inland Navigation consisting in the introduction of the obligation to carry out technical inspections made by an entity authorized to carry out technical inspections of sea-going yachts up to 15 m in length, for all yachts with built-in petrol engines, regardless of their power, and for inland yachts - inspection of all mechanically propelled yachts (regardless of their length) with built-in petrol engines regardless of their power.

In response to the Commission's recommendations, the Minister of Maritime Economy and Inland Navigation explained that the lack of detailed data concerning the scale of fires on petrol-powered yachts and their causes did not allow for a sound assessment of the effects of



the regulation and justification for the introduction of additional financial and administrative costs for yacht owners in the form of mandatory technical reviews.

In the recommendations to the Director of the Maritime Office in Gdynia, the Commission proposed to review “Fire Safety Instructions for the Marina” developed by the Gdynia Sports Center (GCS) as the administrator of the Gdynia Marina, and to co-ordinate the contents of this manual before getting the approval of the Municipal Commander of the State Fire Service in Gdynia.

In response to the recommendations, the Director informed that the recommendations made by the Commission had not been taken into account because of the lack of legal basis for coordinating Fire Safety Instructions for the Gdynia Marina. The Commission did not accept the Director's explanations, assuming that improvements in security need not take place only through the change of law.

Due to lack of understanding of the substance of recommendations formulated by the Commission in this matter, which were aimed at, among other things, the improvement of the supervision of the marina - the obligation imposed on the offshore maritime authorities by the Act on Maritime Areas of the Republic of Poland and maritime administration - the Commission asked the minister responsible for maritime economy to take legislative action and make changes to the Act on Maritime Areas of the Republic of Poland and Maritime Administration as regards the obligation to coordinate methods and conditions of fire protection of the marina by the entity in charge of management of the marina with a competent director of the maritime office.

On the initiative of the Minister, there were prepared, submitted and adopted by the Sejm of the Republic of Poland some changes to that act under which marina's managing entities, in addition to the existing fire protection obligations under the fire protection regulations, were obliged to agree with the territorially competent director of the maritime office the methods and conditions of fire protection of the entire marina (new wording of Art. 50a subparagraph 8, point 2 of the Act).

The second group of recommendations contained in the final report from the fire of the yacht *BGSPORT* were those addressed to entities authorized to conduct technical inspections of sea-going yachts up to 15 m in length and sports and recreational vessels. The Commission advised the Polish Yachting Association and the Polish Motorboat and Water Ski Association to introduce changes to the regulations adopted by these entities taking into account the



requirements of PN-EN ISO 9094-1:2005 - a standard developed by the Polish Committee for Standardization for the protection of small ships of all types with outboard or built-in petrol engines and built-in diesel engines, referring, among others, to the insulation of engine space, fuel systems, ventilation, fixed fire extinguishing systems in the engine space and portable fire extinguishers. The Commission also recommended that both entities should include an annex in their technical regulations specifying functions of the technical inspector during the fire safety inspection of petrol powered yachts and it indicated the recommended scope of such an inspection.

The Polish Yachting Association informed about the introduction of changes in the “Rules of supervision, construction and equipment of sea-going yachts” compliant with the Commission's recommendations and to the “Procedure PG-02-01-PZŻ - Technical Inspection and Expert Services of the Marine Technical Unit of the Polish Yachting Association”. In addition, in response to the Commission’s recommendation on the publication and dissemination of knowledge of fire hazards existing on sea-going yachts with built-in engines, the authorities of the Association posted a comprehensive message on their website – the appeal of the Technical Commission of the Polish Yachting Association to owners, operators and masters of such yachts to pay their attention to selected issues concerning fire hazards and fire protection.

Recommendations addressed to the Polish Motorboat and Water Ski Association were partly implemented by the Association. The Commission accepted explanations of the Association’s management related to efforts put into informing the owners of yachts of the importance of the problem of fire hazard on such vessels. The Commission also acknowledged the information about publishing on the Association’s website an appeal to motorboat enthusiasts about the possibility of voluntary fire safety inspection for all crafts, regardless of their engine power, by authorized Technical Inspectors.

In recommendations to the Gdynia Sports Center, the Commission proposed changes to the existing Fire Safety Instruction of the Gdynia Marina and installation of mobile powder units on the eastern and southern breakwaters. Gdynia Sports Center notified the Commission that the recommendations had been implemented.

In the event of the drowning of a pump man who fell into the water from the deck of the tanker barge *BA-MSR-7* owned by “Gryfia” Shipyard in Świnoujście, the Commission issued recommendations to equip the barge operators with individual life-saving devices and train



them how to use the devices, to observe restrictions related to weather conditions in port shipping, and to equip the shipyard outpatient facilities with a handheld resuscitator. All Commission recommendations were implemented.

After fatal poisoning with carbon monoxide of a crew member of *Corina*, the Commission formulated and addressed in its final report the recommendations to the shipowner to implement safety policy of the shipowner regarding the transportation of dangerous bulk cargo and the access to the enclosed spaces on board its ships. The shipowner informed that the recommendations had been implemented.

As a result of the investigation of a serious marine casualty of *Zjawa IV*, during which the rescue service had to evacuate the crew from the yacht, the Commission prepared the final report and formulated recommendations which were sent to the owner of the yacht – the Centre of Maritime Education of the ZHP and to its classification society – Polish Register of Shipping SA.

The Commission recommended that the Centre of Maritime Education should prepare for *Zjawa IV* the instruction of operation of the yacht, it should implement a procedure ensuring that after a long-term disengagement of the yacht, she would be manned by the crew who was very well familiarized with the yacht, it should make the analysis of risks related to organization of high seas voyages with the crew with persons who were not fully operational and on the basis of the results of this analysis it should supply the yacht with appropriate additional safety equipment, and a high level bilge water alarm with signalling apparatus at the helmsman's post. The owner of the yacht informed the Commission that the recommendations had been implemented.

The Commission asked Polish Register of Shipping S.A. to review the rules and procedures for class renewal of wooden yachts older than 10 years, with particular regard to the permissible period between hull inspection in the dock and final inspection of the boat on water, hull inspection range, requirements for high level bilge water alarm and requirements for the supply of a yacht in technical instructions concerning the equipment and installations in which the yacht is fitted out. According to the Commission, the conclusions resulting from such a review should be used to ensure that the rules and procedures applied by the classifier are appropriate for effective supervision of an increasingly aging fleet of wooden crafts.

In response to the recommendations Polish Register of Shipping furnished the Commission with extensive explanations. The classification society reported that even before



the publication of the report on the casualty of *Zjawą IV*, they reviewed their rules and procedures and changed their “Manual for Inspectors”. To Section VII (Boats and Yachts) they added a new part entitled “Survey of the hull of boats and yachts made of wood” in which they indicated parts of the wooden craft to which special attention should be drawn by the inspector doing the survey of the yacht. In addition, the classifier decided to introduce in the status of each wooden yacht information to the shipowner, which indicates that the shipowner should pay attention to proper operation and maintenance of the craft to prevent the hull to dry up resulting in its loss of tightness. PRS also considered reasonable the recommendation from the Commission to the yacht's owner relating to the installation of a high level bilge water alarm on the yacht and decided to introduce to the status of each existing closed deck motor boat and yacht the information of the requirement for equipping the vessel with such an alarm.

Recent notifications of fulfillment of the Commission's safety recommendations received by the Chairman of the in 2016 referred to a very serious marine casualty - a collision of the vessel *Transforza* (under the flag of Gibraltar) with the tugboat *Kuguar* (under the Polish flag) in the fairway in Świnoujście. The Commission prepared and issued recommendations to four entities: the shipowner, the tugboat operator, the pilot station in Szczecin and the minister responsible for maritime affairs.

The largest number of recommendations were sent by the Commission to the shipowner of the sunken tug boat. These were recommendations on both personnel and crew matters, such as changing the scope of duties of dispatchers supervising the work of tug boat crews, taking control actions that would prevent bringing on board tug boats and drinking alcoholic beverages, as well as trainings of the crew or equipping vessels of the shipowner with AIS transponders. The shipowner - Zakład Usług Żeglugowych in Szczecin – implemented all the recommendations of the Commission.

The Commission requested the shipowner of *Transforza* to instruct masters of their vessels to comply with the requirements of the STCW Convention regarding watchkeeping on the bridge at night and when making voyage plans through narrow passages or fairways to take into account the curvature of the fairway or passageway by sufficiently frequent course changes to keep the requirement resulting from the COLREG Convention to keep near *the* outer *limit* of the channel or fairway. The shipowner did not respond to the Commission's recommendations.



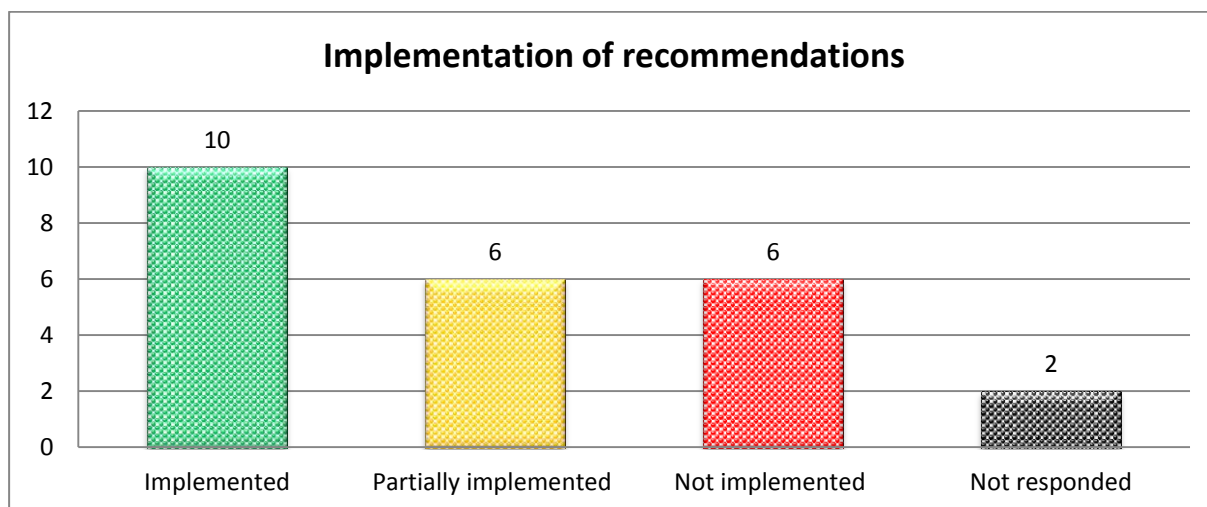
The third entity to which the Commission made recommendations was the Pilot Station in Szczecin. The Commission requested the head of the Station to instruct the pilots to advise the captains of ships passing through the Świna channel to keep near the outer limit of the fairway, to encourage pilots to use electronic charts with marked profile of the fairway, and to focus their attention to the need of more frequent communication with the vessels going in the opposite direction if they cannot rely on their behavior or need to agree the passing manoeuvres. The head of the Pilot Station informed the Chairman of the Commission that the recommendations had been implemented.

The recommendations addressed to the minister responsible for maritime affairs resulted from the analysis of the provisions of the Marine Safety Act performed by the Commission during preparation of the report on the collision of *Transforza* and *Kuguar*.

The Commission came to the conclusion that there was no substantial provision in the law that prohibited the consumption of alcohol on board. The law provides for a penalty for operating a sea-going vessel in the state of intoxication, but no substantial provision prohibiting such conduct is provided. The Commission considered that this was incompatible with applicable rules of the legislative technique and asked the minister responsible for marine affairs to consider supplementing the provisions of the Act of 18 August 2011 on Maritime Safety with a substantial provision specifying, in accordance with the provisions of the STCW Convention, alcohol limits applicable to crew members of sea-going vessels during the performance of official duties on board vessels.

The Minister of Maritime Affairs and Inland Navigation took up the legislative initiative and introduced the change to the act. A new provision (Art. 86b) forbids to operate a sea-going vessel, an inland navigation vessel, a sea-going yacht or an inland boat and to fulfil the duties in the field of ship safety, protection or prevention of pollution of the marine environment, in the state of intoxication or under the influence of narcotic drugs.

The diagram below presents the number of notifications informing whether the recommendations were fulfilled or not and the lack of response to recommendations received in 2016 from entities, which had received them from the Commission.



The Commission's recommendations were not answered by two foreign shipowners (of the vessels *Langballig* and *Transforza*). Cases of failure to comply with the Commission's recommendations were related to the casualty of the motor yacht *Nitrox* (five entities) and the fire of the motor boat *BGSPORT* (one entity).

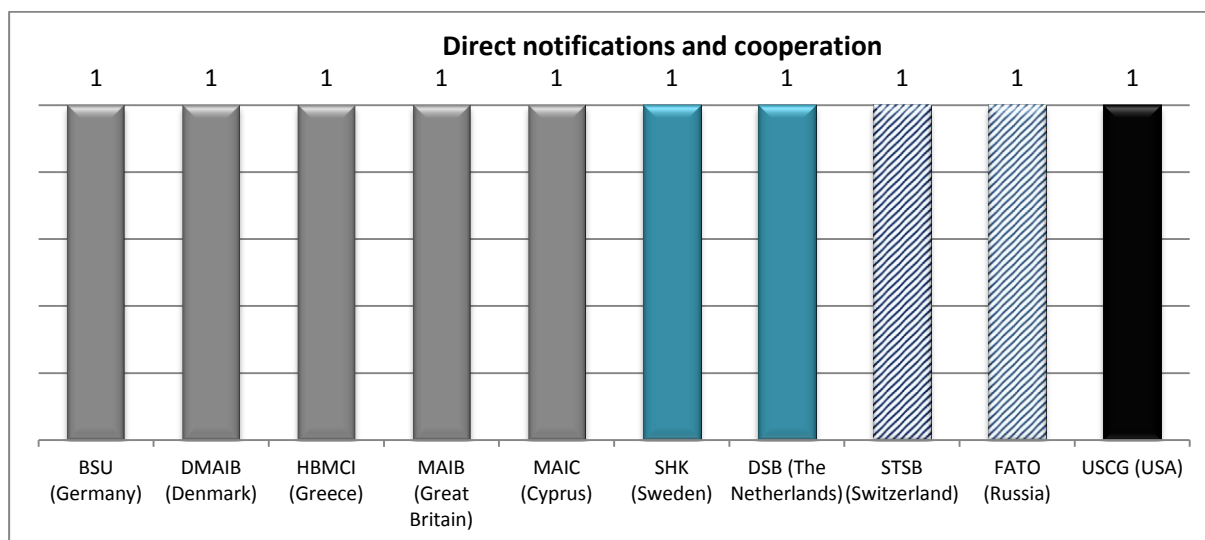
A detailed description of measures taken by the entities, to which the Commission addressed recommendations is available on the Commission's website: www.pkbwm.gov.pl in the "Recommendations" tab of the section entitled "Response to recommendations".

13. Warning about a possible danger (early alert)

In 2016 the Commission neither issued any early alert nor it sent any notification of this type to the European Commission.

14. Cooperation with substantially interested states

In 2016 the Commission received 7 notifications about marine casualties involving Polish vessels or Polish seamen directly from the investigative bodies (AIB) from other countries. Twice, the Commission notified about the casualties substantially interested States from outside the European Union (Switzerland and the Russian Federation). In 44 cases the Commission notified other EU states by means of the European Marine Casualty Information Platform (EMCIP).



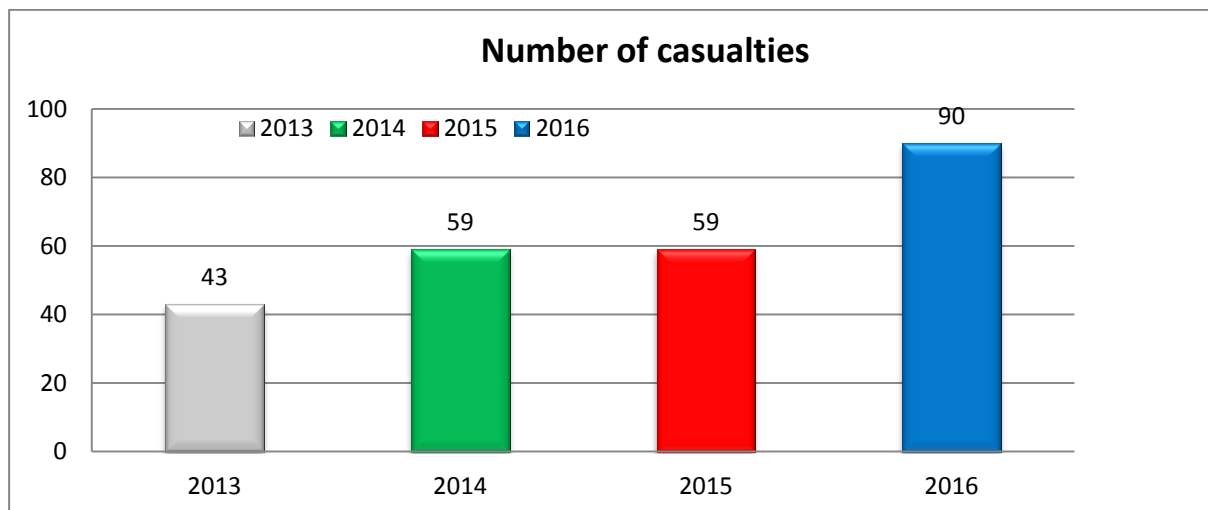
Following Art. 21-24 of the Act on the State Marine Accident Investigation Commission, in 2016 the Commission cooperated with four foreign bodies (AIB) investigating marine casualties: SHK from Sweden (concerning the fire on the tug boat *Zeus* in the port of Sölvesborg and grounding of the sailing yacht *Zjawa IV* in the Baltic Sea), with STSB from Switzerland (concerning the engine failure on board *Sabina* in Świnoujście), with DSB from the Netherlands (concerning the death of the engineer on board the tug boat *Ikar* in Rotterdam), and FATO from Russia (concerning the death of a seafarer on board the tug boat *Odissey* in Gdańsk).

The Commission was also in ongoing contact with the American Coast Guard (USCG) with regard to the investigation of the cause of the sinking of the container ship *El Faro* in the Caribbean Sea in October 2015. The cooperation resulted, among others, in the organization by the Commission of a hearing of a former crew member at the Maritime Office in Gdynia in December 2016.

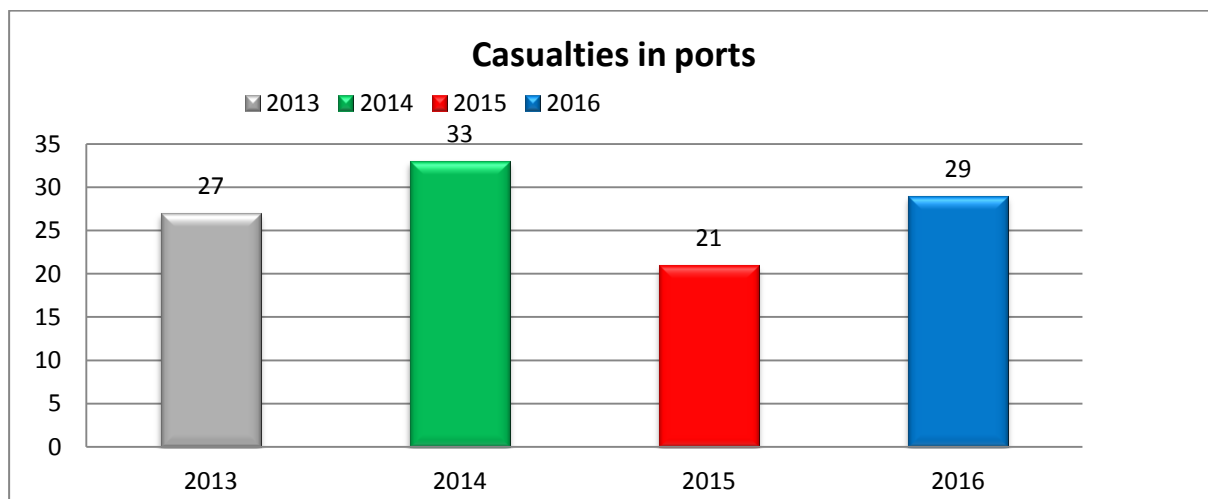


Appendix – comparative statistics 2013 - 2016

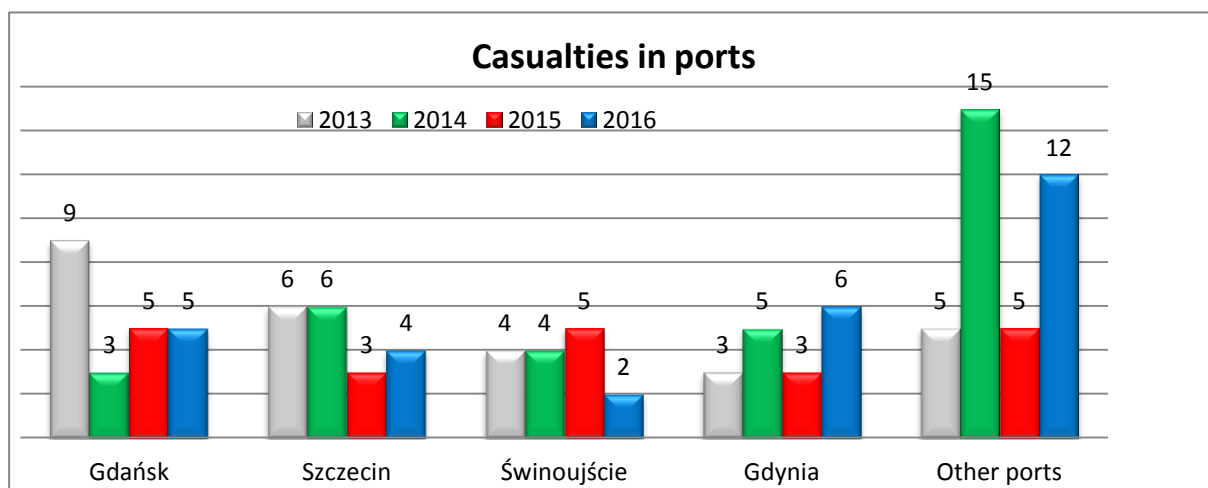
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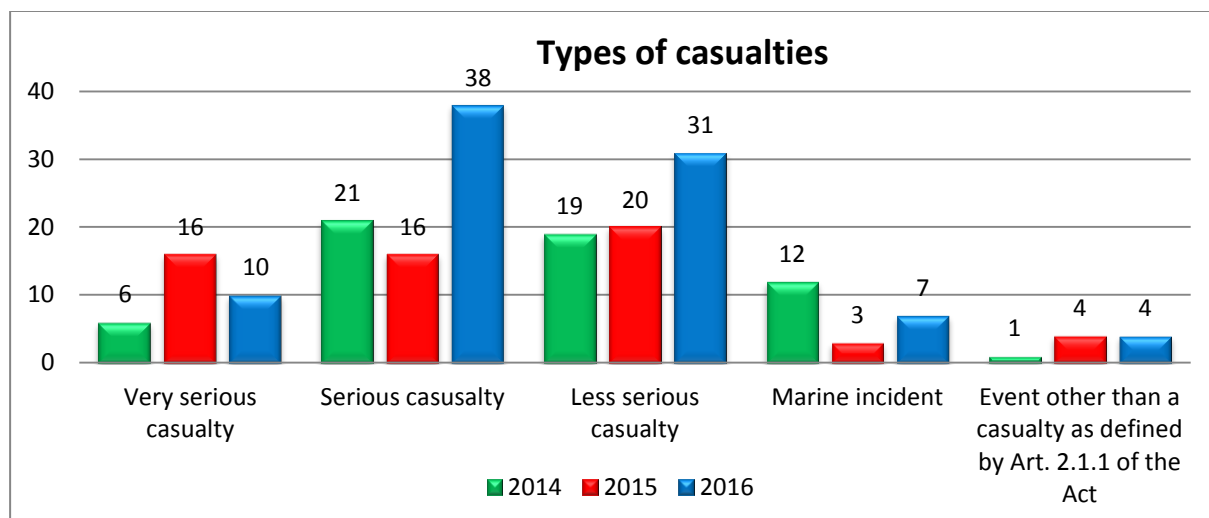


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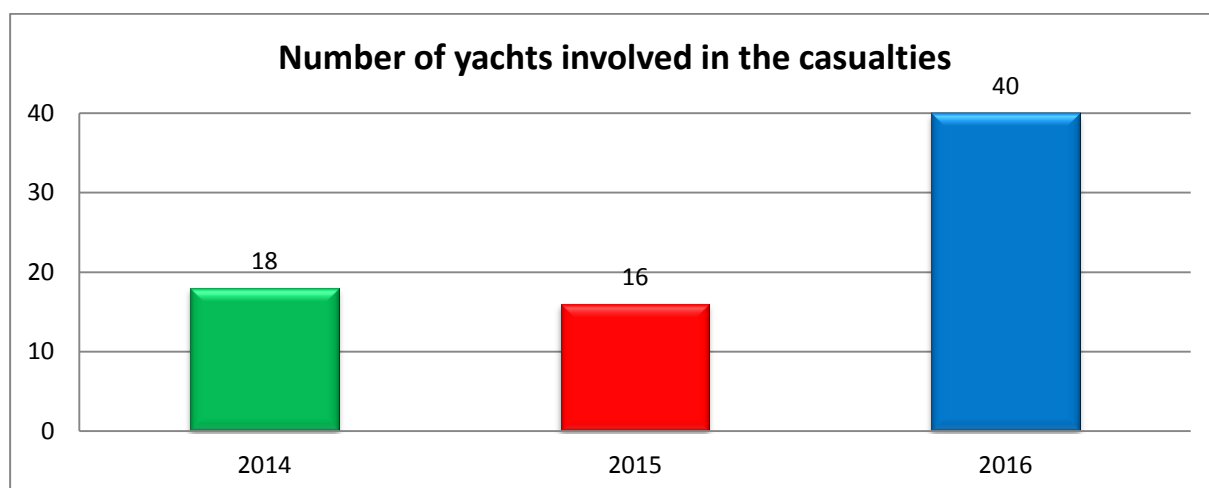




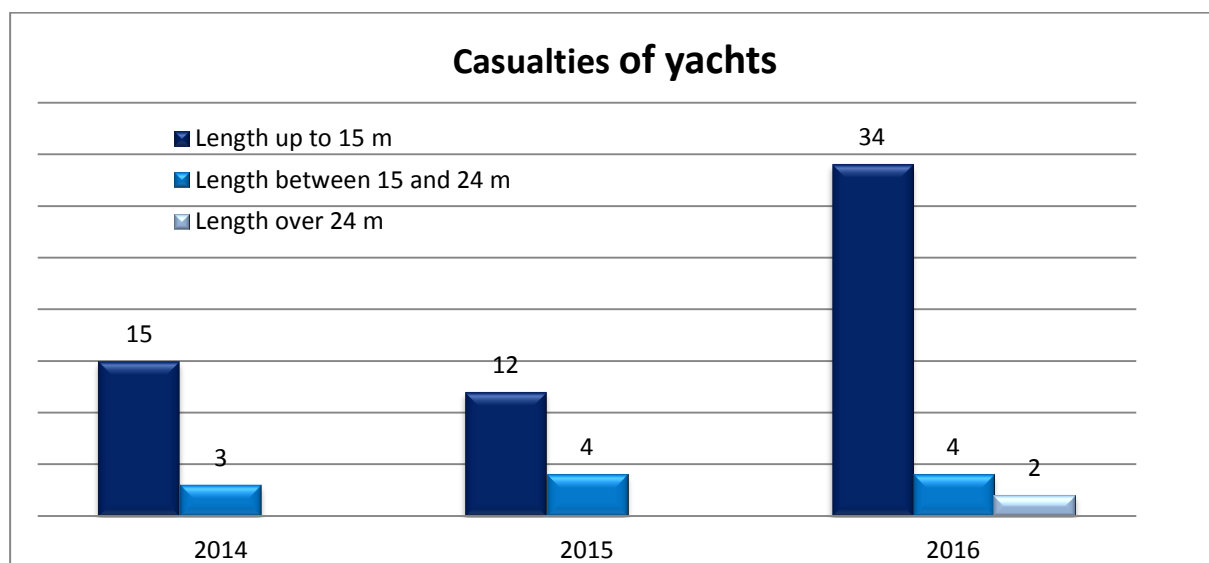
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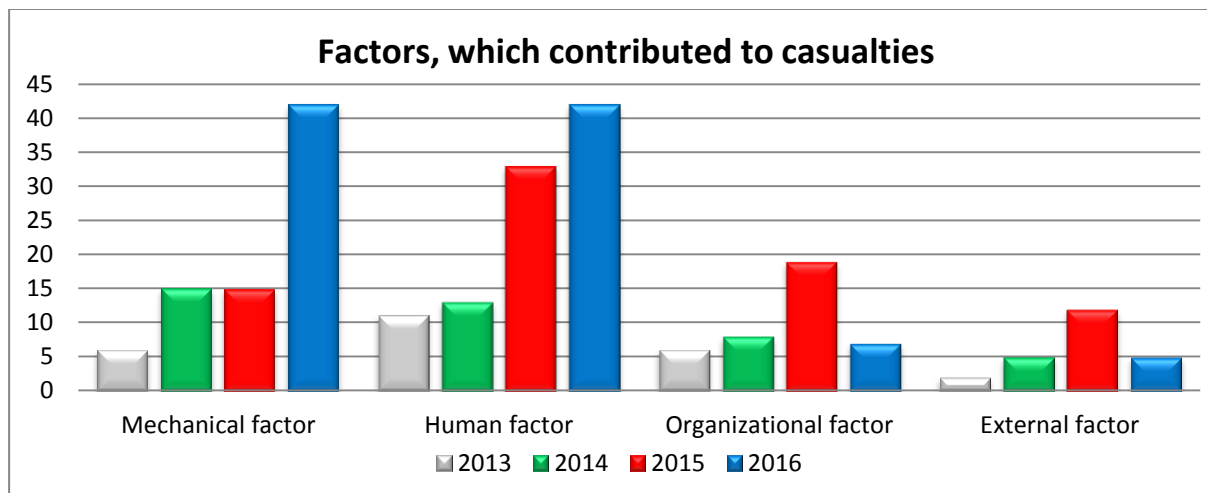


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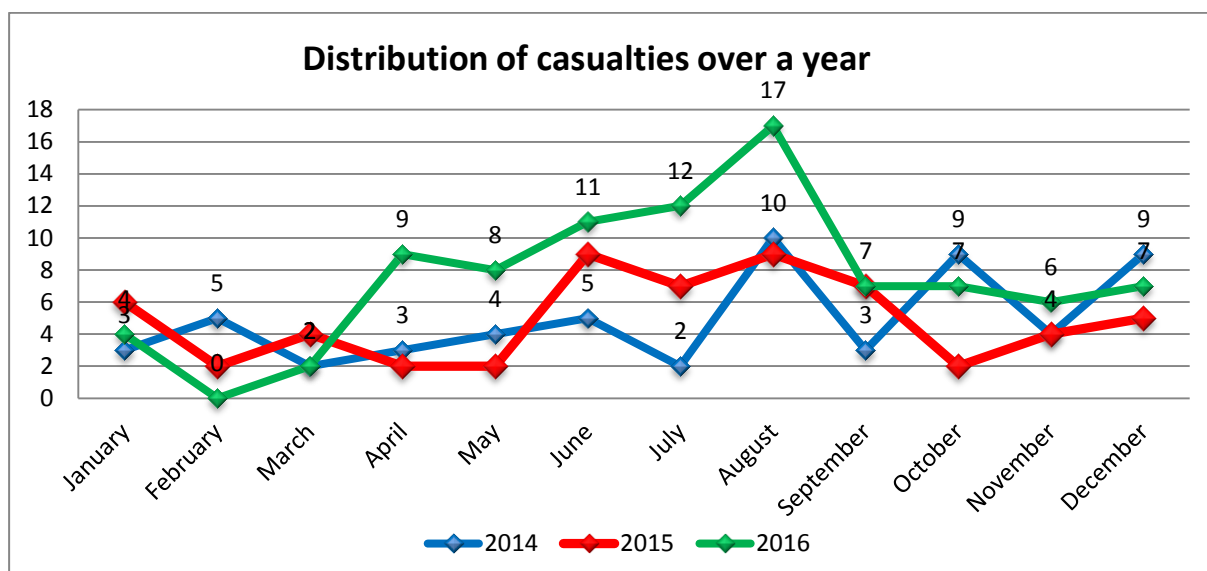




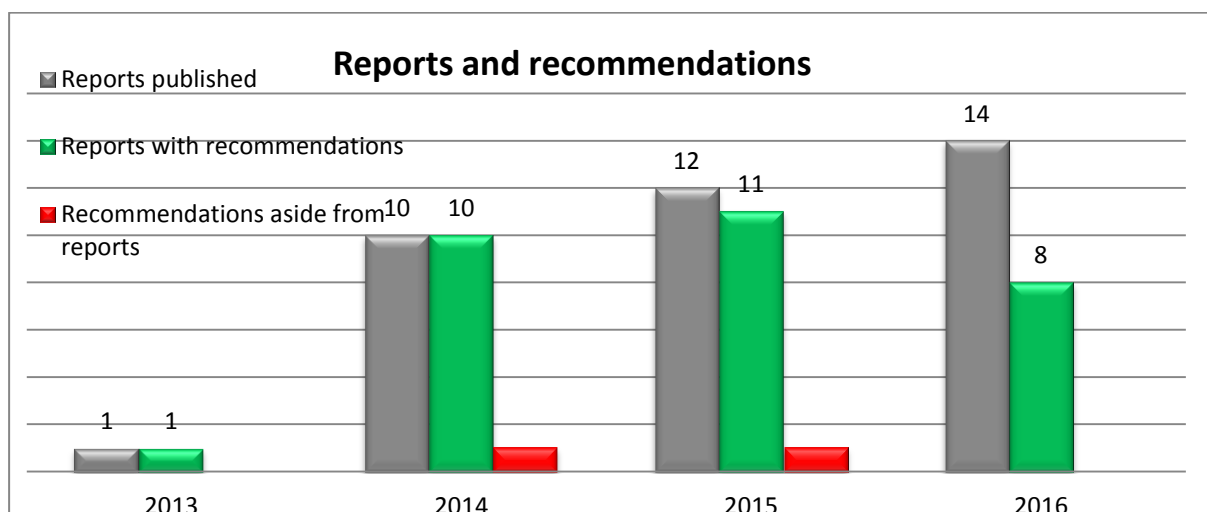
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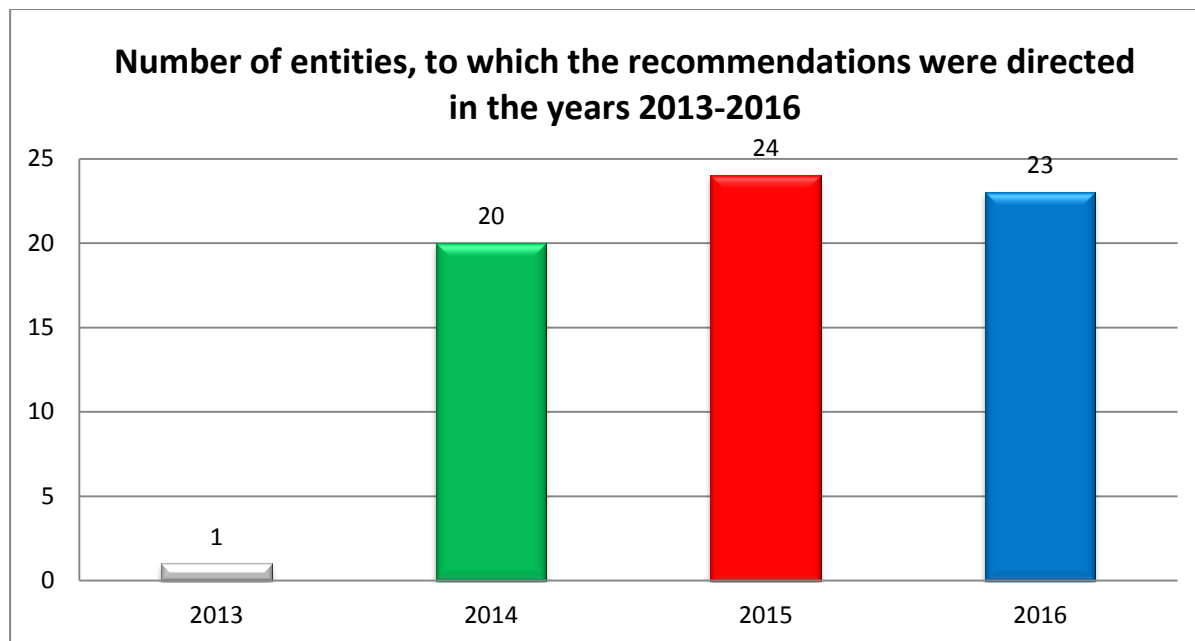


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