



# **CASE STUDY ON IMSBC CODE**

The ship named M/V ABC was safely berthed to the pier number 6 in Gemlik Roda port at 21:15 on 26.10.2017. No adverse events were reported by the ship or port. Preparations for the loading operation were completed and the bulk scale load, known as iron powder, was started to be loaded on the ship at 22:00. The cargo, which was transported in bulk from the factory by trucks, was poured into the portable pool at the port, and was loaded from there by being unloaded from a certain height to the ship's hold by means of a rubber wheel crane.

The loading operation was completed on 27.10.2017 at 16:30 and no adverse events were reported during the loading. According to the total weighing tonnage, 3088.72 MT of scale load (iron powder) was loaded on the ship. In addition, a note that the cargo is wet was written on the bill of lading. Following the completion of the loading, the pilot boarded for the ship's unberth maneuver after the port operations were completed and the ship left the port at 17:55 to go to Karadeniz Ereğli port.

The ship made contact with the Istanbul VTS for the passage of the Bosphorus and anchored off the Istanbul/Kartal offshore for replenishment at 00:25 on 28.10.2017. It started its supply operations at 15:52 on the same day, completed its operations on 31.10.2017 at 19:32 and notified Istanbul VTS that it was ready for the passage of the Istanbul Bosphorus.

On the ship, which remained at the anchorage for approximately 4 days, personnel changes were made without the knowledge of the relevant port authority. In addition, after the P&I insurance survey in Ambarlı port, the information on what kind of maintenance and handling procedures were carried out due to the survey results that there was no survivor among the ship personnel, could not be reached. According to AIS (Automatic Identification System) data, it departed from Kartal anchorage at 20:19 on 31.10.2017, started the passage of the Bosphorus at 21:39 and completed the Bosphorus crossing at 00:00 and exited to the Black Sea. The last AIS data from the ship was taken off the coast of Sile on 01.11.2017 at 02:58.





Afterwards, EPIRB signal was received from the ship at 03:52 at XYZ coordinates by the Main Search and Rescue Coordination Center via the Cospas-Sarsat system. As a result of the contacts made with the ships navigating in the region, it was understood that the ship could no longer be detected by ECDIS and Radar, and therefore the ship sank.

Due to the collapse of the ship, divers could not enter the seafarer's living area for a long time and the survivors could not be reached because of the living space damages. In the following days, as a result of the work carried out with air and sea conditions permits, the dead bodies of 7 personnel were removed from the ship. The 2 missing personnel could not be reached.

### **History of the Ship**

The construction of the ship named M/V ABC was completed in Denmark in 1974 and her firsy voyage was on 1975 under the Malta flag. The ship was built on a system with two hatches and two hatches equipped with a gladora. One in number B&W Alpha 16V23H-VD main engine with 1492 kW power and 3 Mercedes generators are equipped with a total of 4 generators in the engine room, one in number port generator under the head. In 1991, the gladora was modified and the tonnage was changed. DWTT from 3040 has been updated to 3237 DWT.

The ship has 3 cranes on board, crane number 2 was dismantled within the framework of the Rigging Plan approved by Türk Loydu class society. It has been determined that the cranes number 1 and number 3 of the ship were dismantled without the knowledge of the administration and the classification society, and no data regarding the dismantling timing was found in the records of the ship.

It has been understood that M/V ABC ran aground on the southeast Princes Ireland on 28/07/2017 while navigating in the Marmara Sea, did not inform the administrative units about this incident, and that the accident realized as a result of the Coast Guard Command's notification to the administration. After the accident, an underwater survey was conducted by a private company in Samsun port, and in the report prepared after the survey stating that there was no damage to the hull and propeller of the ship and





submitted to Samsun Port Authority. Since she did not report the accident to the Administration, the voyage was allowed by applying administrative action by the Port Authority.

Since the Seaworthiness Certificate of the ship was issued according to the coastal zone on 18/01/2011, it has not been subjected to PSC (Port State Control) inspection after this date.

During the cabotage voyage of the ship, deficiencies were detected which were made on 24/08/2011 and 14/09/2011 by Türk Loydu, the classification society. Subsequently, the class agreement was suspended first and then canceled on 02/04/2012 as the deficiencies were not corrected.

## **Key Personnel**

The captain is 69 years old. It has been seen that he has all the certificates required by the STCW Code and his certificates are valid. His name is on the list of personnel subject to LCB and he was not on board at the time of the accident.

The chief engineer is 49 years old. It has been seen that he has all the certificates required by the STCW Code and his certificates are valid. His name is on the list of personnel subject to LÇB and he was not on board at the time of the accident.

The able seamen( shipowner) is 60 years old, he is a primary school graduate. Has master sailor qualification. It has been seen that he has all the certificates required by the STCW Code and its certificates are valid. He is one of the partners of the ship company and also works as a able seamen on the ship.

The other able seamen (shipowner's son) is 33 years old. Has master sailor qualification. His name is not included in the personnel list subject to the LÇB, and it was determined that he was on the ship at the time of the accident. He was introduced to the authorities as the captain of the ship by the ship owner at the last port departure.

#### **EVALUATIONS**

#### 1. Loading Procedures Before the Final Loading Port;





It was determined that an administrative sanction was imposed on the ship due to overloading before leaving a different port one month before the accident. In the case of the accident, it can be considered that the ship has loaded above its capacity? Please discuss.

## 2. Evaluation of Ship's Loading Capacity;

The maximum summer draft of the ship was determined as 5.71 meters. According to the calculations, it has been observed that the average draft value of the ship leaving the port is 5.77 meters, thus exceeding the required maximum summer loading limit value of 5.71 meters.

On the other hand, when the draft information in the SP report given to VTS is analyzed (forward draft 4.6 mt - stern draft 4.9 mt), it is important to show that the competent personnel of the ship are not even aware of the ship's draft values.

# 3. Safe Loading Procedures;

The ship captain is responsible for the safe loading and unloading of the bulk carrier under his command. Also, the terminal representative, , is responsible for notifying the master or the administration without delay about the deficiencies detected in the bulk carrier that may endanger the safe loading and unloading of solid bulk cargoes.

#### 4. Evaluation from the point of view of seafarers

According to the personnel list submitted to the port authority, the competencies of the ship's personnel are compatible with the said voyage region and the tonnage class of the ship. Only after the accident, it was determined that there was no captain, chief engineer and an oiler on the ship, and this shows that the seafarer's number and proficiency specified in the Minimum Safe Manning Certificate were not present on the ship. However, it has been understood that the relevant port authority has issued the port exit document based on the personnel list declared by the representative of the





shipowner who equips the compliance of the personnel present on the ship with the Minimum Safe Manning Certificate in terms of number and proficiency.

Please discuss according to SOLAS '74 / Chapter V / Article 14

## **5. Inspections and Certification Procedures**

Please discuss according to SOLAS Part I/Chapter B/Article 6 Inspection and Survey;

In order to inspect or survey the seaworthiness of any ship, the Administration may appoint its own surveyor or assign this task to a recognized organization. While these provisions are mandatory for ships navigating in international waters, they are recommended by IMO to Administrations for ships navigating in national waters.

#### 6. Inspections by the Flag State

The sheet measurement process, in which sheet thickness values are determined from the criteria subject to the surveys, was carried out by an organization authorized by the Administration before the renewal survey in 2015. After the accident, as a result of the investigation, it was determined that the sheet measurement report did not belong to the ship named M/V XYZ. However, as a result of the researches, it has been determined that the authorization certificate periods of the organizations that carry out the annual controls of fire extinguishing devices and personal life-saving equipment and tests of life rafts have expired.

It is considered that the present condition of the ship cannot withstand the risks of the sea as a result of the fact that the above-mentioned unsuitable conditions could not be detected during the renovation and intermediate survey, and the ship continued its course even though it was not suitable for the sea conditions.

#### 7. Inspections by Classification Societies

The owner of the ship declared to the administration that his ship will sail in national waters in 2011 and requested the issuance of a Seaworthiness Certificate. During this period, it was determined that the deficiencies were detected in the inspections carried





out by the classification society Türk Loydu, with which the shipowner cooperated, and that the agreement with the organization was suspended and later on canceled because the deficiencies were not remedied in the oncoming period

Until 2017, the ship continued to navigate in national waters without making an agreement with any classification society. On 21 June 2017, a temporary contract with a validity of 6 months was signed with a classification society. On the other hand, on 08 September 2017, another contract valid for 6 months was signed with another classification society.

The ship has been given time until the next scheduled docking date to carry out the class-survey. It has been determined that both classification societies are not among the organizations recognized by the Administration.

#### 8. Other Inspections

When some photographs obtained from the holds of the ship as a result of the relevant survey are examined, it is seen that the port and starboard side shell are covered with sheet metal up to the level of the stringer inside the warehouse. However, when other deficiencies are examined, it is noted that the ship has deficiencies in life-saving equipment and the watertight bulkhead between both holds has lost its watertightness, there are deformations and damages in the hatch floor sheets, and the bilge well of the hatch number 1 is blinded.

#### 9. Safety Management System Practices

It is known that the implementation of the relevant Code is not applicable especially to dry cargo ships and their operators working on the cabotage line, as it is a recommendation to the ships making national voyages and their operators. Therefore, has it been evaluated that the failure to establish an effective control mechanism on the seaworthiness of ships in terms of Safety Management Principles is another effective factor in the process leading to the loss of the ship?

Please discuss?