Marine Safety Investigation Unit

Transport Malta

INTERIM SAFETY INVESTIGATION REPORT

202502/032 REPORT NO.: 02/2026 February 2026

MV *Grande Brasile*
Cargo fire and subsequent fire damage
in position 51° 16.8' N 001° 49.5' E
18 February 2025

SUMMARY

On the morning of 18 February 2025, the Maltese-registered motor vessel *Grande Brasile* was en route from Antwerp, Belgium, to Le Havre, France. The crew members were alerted by a general alarm, followed by an announcement reporting a fire on cargo deck no. 8.

They mustered at their designated fire stations, and the ventilation fans and dampers were remotely shut. Shortly after the fire was visually confirmed, the master ordered activation of the vessel's fixed CO_2 fire-extinguishing system.

Soon thereafter, the volume of smoke rising from the ventilation ducts diminished. The fire was believed to be extinguished, and the crew commenced boundary cooling on the affected cargo and deck areas.

However, several hours later the fire re-ignited and rapidly spread to other cargo decks and the accommodation block.

Despite sustained efforts, the crew members were unable to contain the rapidly escalating blaze. Ultimately, the generators supplying power to the fire pumps failed, leaving the vessel without power and in darkness, and the crew was compelled to abandon ship.

The safety investigation is still active, and this document is an interim safety investigation report, published in terms of regulation 13(1) of S.L. 234.49.

NOTICE

The information contained in this interim safety investigation report is derived from the initial notification and subsequent investigation of the occurrence to date. Readers are cautioned that there is the possibility that new accident data, which may alter the circumstances as depicted in this interim safety investigation report, may become available during the course of the safety investigation.

FACTUAL INFORMATION

Vessel

Grande Brasile was a 56,660 gross tonnage, Maltese-flagged container roll-on/roll-off cargo vessel built in 2000 by Fincantieri CNI S.p.A., Italy. The registered owner was ACL Vessel Two H1696A AB and was managed by Atlantic Container Line AB, Sweden.

The vessel had an overall length of 213.88 m, a summer draught of 9.70 m, a moulded depth of 39.23 m, and a summer deadweight of 26,169 tonnes.

Propulsion was provided by a GMT-Sulzer 7RTA 62U internal combustion diesel engine, rated at 15,540 kW (MCR) at 113 rpm, driving a single four-bladed Lips controllable pitch propeller. The vessel had a service speed of 16.0 knots. Manoeuvrability was enhanced by two transverse thrusters, one fitted forward and one aft.

Electrical power was supplied by four diesel generators, a shaft generator, and an emergency generator. The steering gear comprised two electro-hydraulic power units, operating a single rotary vane (FRYDEMBO MT 761 kNm) actuator.

Grande Brasile was classed by Registro Italiano Navale (RINA), which was authorised by the Government of Malta to issue Statutory certificates on its behalf. The Safety Management Certificate and the Document of Compliance issued by RINA were valid until 10 May 2028 and 26 May 2028, respectively.

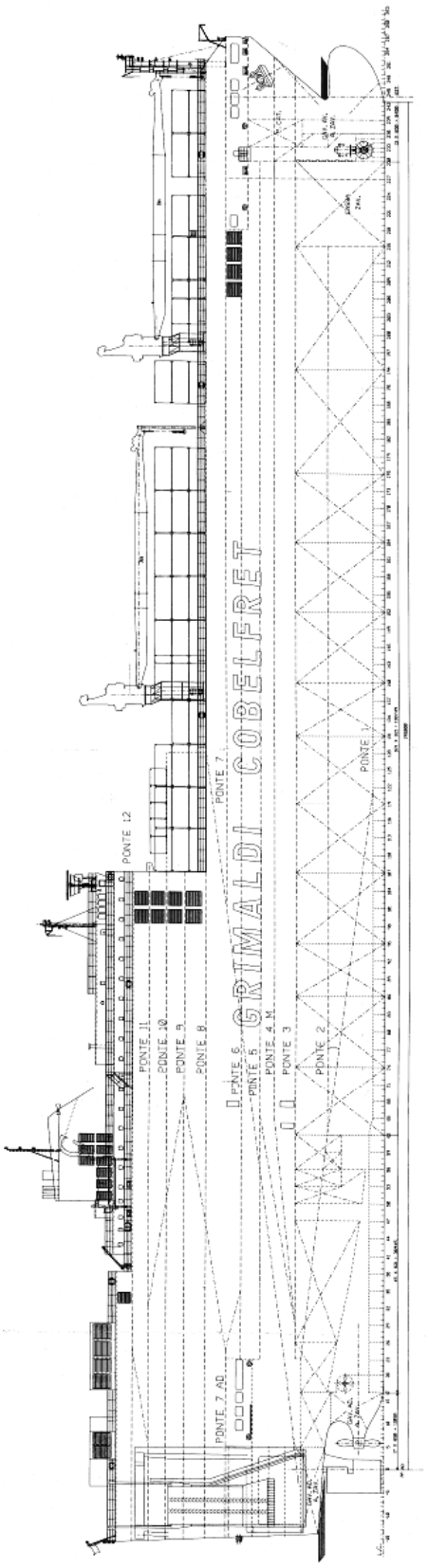

Figure 1: MV *Grande Brasile*

Crew

Grande Brasile was manned by officers and ratings in excess of the requirements set out in the Minimum Safe Manning Document, issued by the flag State Administration.

The master, aged 41, held an STCW Regulation II/2 Certificate of Competency (CoC)[1]. He commenced his seagoing career in 2006 on container and RoRo vessels. He first joined *Grande Brasile* in 2017 as chief mate and was promoted to master in 2021. At the time of the occurrence, he had over three years' experience in command. He joined the vessel in Antwerp on 10 February 2025.

The chief mate held an STCW Regulation II/2 CoC and had approximately three years' experience as chief mate on vessels operated by the Company. He joined the vessel on 15 December 2024.

The chief engineer commenced his career in 1988 as a motorman and obtained his STCW Regulation III/2 CoC[2] in 2005. He joined the Company in 2012 and had served on four sister vessels, including *Grande Brasile*. He joined the vessel in Antwerp on 16 February 2025.

The second engineer was issued with an STCW Regulation III/2 (second engineer) CoC in 2023 by the Ministry of Transport and Maritime Affairs of Montenegro. He embarked the vessel on 10 February 2025.

The third engineer, fourth engineer, second officer, and the vessel's two third officers held the appropriate certificates of competency for their respective ranks.

At the time of the occurrence, *Grande Brasile* had a total complement of 28 crew members. The master, chief mate and chief engineer were Polish nationals, and the second engineer was from Montenegro. The two electro-technical officers were Romanian nationals, and the remaining crew members were Filipino nationals. The working language on board was English.

Environment

The vessel records indicated that at the time of the accident, the weather conditions were clear, and visibility was about 10 nautical miles. A one metre Southeasterly swell was recorded. The air and sea temperatures were recorded to be -2 ºC and 3 °C respectively.

Narrative[3]

On 18 February 2025, *Grande Brasile* disembarked the pilot at 0742 and by 0800, was proceeding on passage to Le Havre, France. The vessel had departed Antwerp, Belgium, carrying containers, new and used cars and vans, trucks, and heavy machinery, destined for West Africa. The vessel's departure draughts were 8.8 m forward and 9.1 m aft.

At 0820, the master handed over the navigational watch to the third officer (3O), while an able seafarer (AB) maintained manual steering. The voyage initially proceeded without incident.

At 0835, while the 3O was monitoring traffic and overseeing course alterations, a fire alarm activated on the fire detection and warning system (FDS), indicating a fire on deck no. 8. An ordinary seafarer (OS), who had been resting in his cabin, was instructed to investigate. He proceeded down the central staircase to deck no. 8 and carried out an inspection of the port side, but found no signs of fire, smoke, or burning odour. At the 3O's direction, he also checked decks nos. 6 and 7, with similarly negative results.

[1] Chief mate on ships of 3,000 GT or more.

[2] Certification of chief engineer officers and second engineer officers on ships powered by main propulsion machinery of 3,000 kW propulsion power or more.

[3] Unless otherwise stated, all times in this report are ship's time (GMT +1).

Over the following hour, additional smoke alarms were triggered on deck no. 7, with multiple sensors activating in succession. Although some alarms were acknowledged and silenced, the recurrence of signals led the 3O to suspect a possible technical malfunction. The electro-technical officers (ETOs) were called to the bridge to examine the FDS panel. On reviewing the repeated alarms, they advised that deck no. 8 should be rechecked. The helmsman was relieved from steering duties and sent to investigate.

While descending the central staircase, the helmsman observed that the lighting was not functioning and returned to collect a flashlight. He then inspected decks nos. 12 and 11 without detecting any abnormalities. However, on opening the door to deck no. 10, he noticed a distinct burning smell and immediately reported this to the officer of the watch, who summoned the master.

The master arrived on the bridge at 1020. The FDS continued to indicate alarms on deck no. 8, and shortly thereafter the helmsman reported sighting smoke on that deck. The master promptly closed the ventilation dampers serving the cargo spaces, galley and accommodation, activated the vessel's general alarm, and announced a fire on deck no. 8 on the public address system. The crew members mustered at their designated fire stations, and a distress message, together with relevant information, was transmitted to the UK Coastguard. Shortly thereafter, steering control and power to the main fire pumps were lost at the bridge.

In the engine-room, the third engineer had earlier observed irregularities with the shaft generator and diesel generator no. 1 (DG1) and had informed the chief engineer. When the chief engineer proceeded to the engine-room, he noticed that the staircase lighting and elevator panel were unlit and that a faint burning odour was present, although no smoke was visible.

Corrective actions were taken to stabilise the vessel's electrical supply and therefore, the shaft generator was disconnected, DG1 was taken off load, and DG4 was started and placed on load in parallel with DG3, which remained in operation.

An inspection of the steering gear revealed that although the pumps were operational, the rudder was hard to port and could not be moved. In the meantime, in the engine control room, multiple alarms were observed on the ship's monitoring systems, including a 440 V low insulation alarm on the main switchboard. The emergency generator was started and connected; however, the insulation alarm persisted. Following the activation of the general alarm, the engine-room crew members isolated electrical power to decks nos. 6, 7 and 8, and then mustered at their fire station.

Fire Team 2 (FT2), led by the second engineer, was directed to investigate deck no. 8 through the aft staircase. The team encountered smoke-logged conditions and on opening the door to deck no. 8, was met with dense black smoke and zero visibility. The door was closed again to prevent further spread of smoke. Deck no. 7 was also found to be smoke-filled, and the team was redeployed to the partially open deck no. 6 mooring station.

Concurrently, Fire Team 1 (FT1) entered deck no. 8 from the central staircase. The team reported thick black smoke, burning vehicles, and explosions within the cargo space. The master ordered their immediate withdrawal. Black smoke was also observed coming out of the ventilation ducts.

Having assessed the situation, the master informed company representatives of his intention to release the fixed CO_2 system. On advice from shore management, ventilation was to remain shut for several hours. Once all crew members were accounted for, the master ordered the release of CO_2. At 1052, CO_2 flooding was

activated for Zone D, covering decks nos. 8 to 12.

In the period that followed, smoke emissions from the ventilation ducts diminished significantly, and the fire was considered to be under control. In the meantime, electrical faults were traced to the emergency transformer and rectified, allowing restoration of power to essential fire-fighting systems.

Shortly after 1140, the master authorised an internal assessment of the affected decks. On deck no. 8, approximately 20 vehicles located aft around frame 32, were found destroyed, whilst deformation of the deckhead and damage to lighting fittings and cabling was also observed. No active fire was reported. Boundary cooling operations were commenced to reduce residual heat, and both fire teams applied water to the affected areas. Although steam was observed rising from burnt vehicles, no flames were detected.

Subsequent inspections identified additional fire-damaged vehicles on deck no. 9 directly above the most severely affected area on deck no. 8, as well as three scorched trucks on deck no. 6 aft. Structural distortion and heat damage were evident, but no active fire was detected during these inspections. Cooling operations continued throughout the early afternoon.

Preparations were later made for a tow to Antwerp, and propulsion and thruster control were restored to the bridge.

However, at 1716, a fire alarm went off for deck no. 7. Thereafter, the fire rapidly escalated, spreading to the upper cargo decks and, by 1732, affecting deck no. 12. Despite sustained boundary cooling, heat and smoke intensified, and access to certain decks became increasingly restricted.

By the evening, the fire had spread to the bosun's store and galley, and the vessel developed a starboard list. Hydrant water temperature increased, and cooling efforts proved ineffective. Smoke and radiant heat penetrated the accommodation block, with paint blistering and temperatures rising significantly.

Attempts to secure the tow were hampered by heavy smoke. As conditions deteriorated and electrical power was ultimately lost following generator failure, the crew prepared to abandon ship. At approximately 2230, the master ordered the port lifeboat to be launched. The crew members were subsequently recovered by a lifeboat of the Royal National Lifeboat Institution and were landed safely at Ramsgate, United Kingdom.

Structural damage

The initial Class damage survey identified varying degrees of structural damage across several decks (**Figures 1** and **2**).

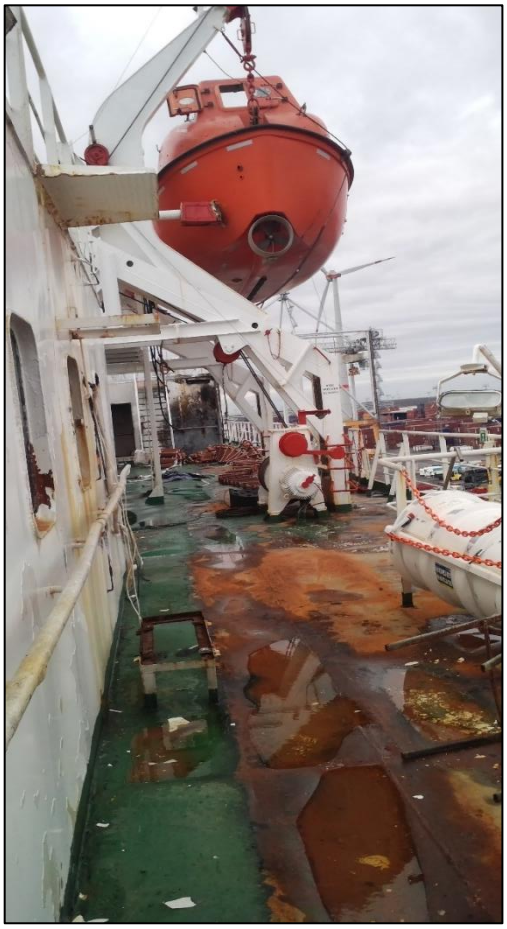

Figure 1: Deformed and scorched deck plating resulting from heat damage

Figure 2: Fire damage visible on the ship's side

On deck no. 12, fire damage was observed on the starboard side from frames 9 to 64, and on the port side from frames 2 to 36; the affected accommodation spaces included the messroom and four crew cabins located from frames 58 to 64 on starboard side. On deck no. 11, damage extended along the mid-length section from frames 9 to 92 on both starboard and port sides. Moreover, deck no. 10 exhibited heat exposure around frame 55 on the port side, with fire-affected areas from frames 9 to 64 on starboard side, and from frames 9 to 36 on port side.

On deck no. 9, damage was primarily observed from frames 9 to 51, extending from the starboard shell inboard to the edge of the ramp leading to deck no. 7. Deck no. 8 sustained damage from frames 15 to 50 on starboard side, and from frames 16 to 36 on port side extended from frames 26 to 29 on the port side.

Heat-related damage was also identified on the inside of the funnel casing, in way of decks nos. 6 to 12. However, no damage was detected in the engine-room, and no significant structural damage to the hull, bulkheads, or decks was found. Although steel supporting members were affected by smoke, the vessel's overall structural integrity had not been compromised.

Cargo damage

The preliminary cargo survey indicated that containers, vans, cars, and general cargo stowed on decks nos. 1 to 5 had not sustained fire damage. Vehicles located on deck no. 6 in the aft section, were severely affected by heat, while other vehicles on that deck were heavily contaminated with soot.

All vehicles on deck no. 7 were found to be covered in soot, with those stowed at the extreme aft, near the upper section of the ramp leading from deck no. 6, exhibiting heat damage.

Vehicles stowed on deck no. 8 within the enclosed cargo space, were either completely destroyed by the fire or had sustained extensive heat and soot damage (**Figure 3**).

Figure 3: Damaged vehicles on deck no. 8

On decks nos. 9, 10, 11, and 12, vehicles stowed in the aft sections were heavily burnt, surrounded by other vehicles which showed significant heat damage. In contrast, vehicles in the forward sections of these decks were not burnt, although heavily covered in soot (**Figures 4** and **5**).

Figure 4: Vehicles in the forward sections on deck no. 10

Figure 5: Damaged vehicles on deck no. 12

Safety investigation activities

On 18 February 2025, the Marine Safety Investigation Unit (MSIU) was notified by the Federal Bureau for the Investigation of Maritime Accidents in Belgium (FEBIMA) of a fire on board the Malta-flagged *Grande Brasile*. The MSIU immediately established communication with the Company and commenced the collection of information and documentation relating to the fire and subsequent abandonment of the vessel. The United Kingdom's Marine Accident Investigation Branch (MAIB) interviewed the crew members and compiled accounts of the occurrence. On 02 May 2025, an MSIU representative interviewed Company officials and obtained additional documentation, including relevant vessel drawings.

On 16 April 2025, during the course of the safety investigation into the fire on board *Grande Brasile*, the MSIU was informed of a separate fire incident involving the Maltese - registered ro-ro vessel *Delphine*, while alongside in the port of Zeebrugge, Belgium. During the cargo operations, a second-hand vehicle caught fire on deck no. 3A.

Upon discovery of the fire, the crew responded promptly and attempted to extinguish it using the available onboard fire-fighting equipment. However, the fire and associated smoke spread rapidly, compelling the crew to withdraw from the affected area in the interest of their own safety. In an effort to contain the situation, decks nos. 3 and 3A were subsequently sealed off, a head count of personnel was conducted, and the vessel's fixed CO_2 fire-suppression system was activated. The fire was eventually extinguished, and the situation was brought under control.

The safety investigation is analysing the fire from multiple perspectives to identify any underlying safety issues and understand the events during the emergency that influenced the decisions taken and actions carried out on board.

SHIP PARTICULARS	
Vessel Name:	*Grande Brasile*
Flag:	Malta
Classification Society:	Registro Italiano Navale (RINA)
IMO Number:	9198123
Type:	Container / RoRo
Registered Owner:	ACL Vessel Two H1696A AB
Managers:	Atlantic Container Line AB, Sweden
Construction:	Steel
Length Overall:	213.88 m
Registered Length:	196.61 m
Gross Tonnage:	56,660
Minimum Safe Manning:	15
Authorised Cargo:	RoRo / Containerised

VOYAGE PARTICULARS	
Port of Departure:	Antwerp, Belgium
Port of Arrival:	Le Havre, France
Type of Voyage:	International
Cargo Information:	General cargo, containers, trailers, trucks and vehicles (14,793 t)
Manning:	26

MARINE OCCURRENCE INFORMATION	
Date and Time:	18 February 2025 at 08:35 (GMT +1)
Classification of Occurrence:	Serious Marine Casualty
Location of Occurrence:	51° 16.8’ N 001° 49.5’ E
Place on Board	Cargo spaces
Injuries / Fatalities:	None reported
Damage / Environmental Impact:	None reported
Ship Operation:	In passage
Voyage Segment:	Transit
External & Internal Environment:	Clear weather conditions. Visibility was about 10 nautical miles. A one metre Southeasterly swell was recorded. The air and sea temperatures were recorded to be -2 ºC and 3 °C respectively.
Persons on board:	26