DMAIB
DANISH MARITIME ACCIDENT INVESTIGATION BOARD

# VIBIMA & LOUIS

## Marine accident report on collision

28 FEBRUARY 2023

**MARINE ACCIDENT REPORT ON COLLISION BETWEEN VIBIMA & LOUIS ON 28 FEBRUARY 2023**

published by

DMAIB
Danish Maritime Accident Investigation Board
Batterivej 9
DK-4220 Korsoer
Denmark

The report is issued on 24 April 2024.

Photo: Collision between VIBIMA and LOUIS.
Source: Private photo



The investigations are carried out separately from the criminal investigation, without having used legal evidence procedures and with no other basic aim than learning about accidents with the purpose of gaining and promoting an understanding of safety. Consequently, any use of this report for other purposes may lead to erroneous or misleading interpretations.

# Content

# Introduction

## Start of the investigation

On 28 February 2023, DMAIB was notified by the Danish Maritime Authority that the Danish-registered fishing vessel VIBIMA had collided with a barge (LOUIS) being towed by the Netherlands-registered ship MULTRATUG 18. The collision had occurred west of TSS Skagen West earlier the same day. VIBIMA foundered immediately after the collision, and its two crew members abandoned onto a nearby fishing vessel. After the collision, MULTRATUG 18 continued its voyage to Thyboron, Denmark, with LOUIS in tow.

In view of the rapid and total loss of VIBIMA and the resulting danger to its crew, DMAIB immediately started a full investigation and two investigators were deployed to interview VIBIMA's crew. The following day, the investigators attended MULTRATUG 18 and LOUIS in Thyboron to interview the crew and carry out technical investigations on board.

The purpose of the investigation was to establish the circumstances that led to the collision.

# Narrative

# Background

## VIBIMA

VIBIMA (Figure 1 and appendix) was a Danish steel fishing vessel operated by a skipper/owner and a deckhand both of whom were licensed commercial fishermen. The vessel primarily fished for lobster in the coastal waters of the Kattegat and the Skagerrak, Denmark.

In the late evening of 27 February 2023, VIBIMA was alongside in Skagen, Denmark, after having discharged lobster caught in the Kattegat. Fishing in the usual fishing grounds had not been succesful, so the crew decided to discharge the catch in Skagen, stay for a few hours to rest, and then depart to fishing grounds in the Skagerrak to the northwest of Skagen.


*Figure 1: VIBIMA*
*Source: Private photo*

## MULTRATUG 18/LOUIS

The Netherlands-registered tug MULTRATUG 18 was towing the steel barge LOUIS (Figure 2 and 3 and appendix). LOUIS was of a length of 100 m.

MULTRATUG 18 primarily traded in northern European waters, towing barges and oil rigs. It had a crew of six: master, chief officer, two deckhands and two engineers. At the time of the accident, MULTRATUG 18 was chartered to tow the barge LOUIS from Aalborg to Thyboron carrying wind turbine structures.

On 27 February 2023, at approximately 0730, MULTRATUG 18 and LOUIS departed Aalborg and headed for Thyboron. The voyage was a short coastal voyage of approximately three days. At 1105, the local pilot disembarked as the tug and its tow cleared the main navigation channel and headed into the Kattegat at a speed of approximately 4 knots, following its planned route to Thyboron (Figure 4).


*Figure 2: MULTRATUG 18.*
*Source: DMAIB*


*Figure 3: LOUIS.*
*Source: DMAIB*

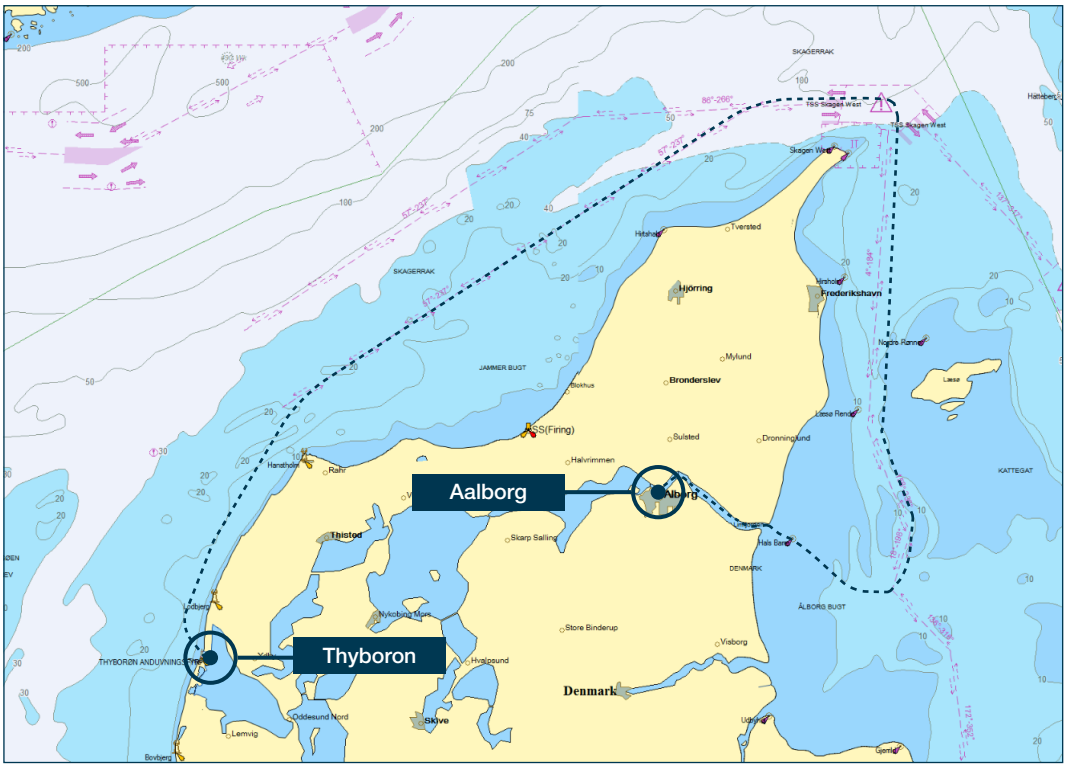


*Figure 4: MULTRATUG 18/LOUIS' planned route.*
*Source: SafeSeaNet Eco GUI, modified by DMAIB*

# Course of events

**Reconstruction of the course of events**

The following reconstruction of the course of events is seen from the perspectives of both VIBIMA and MULTRATUG 18.

The accounts are based on technical data collected by the DMAIB investigators on MULTRATUG 18/LOUIS, both ships' AIS data, and written records and interviews from a selected group of crew members from both ships.

The course of events covers the period from the early morning of 28 February 2023 until the abandonment of VIBIMA's crew shortly after the collision. All times are local time UTC (+2).

In the early morning of 28 February, the chief officer on MULTRATUG 18 was on watch. The tug kept a northerly course and entered the precautionary area in the traffic separation scheme (TSS) north of Skagen at approximately 0210. The towing wire had been paid out, making the length of the tow approximately 400 metres.

In addition to the required navigation lights, the chief officer had also reportedly turned on MULTRATUG 18's searchlight and directed it towards the wind turbine structures on the barge to increase the likelihood of them being visible in the dark. During the watch, he had noticed that the barge was yawing, so its heading was not continuously aligned with the tug's. However, this was not unusual, and he did not consider it an immediate problem.

At 0330, VIBIMA left Skagen to head for fishing grounds to the northwest. Once out of the port, the skipper plotted the intended track in the ECS[1] and set the required heading on the autopilot. He told the deckhand to take over the watch while he went to the cabin to rest.

MULTRATUG 18's chief officer had made a large course alteration to port from a northerly course to approximately 270° at a speed of 5 knots to follow the westbound traffic lane. At approximately 0500, he noticed several fishing vessels having departed Skagen and heading northwest (Figure 5). The chief officer plotted three of the fishing vessels and saw that two of them would cross ahead of MULTRATUG 18 and that one, VIBIMA, was on a steady bearing with the tug.

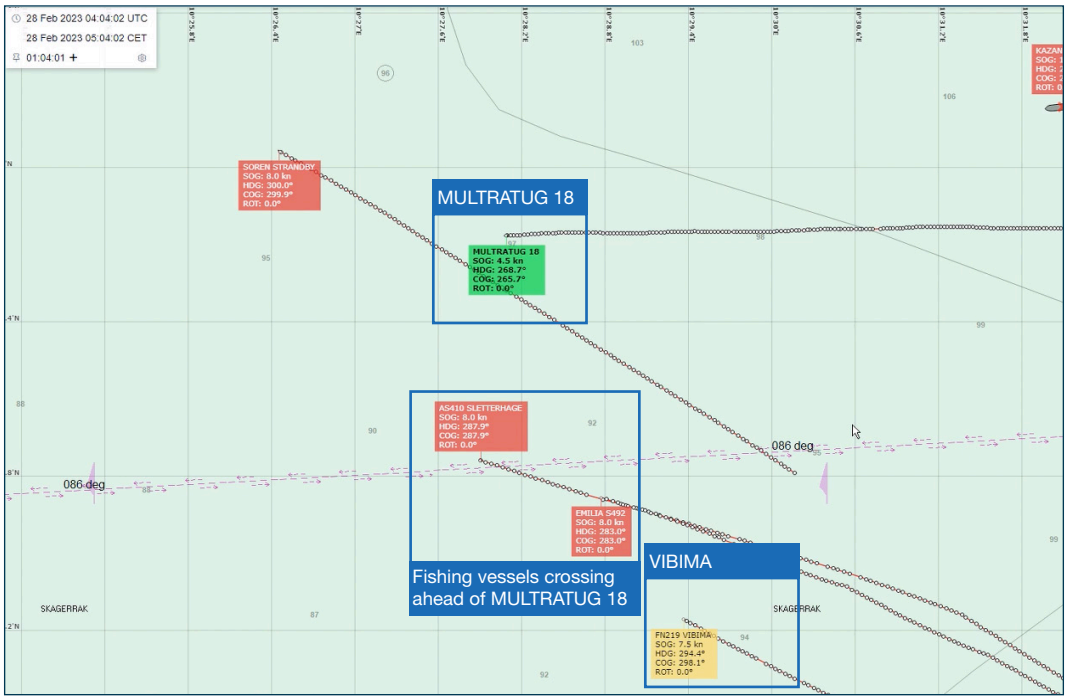


*Figure 5: Fishing vessels departing Skagen heading northwest.*
*Source: SafeSeaNet Eco GUI, modified by DMAIB*

VIBIMA's deckhand sat in the navigational chair while keeping the watch. At 0540, he was alerted by the AIS'[2] CPA[3] alarm on the ECS, which indicated a risk of collision with MULTRATUG 18 in about 10 minutes. He immediately saw the lights on MULTRATUG 18 and turned VIBIMA approximately 50° to starboard. This alteration was seen by MULTRATUG 18's chief officer who estimated the fishing vessel was now about 400m away and appeared to be passing astern of the barge.

1 Electronic Chart System

2 Automatic Identification System

3 Closest Point of Approach

When it was apparent to VIBIMA's deckhand that the fishing vessel would pass aft of MULTRATUG 18, he slowly altered the course to port following the stern of MULTRATUG 18. MULTRATUG 18's chief officer saw the fishing vessel suddenly turn to port and realised that a collision between the fishing vessel and the barge astern was imminent. The distance between the ship's was a few hundred metres, and he realised there was insufficient time to warn the fishing vessel.

Without warning, VIBEMA's deckhand felt a violent impact and was hurled out of the navigational chair. He realised that the vessel had collided with something. Water gushed in aft, flooding the galley and submerging the aft part of the vessel. At the same time, the bridge equipment lost power.

The master had been asleep in his cabin, but was woken by the impact and fell out of his bunk. He was confused and initially he could not find the door to exit because the vessel was listing. Within a minute, the deckhand opened the door to the cabin and shouted to the skipper that he had to come out. The skipper climbed up to the unlit and very dark wheelhouse and realised that the vessel was sinking by the stern. He assessed that the only way out was through the starboard side front window. The deckhand opened it and climbed out, followed by the skipper.

MULTRATUG 18's chief officer saw the collision. He reduced the tug's speed, called the master and contacted the coastal radio station and all nearby ships. When the master came to the bridge, he called the engineer and deckhands to inform them about the situation and ordered them to prepare the rescue boat. When the chief officer and the master saw a nearby fishing vessel approaching VIBIMA, the readying of the rescue boat was stopped.

VIBIMA was now sinking by the stern, and the skipper and the deckhand were climbing from the front of the wheelhouse to the bow to keep themselves out of the water. It was completely dark, and they prepared to swim towards some lights they saw in the distance. Shortly after, they saw a searchlight from the approaching fishing vessel, and soon after they transferred from VIBIMA to the assisting fishing vessel. VIBIMA then submerged and sank.

VIBIMA's crew was taken to shore, and MULTRATUG 18 was permitted by the coastal authorities to continue its voyage to Thyboron.

# Investigation

**Scope of the investigation**

The course of events showed that VIBIMA's deckhand did not see the barge LOUIS before the collision, and that the resulting damage to the fishing vessel necessitated the crew's abandonment as the vessel quickly foundered. MULTRATUG 18's chief officer had recognised the risk of collision between LOUIS and VIBIMA, but restricted manoeuvrability of the tug and its tow made it impossible to avoid the collision.

The investigation therefore focused on answering the following questions:

- Why did the deckhand on VIBIMA not observe LOUIS prior to the collision?
- What caused VIBIMA to founder?

To answer these questions the following topics are described:

- The dynamics of the collision.
- Damage to VIBIMA.
- Wheelhouse layout and navigational practice on VIBIMA.
- Visibility of LOUIS.
- Applicable rules according to COLREG.

# The dynamics of the collision

In this section LOUIS' and VIBIMA's movements prior to and during the impact are mapped to determine the dynamics of the collision. LOUIS' heading could not be established with accuracy because it was not equipped with an AIS. LOUIS' heading was thus estimated to be the same as MULTRATUG 18's heading, with the caveat that LOUIS was reported to be yawing during the tow.

At 0522, MULTRATUG 18 was heading 269° and VIBIMA was heading 297°. Both ships had kept steady courses for more than an hour (Figure 6). Approximately one minute later, at a distance of 0.3 nautical miles, the deckhand on VIBIMA was alerted by the AIS of the risk of collision with MULTRATUG 18 and turned the ship to starboard to heading 345° (Figure 7).

MULTRATUG 18's chief officer saw VIBIMA's course alteration visually, by radar and by AIS, and he assessed that the fishing vessel was passing clear of the tug and the barge.

Shortly after, VIBIMA's deckhand watched MULTRATUG 18 pass across the fishing vessel's bow and then gradually turned VIBIMA to port, following the stern of MULTRATUG 18 in order to resume the intended passage.

The collision with LOUIS occurred about three minutes later, at 05.26, as the deckhand monitored MULTRATUG 18 on the fishing vessel's port bow (Figure 8).

At the time of the impact, VIBIMA was heading of 292° at 4.7 knots and MULTRATUG 18 was heading 270° at 2.6 knots. Although this indicates that the angle of impact was approximately 22°, this does not take account of effect of yawing on LOUIS, the extent of which is unknown. The speed of impact was approximately 2.1 knots.

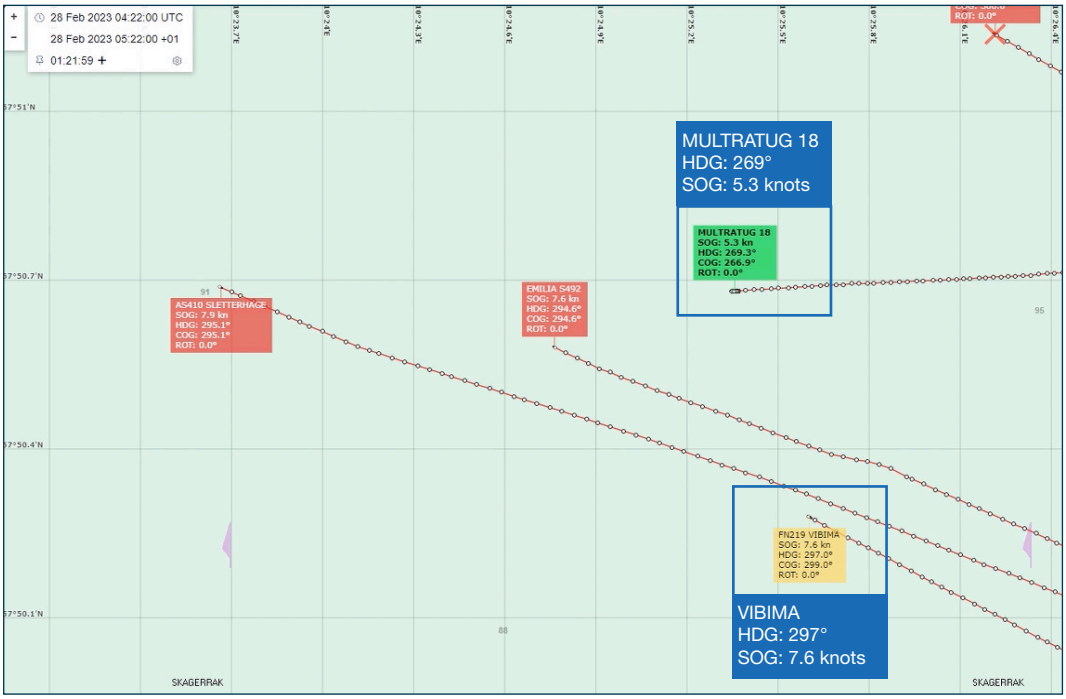


*Figure 6: 0522 - VIBIMA and MULTRATUG on steady courses.*
*Source: Plotter MadeSmart, modified by DMAIB*

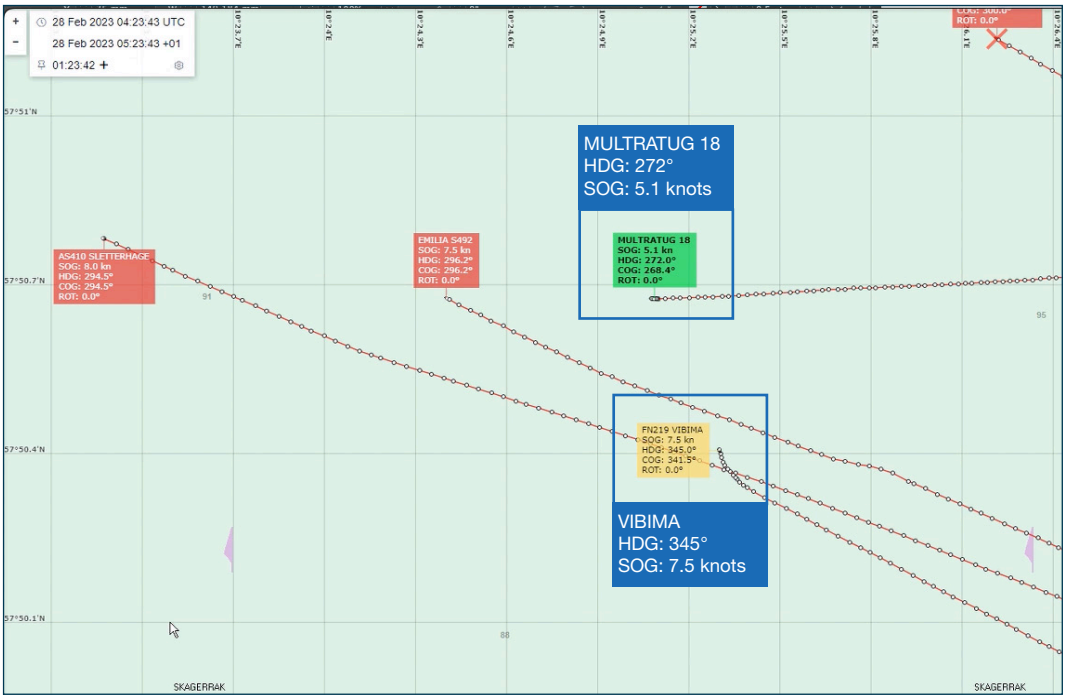


*Figure 7: 0523 - VIBIMA turning to starboard.*
*Source: Plotter MadeSmart, modified by DMAIB*

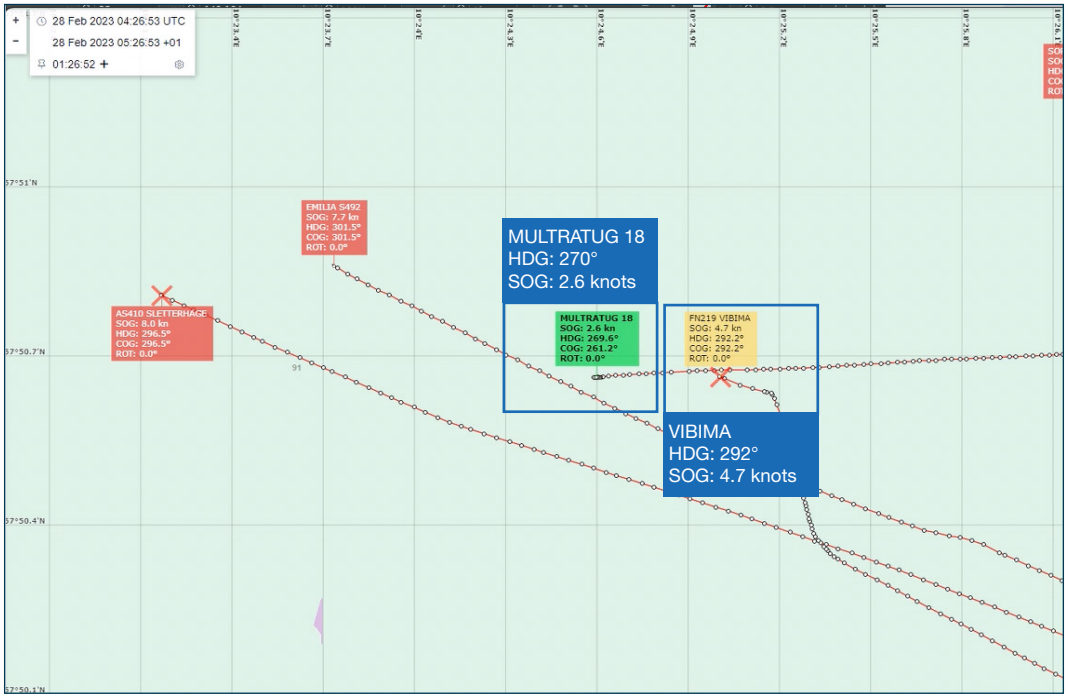


*Figure 8: Collision*
*Source: Plotter MadeSmart, modified by DMAIB*

During DMAIB's examination of the damage on LOUIS the following day, it was determined that the impact of the collision was on the port side bow, just aft of the red sidelight (Figure 9 and 10).

A number of paint scratches were found with no visible indentations, which suggests that the impact happened at an angle that made VIBIMA slide forward alongside the hull of LOUIS. Additionally, paint scratches were found by the bow (Figure 11).

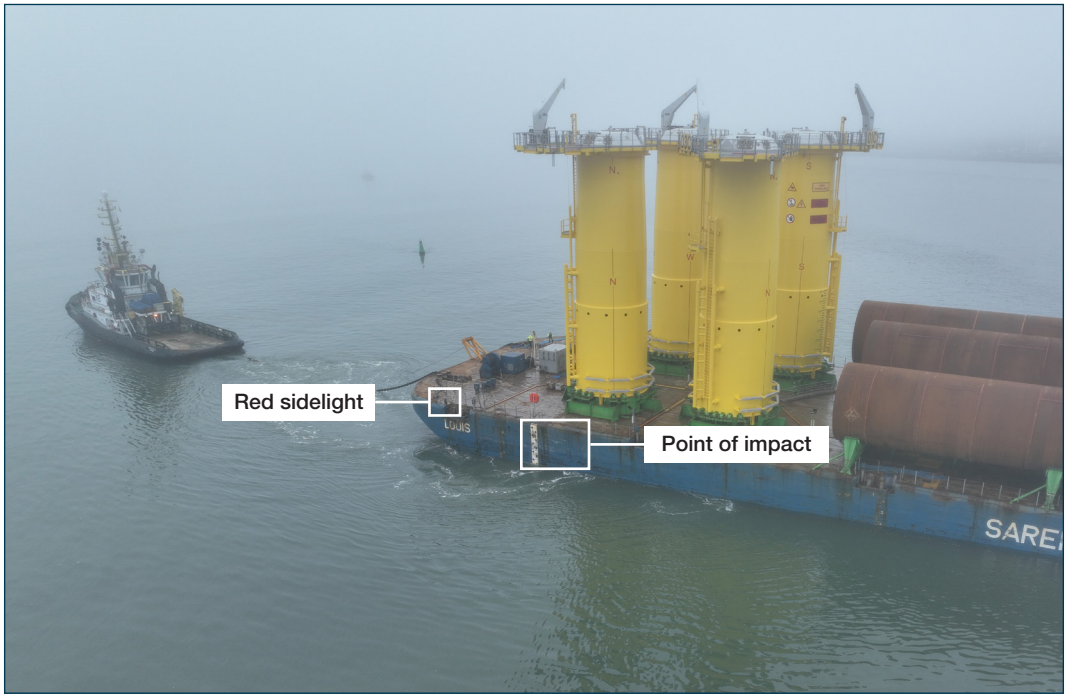


*Figure 9: Location of impact on port side of LOUIS' bow.*
*Source: DMAIB*


*Figure 10: Damage on port side of LOUIS.*
*Source: DMAIB*

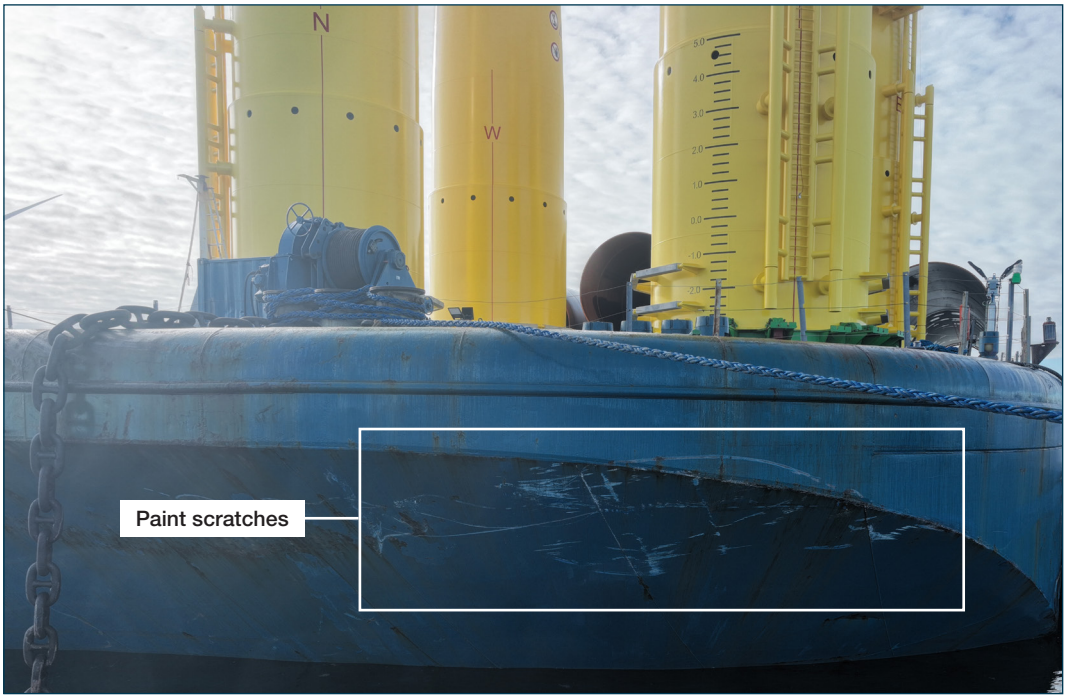


*Figure 11: Damage on LOUIS' bow.*
*Source: DMAIB*

This damage coincides with the testimonies of the crew on MULTRATUG 18, which described how VIBIMA overtook LOUIS after the impact and was partly forced under the bow. A photo taken by a crew member on MULTRATUG 18 seconds after the impact showed VIBIMA on a parallel course with MULTRATUG 18 (Figure 12).

*Figure 12: Impact between VIBIMA and LOUIS.*
*Source: Private photo.*

# Damage to VIBIMA

VIBIMA foundered moments after the collision. DMAIB did not conduct an underwater survey of the wreck because the information gained would not merit the scale of the effort and the cost of an underwater survey in open sea. Additionally, the information was deemed unnecessary for understanding the collision. Therefore, the cause of VIBIMA's foundering was based on documentation of the damage on LOUIS, witness testimonies and a review of VIBIMA's layout.

There was no updated general arrangement of the ship available, and VIBIMA had undergone several changes since the ship was built in 1978. However, an archival drawing of the ship from when it was built in 1978 was found. When comparing testimonies from the crew and to the drawing, it was determined that the changes were mainly related to the fishing equipment and not the hull and main compartments.

Testimonies from the crew members on VIBIMA indicated that, after the impact with LOUIS' bow, VIBIMA's stern was quickly submerged and water gushed into the galley. The stern was submerged before the master escaped from the cabin to the wheelhouse. This indicates that the engine compartment, and possibly the fish hold, were immediately flooded, causing the ship to lose buoyancy.

The residual buoyancy in the forward part of the ship indicates that the compartements in the forward part of the hull were not damaged during the impact.

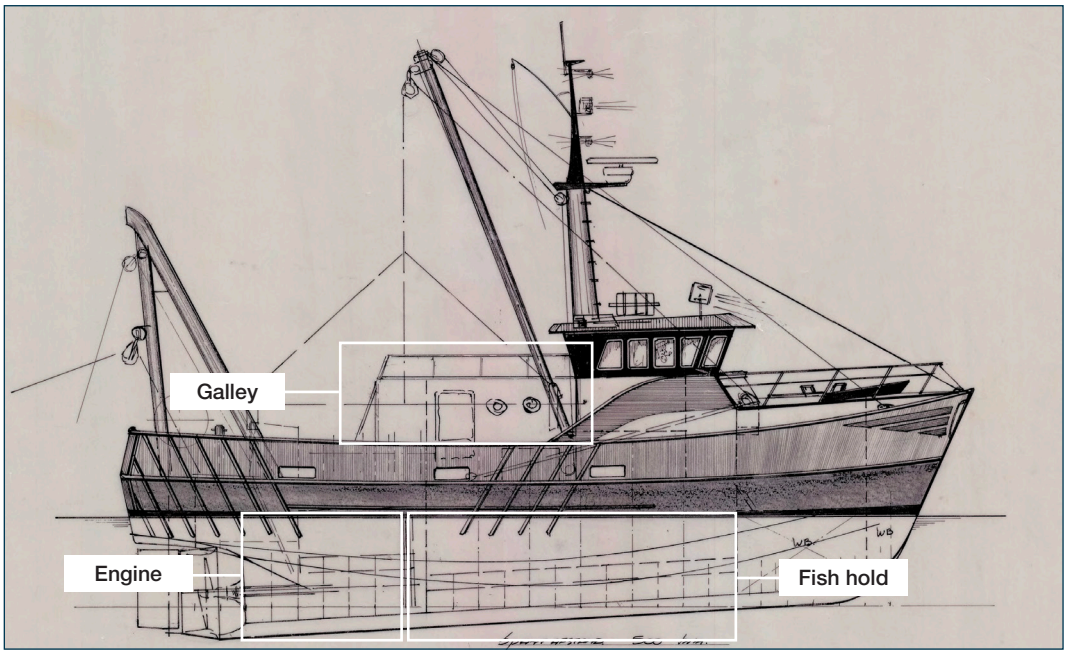


*Figure13: VIBIMA's general arrangement.*
*Source: Scheepsbouwkundig Bureau, modified by DMAIB*

# VIBIMA's wheelhouse layout and navigational practice

This section aims to ascertain whether the layout of VIBIMA's wheelhouse and the available navigational equipment and its use were factors that could contribute to the deckhand not observing LOUIS prior to the collision.

DMAIB did not have access to the fishing vessel, and there was no recent photo documentation of the interior of VIBIMA available. Therefore, the layout of the wheelhouse and the navigational instrumentation were reconstructed based on testimonies from the crew.

The conning station with a navigational chair was located on the starboard side of the wheelhouse. A 19-inch radar monitor and an ECS screen were mounted to the left of the navigational chair. The radar and the ECS could be seen and adjusted when seated. However, it was necessary to stand up to get an overall view of both displays.

The radar received input from the GPS and was usually operated in the 'head-up' mode, with the range set to either 1.5 or 3.0 nautical miles.

The ECS had an overlay from the AIS receiver and had collision warning capabilities based on AIS data. It is uncertain what parameters the collision warning was set to, i.e., the closest point of approach (CPA) and time to closest point of approach (TCPA). The deckhand did not usually change the settings on either the ECS or the radar.

VIBIMA's deckhand primarily used the ECS and AIS for collision avoidance. When an AIS target came within the parameters, the target would change colour to red and indicate that there was a risk of collision. Generally, the deckhand followed the route planned by the skipper.

# Visibility of LOUIS

LOUIS was not equipped with an AIS transmitter and was therefore not visible on VIBIMA's AIS receiver or ECS, which was the deckhand's primary method of assessing the risk of collision. Consequently, light sources on MULTRATUG 18 and LOUIS, and radar, were the only means available for the deckhand to identify the presence of the barge. During interview, VIBIMA's deckhand demonstrated that he did not have an in-depth understanding of the meaning of various navigational lights, including towing lights. The lights on MULTRATUG 18 therefore did not indicate to the deckhand that MULTRATUG 18 was towing an object.

LOUIS was equipped with side lights and a stern light. Reflective fixtures were mounted on top of the windmill structures. On Figure 15 the port side light and the fixtures can be seen in good working order.

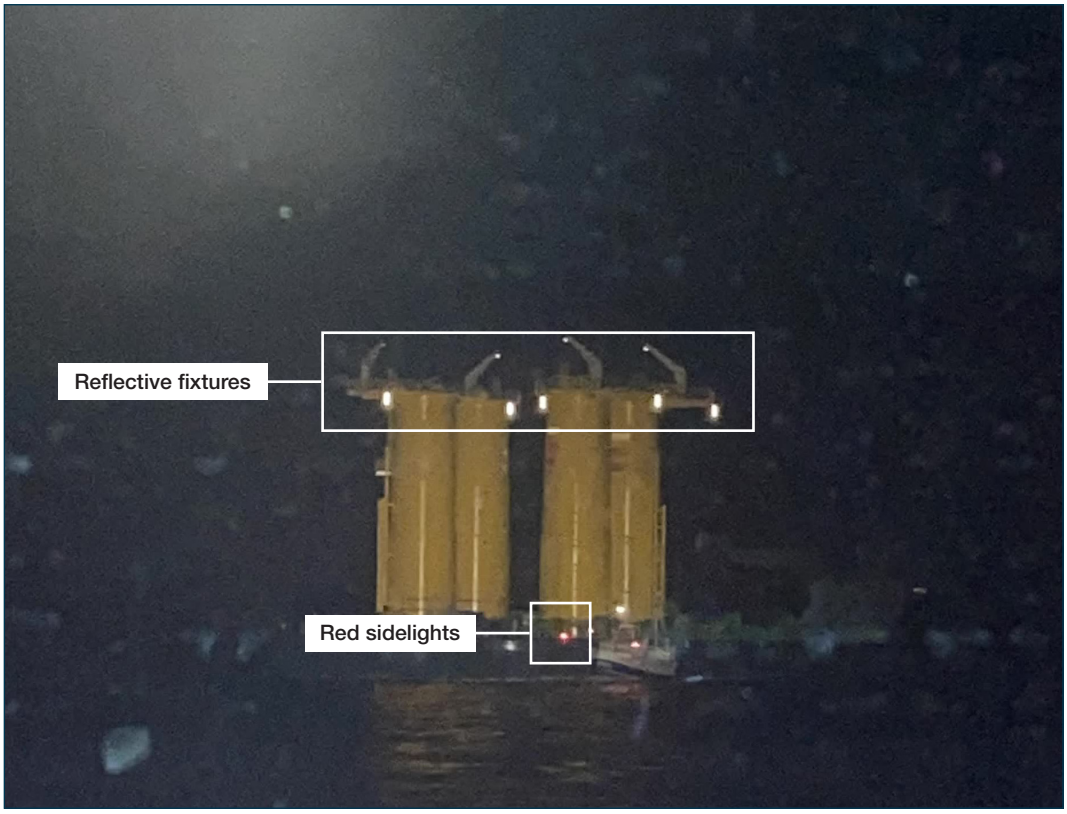


*Figure 15: Lights and reflective fixtures on LOUIS.*
*Source: Private photo.*

The searchlight on MULTRATUG 18 that illuminated LOUIS, as seen on Figure 15, was reportedly turned on prior to the collision to make the barge more visible. However, it is uncertain if the searchlight was pointed directly towards LOUIS' hull and the wind turbine structures immediately prior to the collision. Shortly before the collision, one of the fishing vessels that passed ahead of MULTRATUG 18 reported that they did not see the barge visually. Therefore, it is possible that the searchlight was not pointed at LOUIS during some periods due to the barge yawing.

# Applicable rules according to COLREG

COLREG's[4] steering and sailing rules provide a regulatory framework for collision avoidance. In this section, the ship's movements and lights are therefore viewed in relation to the applicable rules in COLREG, with the aim of describing the watchkeeper's understanding of the situation and expectations of the other ship's manoeuvres. It should, however, be noted that the purpose of DMAIB's investigation is not to apportion blame or responsibility. Consequently, no judgement will be made on whether the ships adhered to the rules or not.

MULTRATUG 18 with its tow, and VIBIMA, were power-driven vessels that were under way (Rule 3), and MULTRATUG 18 and VIBIMA were in sight of each other (Rule 11). At the time of the collision, it was dark, and visibility was good.

Both MULTRATUG 18's chief officer and VIBIMA's deckhand had a common understanding of the situation. Namely, that it was a crossing situation so as to involve risk of collision (Rule 15). VIBIMA had MULTRATUG 18 on its starboard side and therefore turned to starboard to keep out of the way of MULTRATUG 18, with the intention of avoiding passing ahead of MULTRATUG 18 (Rule 15). While VIBIMA made an early and substantial course change (Rule 16), MULTRATUG 18 kept its course and speed (Rule 17). As VIBIMA's deckhand was not aware that MULTRATUG 18 was towing LOUIS which restricted the tug's ability to manoeuvre, he was not aware of the additional requirement to keep clear (Rule 18).

MULTRATUG 18 reportedly exhibited the required lights for towing and the lights for a vessel restricted in its ability to manoeuvre (Rules 24 and 27). Additionally, LOUIS was exhibiting the required lights (Rule 24). During the investigation, DMAIB tested all the navigational lights on MULTRATUG 18 and LOUIS and found them to be in good working order.

Nonetheless, VIBIMA's deckhand did not recognize these lights as an indication that a tow was present aft of MULTRATUG 18, and it therefore went unnoticed that MULTRATUG 18 was towing a barge. LOUIS was not equipped with AIS so the decknhand on VIBIMA did not observe the tow on the ECS and he did not utilise the radar's functionalities for the purposes of detection or to assess the risk of collision. This hindered the deckhand in keeping an effective look-out (Rule 5).

4 Convention on the International Regulations for Preventing Collisions at Sea, 1972, as amended.

In general, COLREG leaves the watchkeeping officer a discretionary space for determining the ship's risk of collision in relation to a variety of factors such as safe speed (Rule 6) and due regard to the prevailing circumstances (Rules 5 and 19(c)). This discretionary space is dependent on the specific context, such as navigating in open waters or narrow channels, the amount of traffic and the normal practices in certain types of ships, e.g., tugs, fishing vessels or passenger ship trade navigating across channels. The application of COLREG is, therefore, to some extent based on heuristics and how the watchkeeping officer's experience shapes the perception of risk, and within the discretionary space the watchkeeper can and should depart from the rules in special circumstances to avoid immediate danger (Rule 2).

It is expected that the watchkeeping officer can take into due regard all dangers of navigation and any special circumstances (Rule 2). This indicates that the underlying thinking in COLREG is that all dangers are visible and can be taken into account and mitigated. Whether or not due regard has been shown can only be based on an evaluation of the events after the outcome is known. However, evaluation in hindsight provides little information about the actual circumstances in which the heuristics were applied and what difficulties the watchkeeping officer was presented with in the given situation. Therefore, the cause of the collision cannot be explained with this type of analytical approach.

# Analysis & conclusion

# Accident causation

MULTRATUG 18's chief officer recognised the risk of collision between LOUIS and VIBIMA, but the restricted manoeuvrability of the tug and its tow made it impossible to avoid the collision. Additionally, there was not sufficient time to call VIBIMA to warn about the impending collision.

VIBIMA's deckhand did not see LOUIS until after the collision, and the fishing vessel foundered shortly after its skipper and deckhand were rescued from the foredeck due to flooding in the aft section of the hull. The foundering was caused by water ingress either from damage resulting from the collision impact or from VIBIMA being forced under by LOUIS' bow. The investigation focused on determining why the deckhand on VIBIMA did not see LOUIS prior to the collision.

The watchkeepers on MULTRATUG 18 and on VIBIMA were aware that MULTRATUG 18 was the stand-on vessel and VIBIMA was to give way. However, the deckhand on VIBIMA did not recognise that the navigational lights on MULTRATUG 18 implied that it was towing a barge. The collision thus occurred as a fundamental surprise for the deckhand on VIBIMA.

DMAIB has not been able to determine the exact reason for why the deckhand on VIBIMA did not observe LOUIS prior to the collision. However, several factors were found which rendered it possible for the deckhand to overlook LOUIS:

*1) Navigational practise*

The deckhand's navigational practise was to make use of the AIS overlay on the ECS for warning on risk of collision. The radar was not used for this purpose. As the deckhand received a collision warning for MULTRATUG 18, and LOUIS did not transmit AIS data and therefore was absent on the ECS, the deckhand's attention fixed on the presence of MULTRATUG 18. Cognitive fixation on one object reduces the ability to observe and process other visual input. Hence, a combination of the deckhand's navigational practise and LOUIS not being equipped with AIS made is possible for the deckhand to overlook the presence of LOUIS. In addition, he was not alerted to LOUIS' presence because he did not understand the significance of MULTRATUG's yellow towing light.

*2) Visibility of sidelight*

LOUIS was equipped with navigational lights. If VIBIMA approached LOUIS at an angle of less than 67.5° (i.e. more than 22.5° abaft the barge's port beam) then the red port side navigational light would not have been visible to VIBIMA's navigator. When forward of the barge's stern, the barge's stern light would also have been obscured.

DMAIB could not determine LOUIS' precise heading and position because the barge was not equipped with an AIS transmitter and the barge was yawing during the tow. Consequently, it was not possible to accurately reconstruct LOUIS' aspect as seen from VIBIMA nor to establish the exact angle of impact. The damage to LOUIS indicates that the impact occurred in the forward part of the barge's port side, abaft the red side light. However, the AIS data, along with the absence of significant indentations, and evidence of VIBIMA scraping alongside and continuing to overtake the barge, suggests that VIBIMA approached LOUIS at a shallow angle which obscured the port sidelight.

*3) Visibility of LOUIS' hull and turbine structures*

Reportedly, MULTRATUG 18 had its searchlights directed aft to enhance the visibility of LOUIS. However, due to yawing the barge was possibly not continously fully covered by MULTRATUG 18's searchlight resulting in decreased light effect of the reflective fixtures on the turbine structures. Fishing vessels that earlier passed ahead of MULTRATUG 18 did not observe LOUIS. It is therefore possible that the light fixtures were not continously illuminated by MULTRATUG 18's searchlight, making LOUIS less visible to the deckhand on VIBIMA.

# Appendix

# MULTRATUG 18 & LOUIS

## SHIP INFORMATION

| | |
|---|---|
| **Name:** | MULTRATUG 18 |
| **Ship type:** | Tug |
| **Nationality:** | Netherlands |
| **Port of registry:** | Terneuzen |
| **Call sign:** | PBRY |
| **IMO number:** | 9492880 |
| **DOC company:** | Multraship Towage & Salvage BV |
| **IMO company no. (DOC):** | 1731807 |
| **Year built:** | 2009 |
| **Shipyard/shipyard number:** | Karadeniz Eregli/Hull no. NB13 |
| **Classification Society:** | Det Norske Veritas (DNV) |
| **Length overall:** | 35.70 m |
| **Breadth overall:** | 11.50 m |
| **Maximum draught:** | 4.35 m |
| **Gross tonnage:** | 499 |
| **Deadweight:** | 947 t |
| **Propulsion power:** | 2x1,900 kW |
| **Hull material:** | Steel |
| **Hull design:** | Single |

## VOYAGE PARTICULARS

| | |
|---|---|
| **Port of departure:** | Aalborg, Denmark |
| **Port of arrival:** | Thyboron, Denmark |
| **Voyage type:** | International |
| **Information about the cargo:** | Towing barge LOUIS |
| **Manning:** | 6 |
| **Pilot on board:** | No |
| **Number of passengers:** | 0 |

## WEATHER INFORMATION

| | |
|---|---|
| **Wind:** | Various directions - 5 m/s |
| **Current:** | Unknown |
| **Wave height:** | 0.5 m |
| **Visibility:** | Good |
| **Weather conditions:** | Clear |
| **Light/dark:** | Dark |

## INFORMATION ABOUT THE ACCIDENT

| | |
|---|---|
| **Type of marine casualty:** | Collision |
| **IMO Classification:** | Less serious |
| **Date and time:** | 28 February 2023, 05.26 LT |
| **Location:** | North Sea |
| **Position:** | 57º50'68 N - 10º24'69 E |
| **Ship operation:** | Underway in passage |
| **Place on board:** | Barge LOUIS above waterline |
| **Human factors:** | Yes |
| **Consequences:** | None. |

## RELEVANT CREW MEMBERS

| | |
|---|---|
| **Master:** | 43 years old. Had served as master on tugboats since 2011 and had been employed in the company for approximately 5 years. |
| **Chief officer:** | 27 years old. Had served with the company as chief officer for approximately 3 years, with 5 months on MULTRATUG 18. |

## BARGE INFORMATION

| | |
|---|---|
| **Name:** | LOUIS |
| **Ship type:** | Pontoon barge |
| **Nationality:** | Belgium |
| **Port of registry:** | Ghent |
| **Official number:** | O-6598 |
| **IMO number:** | 8917613 |
| **Year built:** | 2011 |
| **Classification Society:** | Bureau Veritas |
| **Length overall:** | 100.00 m |
| **Breadth overall:** | 33.00 m |
| **Maximum draught:** | 7.60 m |
| **Deadweight:** | 15,492 t |
| **Propulsion power:** | 23,760 kW |
| **Hull material:** | Steel |
| **Hull design:** | Single |

# VIBIMA

## SHIP'S DATA

| | |
|---|---|
| **Name:** | VIBIMA |
| **Ship type:** | Fishing vessel |
| **Nationality:** | Denmark |
| **Port of registry:** | Strandby |
| **Call sign:** | XP 3621 |
| **Year built:** | 1978 |
| **Shipyard/shipyard number:** | P. Roenn Christensen ApS/3 |
| **Classification Society:** | None |
| **Length overall:** | 16.00 m |
| **Breadth overall:** | 4.72 m |
| **Maximum draught:** | 6.37 m |
| **Gross tonnage:** | 49.99 |
| **Propulsion power:** | 23,760 kW |
| **Hull material:** | Steel |
| **Hull design:** | Single |

## VOYAGE DATA

| | |
|---|---|
| **Port of departure:** | Skagen, Denmark |
| **Port of arrival:** | Fishing grounds northwest of Skagen, Denmark |
| **Voyage type:** | Coastal, national |
| **Information about the cargo:** | None |
| **Manning:** | 2 |
| **Number of passengers:** | 0 |

## WEATHER

| | |
|---|---|
| **Wind:** | Various directions - 5 m/s |
| **Current:** | Unknown |
| **Wave height:** | 0.5 m |
| **Visibility:** | Good |
| **Weather conditions:** | Clear |
| **Light/dark:** | Dark |

## INFORMATION ABOUT THE ACCIDENT

| | |
|---|---|
| **Type of marine casualty:** | Collision and foundering |
| **IMO Classification:** | Very serious |
| **Date and time:** | 28 February 2023 05.26 LT |
| **Location:** | North Sea |
| **Position:** | 57º50'68 N - 10º24'69 E |
| **Ship operation:** | Underway in passage |
| **Place on board:** | Unknown |
| **Human factors:** | Yes |
| **Consequences:** | Ship foundered. |

## SHORE AUTHORITY INVOLVEMENT AND EMERGENCY RESPONSE

| | |
|---|---|
| **Involved parties:** | Fishing ship EMILIA |
| **Resources used:** | Own ship |
| **Speed of response:** | 5 minutes |
| **Actions taken:** | Two crew members from VIBIMA evacuated. |

## RELEVANT CREW MEMBERS

| | |
|---|---|
| **Master:** | 31 years old. Licensed as commercial fisherman. Had been a fisherman for 15 years and had owned and served on VIBIMA for 8 years. |
| **Deckhand:** | 26 years old. Licensed as commercial fisherman. Had been a fisherman for 5 years and had served on VIBIMA for 4 months. |