MINISTRY OF ECONOMY AND SUSTAINABLE DEVELOPMENT OF GEORGIA

TRANSPORT SAFETY INVESTIGATION BUREAU

Investigation Report into a Serious Marine Casualty Involving Personal Injury on Board the Liberian-Flagged Dry Cargo Vessel MV DOJUN BRAVE During Towing Line Recovery Operations in the Port of Poti on 14 March 2026

TBILISI 2026

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The main purpose of marine casualty investigation is to determine all contributing factors, cause and outcome, to evaluate the actions of persons involved in such incidents and to determine and create preventive measures to eliminate such incidents in the future.

Short description

On 14 March 2026, during the shifting operation from Berth No. 12 to Berth No. 4 in the Port of Poti, involving the Liberian-flagged dry cargo vessel MV DOJUN BRAVE and the tugboats TB SIMSON and TB PORTGART, a serious marine casualty involving personal injury occurred.

At approximately 17:25 local time, after completion of the towing operation, a crew member (sailor) of MV DOJUN BRAVE, a Georgian citizen, sustained a serious injury, namely the loss of the lower part of his left leg.

The pilot reported the serious marine casualty to the Poti Port State Supervision and Control Service, called an ambulance, and the injured sailor was transported to Poti Hospital, where he received the necessary medical assistance.

In accordance with the requirements of the Maritime Code of Georgia, the regulations of the Ministry of Economy and Sustainable Development of Georgia, and the regulations of the Transport Safety Investigation Bureau, the investigation of the above-mentioned marine casualty was conducted by the Transport Safety Investigation Bureau of the Ministry of Economy and Sustainable Development of Georgia.

1. Factual information

1.1 Incident history

On March 14. 2026, the Liberian-flagged dry bulk carrier MV DOJUN BRAVE was at Berth No. 12 of the Port of Poti and was preparing for shifting to Berth No. 4.

At 17:00 (local time, hereinafter referred to as local time), the pilot boarded the vessel to conduct the shifting operation.

At 17:13, the tugboat TB SIMSON was made fast to the vessel's port bow (forward mooring deck), while the tugboat TB PORTGART was made fast to the vessel's port quarter.

At 17:15, the pilot received permission from the Poti Port State Supervision and Control Service to commence the shifting operation, and the vessel was unberthed from Berth No. 12.

At 17:25, the pilot instructed the tugboats to let go the towing lines.

At approximately 17:30, the chief mate and an ordinary seaman (OS) of MV DOJUN BRAVE were engaged in the operation of recovering the towing line of the tugboat TB SIMSON. Following the instruction of the chief mate, the ordinary seaman removed the eye of the towing line from the bollard. At the same time, the chief mate gave a hand signal to the tugboat to heave away the towing line.

Under the effect of gravity and tension, the towing line moved rapidly, and the attached messenger line became entangled around the lower part of the ordinary seaman's left leg, resulting in a traumatic amputation below the knee.

The pilot immediately reported the serious marine casualty to the Poti Port State Supervision and Control Service.

At 17:40, MV DOJUN BRAVE was re-berthed at Berth No. 12.

An emergency medical team was called to the scene. The injured seafarer was transported to a medical facility in Poti, where he received the necessary medical treatment.

The injured seafarer is a citizen of Georgia.

1.2 Human injury

During the serious marine casualty on board MV DOJUN BRAVE, an ordinary seaman, a citizen of Georgia, sustained a serious injury to his left leg, namely a traumatic amputation below the knee, during the operation of letting go the towing line.

According to the sole witness to the occurrence, the chief mate, after the towing line had been let go, the attached messenger line became entangled around the ordinary seaman's left leg and severed the lower part of the leg.

1.3 damage to the Vessel

The vessel MV DOJUN BRAVE did not sustain any damage during the marine casualty.

1.4 Other damage

The vessel MV DOJUN BRAVE did not sustain any other damage as a result of the marine casualty.

1.5 Technical Particulars of the Vessel and Tugboats Involved in the Incident

MV DOJUN BRAVE

IMO # 9408097;

Call Sign 5LXKB;

MMSI 636025433;

Flag state LIBERIA;

Length overall L =79.99m;

Breadth B =13.60 m;

Draft d = 5.63 m;

Deadweight 3227.2mt;

Year Built: 2007;

Gross tonnage 1993t;

Net tonnage 923t;

Main Engine characteristics-1,458HP X825RPM/ 1080KWRpm;

Main Engine Power – 1080. KW;

Port of Registry - Panama.

Tug boat TB SIMSON

IMO #9054365;

Call sign 4LSA2;

MMSI 213436000;

Length over all =28,3 m;

Breadth B =9.5 m;

Draft = 5.0m;

Year Built 1993;

Gross Tonnage GT 314t;

Net tonnage 94.0t;

Flag state – Georgia;

Port of Origin – Panama;

Main Engine Characteristics -8MDZC900166;Kw;

Power – 3180KW:

Number of Engines – 2.

1.6 Meteorological Information

The prevailing weather conditions were not considered to be a contributing factor to the marine casualty involving MV DOJUN BRAVE in the Port of Poti.

1.7 Fire

No fire occurred during the marine casualty involving MV DOJUN BRAVE.

1.8 Environmental Pollution

No environmental pollution resulted from the serious marine casualty involving MV DOJUN BRAVE.

1.9 Rescue factors

During the marine casualty involving MV DOJUN BRAVE, the injured seafarer was provided with first aid by the emergency medical team, after which he was transported to Poti Hospital, where he received the necessary medical treatment. No other personnel involved in the shifting operation sustained injuries.

2.Analysis

The analysis of the serious marine casualty that occurred in the Port of Poti on 14 March 2026 was conducted on the basis of applicable national legislation, relevant normative acts, materials obtained during the investigation process, and international best practices in the field of maritime transport.

The analysis was carried out with reference to the Maritime Code of Georgia, the Rules for the Official Investigation of Transport Accidents and Incidents in the Fields of Maritime and Inland Water Transport, and the technical regulation "Port Rules".

The analysis was based on official documentation, including reports submitted by the operator and the Port Captain of the Poti Port State Supervision and Control Service, as well as a notification received from the Maritime Transport Agency. The vessel's logbook, video recordings from the vessel and port surveillance systems, statements provided by the master and chief mate, and statements obtained from the pilot, tugboat master, and chief engineer were also examined.

In addition, weather forecasts and actual meteorological data provided by the State Hydrographic Service of Georgia, as well as statements from relevant personnel of the Port of Poti, were taken into consideration.

- **17:00** – The Liberian-flagged dry bulk carrier MV DOJUN BRAVE commenced shifting from Berth No. 12 to Berth No. 4. The pilot boarded the vessel to conduct the shifting operation.
- **17:13** – Tugboat TB SIMSON was made fast to the vessel's port bow on the forecastle deck, while tugboat TB PORTGART was made fast to the vessel's port quarter.
- **17:15** – The pilot received permission from the Poti Port State Supervision and Control Service and commenced shifting the vessel from Berth No. 12.
- **17:25** – The pilot gave the order to let go the towing lines. Tugboat TB SIMSON approached the vessel's side, causing the towing line to slacken and enabling it to be easily removed from the vessel's bollard (Fig. 1).

Fig.1

- **17:30** – The operation of recovering the towing line was carried out by the chief mate and an ordinary seaman. The operation was conducted with fewer personnel than normally required, as only two crew members participated, while the boatswain was absent from the vessel's forecastle deck.

- Upon the instruction of the chief mate, the ordinary seaman removed the towing line from the bollard. At the same time, the chief mate gave a hand signal to the tugboat indicating that the towing line had been released from the bollard. According to the injured ordinary seaman, the chief mate then instructed him to manually move the towing line from the bollard towards the mooring opening (fairlead).

In the explanatory statement of the master of MV DOJUN BRAVE, it is stated: "After the order was given to release the towing line, the ship's crew released the line. However, the tugboat suddenly started heaving on its towing line. While the towing line was being lowered from the upper deck, the messenger line attached to the towing line suddenly became entangled around the sailor's left leg."

In the explanatory statement of the master of TB SIMSON, it is stated: "At 17:25, the pilot instructed us via VHF radio to recover our towing line and proceed to the starboard side of the vessel for further operations. I did not use the winch, as the towing line was sufficiently long, approximately 8–10 metres, with an additional messenger line of approximately 18–20 metres. Presumably, upon the instruction of the vessel's master, a crew member released the towing line from the bollard. I observed that the towing line was hanging alongside the vessel, and only the messenger line remained visible. Shortly thereafter, the line came free and fell into the sea on the port side of the tugboat, followed by blood splashes and what appeared to be a part of the injured crew member's leg. I immediately reported the incident to the pilot."

The chief mate attempted to assist the injured seafarer by applying a rope around the injured leg in an effort to control the bleeding, before informing the master and the pilot about the serious marine casualty.

17:40 – The pilot reported the serious marine casualty to the Poti Port State Supervision and Control Service, and an ambulance was called. MV DOJUN BRAVE was re-berthed at Berth No. 12, and the injured seafarer was transported to Poti Hospital.

The analysis of the above-mentioned facts and other materials obtained during the investigation indicates that the shifting operation of MV DOJUN BRAVE in the Port of Poti was conducted under pilotage and with the assistance of tugboats. However, during a critical stage of the towing operation, safety procedures were not properly followed, and coordination between the vessel's crew and the tugboat was insufficient.

The investigation identified inadequate manning during the towing line recovery operation. According to the Safe Manning Document and the vessel's Safety Management System (SMS), high-risk deck operations, including tugboat line handling operations, are required to be adequately manned. During the operation of letting go and recovering the towing lines, only two persons were present at the vessel's bow — the chief mate and an ordinary seaman (OS) with limited experience.

This was not in accordance with safe working practices or the minimum manning requirements established by the vessel's Safety Management System (SMS).

The limited number of personnel significantly reduced the ability to safely conduct the operation, particularly during high-risk line-handling activities. The presence of only two crew members, one of whom was inexperienced, created insufficient human resources for simultaneously controlling the towing line, monitoring line tension, and maintaining operational safety.

The investigation also identified incomplete implementation of the requirements of Chapter 6, Section 6.3 of the ISM Code, which states that:

"The Company should establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the environment are given proper familiarization with their duties."

In addition, deficiencies were identified in the implementation of Chapter 7 of the ISM Code, which provides that:

"The Company should establish procedures, plans and instructions, including checklists as appropriate, for key shipboard operations concerning the safety of the personnel, vessel and protection of the environment. The various tasks involved should be defined and assigned to qualified personnel."

The investigation identified that no documented risk assessment or "Toolbox Talk" (a short, task-specific safety briefing conducted prior to deck operations) had been carried out before commencement of the towing operation. Conducting a risk assessment prior to towing and line-handling operations is a mandatory safety requirement and should include the identification of hazardous areas, including snap-back zones (recoil path of a tensioned line) and other danger zones.

The presence of an inexperienced ordinary seaman in an unsafe position during the towing line recovery operation indicates either that no effective safety briefing was conducted or that established safety boundaries were not maintained during the operation.

The STCW Convention and the ISM Code require that critical deck operations be properly supervised by competent personnel. Although the chief mate was a qualified officer, the assignment of an inexperienced ordinary seaman to a high-risk line-handling task, together with insufficient instruction regarding snap-back zones, demonstrates inadequate operational control and supervision.

Accordingly, the investigation determined that the required standard of supervision was not effectively maintained throughout the operation.

The figure below shows the standard number of crew members required for tugboat line-handling operations in accordance with SOLAS and ISM Code requirements.

In order to obtain the "Toolbox Talk" documentation, an investigator of the Transport Safety Investigation Bureau boarded the vessel and requested the relevant documents from the master. The request was refused. The master explained that the refusal was related to his having been summoned to court in connection with charges initiated by the Coast Guard concerning marine pollution.

The materials examined during the investigation indicate that an appropriate safety briefing ("Toolbox Talk") was not conducted prior to the towing operation. As a result, the crew members did not have a clearly established sequence of actions and operational risks and lacked adequate awareness of the hazards associated with the operation. Furthermore, the chief mate did not maintain adequate supervision of the operation, including monitoring the tugboat's movements, the condition and tension of the towing line, and the hazardous movement of the messenger line.

The analysis also identified insufficient communication and coordination between the vessel and the tugboat. One of the main causes of excessive tension in the towing lines is inadequate coordination between the vessel's bridge team and personnel conducting the towing operation. In accordance with SOLAS Chapter V, safe maneuvering operations require effective communication between all involved parties.

A critical contributing factor was identified as the improper handling of the messenger line. According to established maritime practice, during the operation of letting go or recovering a towing line, the messenger line is required to remain under control, for example by being properly secured or controlled around a bollard, in order to prevent uncontrolled movement. In this occurrence, the messenger line was not adequately controlled, resulting in its sudden and hazardous movement.

Another important contributing factor was the substantial weight of the towing line and the vertical distance between the deck and the water surface (approximately 5–5.5 metres), which created additional dynamic forces and increased the risk of uncontrolled movement of both the towing line and the attached messenger line.

As a result, the rapid movement of the towing line and the uncontrolled movement of the attached messenger line caused the messenger line to become entangled around

the seafarer's lower limb, resulting in severe injury, namely traumatic amputation of the leg.

Based on the analysis, it was determined that the occurrence was not caused by a single factor, but developed as a result of several interrelated circumstances, including:

- Incomplete implementation of safety procedures;
- Insufficient manning during critical stages of the operation;
- Failure to conduct a safety briefing and prior risk assessment;
- Inadequate supervision of the towing line recovery operation;
- Insufficient coordination and communication between the vessel and the tugboat;
- Incomplete implementation of the requirements of the vessel's Safety Management System (SMS) under the ISM Code, particularly with regard to crew familiarization, training, and procedures for the safe conduct of critical operations;
- The internal investigation report entitled "Report of Personal Injury or Loss of Life", prepared by the master of MV DOJUN BRAVE (page 4-4), also identified deficiencies corresponding to the findings of this investigation, including the need to conduct Toolbox talks and provide snap-back zone awareness during rope-handling operations, maintain a safe distance from towing and mooring lines, and ensure proper and coordinated communication between the bridge team and deck personnel.

3. Conclusion

The marine casualty that occurred on 14 March 2026 on board the dry cargo vessel MV DOJUN BRAVE in the Port of Poti is classified as a serious marine casualty involving personal injury in accordance with the Rules for the Official Investigation of Transport Accidents and Incidents in the Fields of Maritime and Inland Waterway Transport.

The serious marine casualty involving personal injury was caused by inadequate planning and execution of the towing line recovery operation involving tugboat TB SIMSON by the crew of MV DOJUN BRAVE, improper assessment of operational risks, and insufficient manning during a high-risk deck operation.

Insufficient supervision of the ordinary seaman involved in the towing line recovery operation — the chief mate, as the officer responsible for deck operations and line handling, was required to ensure the safety of the personnel involved. Allowing the ordinary seaman to remain in close proximity to a tensioned towing line without timely intervention constituted inadequate supervision and a lack of situational awareness.

Violation of snap-back zone safety requirements — the Code of Safe Working Practices for Merchant Seafarers (COSWP) strictly prohibits personnel from standing within the potential snap-back zone or recoil path of a tensioned rope. Permitting an inexperienced crew member to enter or remain within the danger zone while the towing line was under tension constituted a direct breach of established safety requirements.

Failure to conduct a risk assessment and Toolbox Talk prior to the towing line recovery operation, together with inadequate identification and marking of hazardous areas, including snap-back zones.

4. Safety Recommendations

1. In order to improve the level of maritime safety and prevent similar marine casualties in the future, this serious marine casualty involving serious personal injury investigation report shall be forwarded for further action to:

a) the shipowner of MV DOJUN BRAVE;

b) Maritime Transport Agency;

c) the heads of the State Supervision and Control Services of the ports of Kulevi, Batumi, Poti, and Supsa, as well as the recognized maritime training institutions of Georgia.

2. All recipients of this serious marine casualty involving serious personal injury investigation report shall ensure a detailed review of the report and its findings.

The vessel's technical manager / Company shall:

- Ensure the full and effective implementation of the vessel's Safety Management System (SMS), particularly with regard to the planning and execution of towing and line-handling operations;
- Establish clear procedures regarding minimum manning requirements during towing operations and ensure strict compliance with such procedures;
- Strengthen crew training and conduct regular drills, with particular emphasis on towing operations and other high-risk deck operations;
- Ensure that crew members possess adequate knowledge and practical skills for the safe handling of towing and messenger lines;
- Implement and monitor mandatory pre-operational safety briefings ("Toolbox Talks") prior to all critical operations.

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The vessel's captain and crew shall:

- Ensure that a "Toolbox Talk" is conducted prior to towing and line-handling operations and that the requirements of the Code of Safe Working Practices for Merchant Seafarers (COSWP) are strictly followed;
- Ensure continuous monitoring and safe control of the messenger line during towing and towing line recovery operations;
- Towing operations should not commence until sufficient manning levels and crew readiness have been confirmed;
- Strengthen communication and coordination with tugboats, including clear confirmation of the receipt and execution of operational orders;
- Ensure that a documented risk assessment is conducted prior to the commencement of towing operations.

Seaport Authority / Supervisory Body shall:

- Strengthen oversight of towing operations and monitor compliance with applicable safety requirements;
- Ensure effective coordination between vessels and tugboats during towing operations under pilot supervision;
- Consider the development and implementation of additional guidelines or safety recommendations for the safe conduct of towing and line-handling operations.

The tugboat operator shall:

- Ensure that towing line recovery and lowering operations are carried out only after a clear and confirmed signal has been received from the vessel's crew;
- Enhance crew training regarding coordination and communication with vessels, as well as the safe conduct of towing operations.

Head of the Transport Safety Investigation Bureau Kakhaber Gudiashvili