

Ship Management FEUPT01-N

Case Study Ever Given – Ship Management

Teaching Notes: Questions and Answers

The material and information contained in this study case is for educational purposes only. You should not rely upon the material or information of this document as a basis for making any business, legal or any other decisions.

© Erasmus UPT

Case Study Ever Given – Ship management

How one ship can disrupt the world's economy

Introduction

The case study is about the grounding of the Ever Given in the Suez Canal. The exercise focuses on the ship management perspective. As a student, you are working for the ship management company Bernhard Schulte and you have the role as a duty officer of the firm named Herman Hoff. Your task is to figure out what the first priorities as a ship manager and which actions have to be put in motion after the disruptive event. Initially, you are going to read a short introduction about the ship management company Bernhard Schulte Ship Management. Then you are requested to read the narrative and answer the questions to provide the ship management company with information and recommendations.



Photographed by Bart Kuipers

Bernard Schulte Shipmanagement – Herman Hoff

Bernard Schulte Shipmanagement (BSM) manages a fleet of approximately 600 vessels, 20,000 seafarers and 2,000 shore-based employees. The Shipmanagement company is determined to provide maximum vessel availability, reliability, efficiency, and safety. One of the largest vessels in the world – The Ever Given – is part of the 600 vessels under management of BSM. They are in charge of the technical management and crew management of the Ever Given. The grounding of the Ever Given had significant consequences for the ship management company.

Narrative

The air was filled with dust and a strong wind with gusts of more than 40 knots per hour was raging around the ship as Captain John Doe watched out of the window from the bridge. There were a dozen other ships waiting on anchor to pass the Suez Canal, but these ships were barely visible in the hazy yellow air. Sandstorms occur more often in this season and has been the cause for 75 shipping incidents in the past decade according to insurance company Allianz Global. More than a third of those incidents were reported to be container ships with grounding as the most common cause of the incidents.

The Ever Given was scheduled to be travelling through the canal with the next convoy in the morning of March 23, 2021. The ship carried some 12,000 containers with a combined trade value of US\$ 1 billion. It was on a tight schedule to reach Rotterdam (The Netherlands) on 31st of August. The two pilots from Suez Canal Authority stepped on board and were welcomed by the Captain on the bridge.

Eventually the ship made its entrance into the canal. A few miles into transit, the ship began to move from port to starboard and back. It only appeared later – according to the legal documents filed at the Egyptian court - that the pilots had been in disagreement and given ambiguous advices to the captain. The lead pilot gave the order to go ‘full speed ahead’ while the other pilot wanted the ship to slow down. As the ship accelerated speed to 13 knots – where 8 knots is the maximum on this part of the canal – the ship was pulled towards the bank of the canal and came to a dramatic standstill as its bulb crashed into the side of the port side of the canal. Weeks later it would appear that there had been a fierce discussion between the captain and the pilots whether the ship would enter the canal under these conditions. It’s not that the captain had never done the passage before, neither is visibility a point of concern with all the modern navigation equipment on board.

It was early morning 6:20 a.m. in Hamburg when Hermann Hoff’s phone started ringing urgently. He was the duty officer of Bernhard Schulte Shipmanagement, a German company that was in charge of the technical management and provided the crew for the Ever Given. He realized this was a situation he had been trained for so many times. But this was not a training, this was for real. Meanwhile international media had picked up on this incident. Across the world, the grounding of the Ever Given was Breaking News, while on social media facts and fiction were mixing into a dangerous cocktail.

He stood up and started to act to the situation at hand.

Questions

The answers on the below questions are based on the course books:

- Dickie, J.W. (2014) '21st century Ship Management', Bloomsbury, London, United Kingdom.
- Institute of Chartered Shipbrokers (2013), 'Ship Operations and Management', London, United Kingdom.

Imagine yourself being the duty officer of this ship management company and ask yourself the following questions.

Question 1: First Priority

- What is the first priority of the ship manager?

Answer:

Execute the Emergency Response Plan is what matters. First priority is to check whether crew and ship are safe, and to check whether there's any pollution to the environment.

The Ship manager needs to set up open communication lines in accordance with the Emergency Response Plan. In principle there are four functions that are critical: the master, the Company Security Officer, the designated person and the ship manager. Each job has specific responsibilities, and these must be met in all cases. It is important that communication lines are not broken. Although we talk about separate job profiles, they can be combined into one or a few persons. In larger companies, there will be four people, meaning the lines of communication are more complex. Therefore the circulation list is important to ensure that the right discussions are held and decisions made in the best interest for the safe operation of the ship.

In reality, these four functions do not necessarily work in one location. It is very likely that people assigned to either four of these jobs work in different time zones which may cause time delays in communication. Modern communication systems and information management systems may have taken away most of these concerns, but still it happens that emails remain unread in someone's mailbox. You need to realise that in the end people have to make decisions not computers and for these decisions the best and latest information has to be made available.

- **Master;** the Master and others must be guided by SOLAS 74, amended 2009 (consolidated edition, Chapter V, regulation 34.1): The owner, the charterer, the company operating the ship as defined in regulation IX/1, or any other person shall not prevent or restrict the master of the ship from taking or executing any decision which, in the master's professional judgement, is necessary for the safety of life at sea and protection of the marine environment. Also the governments must take the necessary steps to safeguard the ship master in the proper

discharge of his responsibilities with regard to the maritime safety and protection of the environment (Preamble Item 2 of the ISM Code, resolution A.443 (XI).

- **Company Security Officer:** Large ship managers have the function of CSO and designated person (DS) assigned to separate people. In most of the times, these functions are combined. This may mean there could be a conflict of interest in certain scenarios, maybe not intentional but it can influence decisions. The ISPS Code and ISM Code place certain constraints and a minimum set of responsibilities that must be met. The CSO will need to liaise with the master, SSO and PFSO to ensure the requirements of the declaration of security is met and that the ship is informed to set the level of security on board and what that entails.
- **Designated Person Ashore (DPA);** the designated person ashore needs to provide structure and support for an efficient and effective Safety Management System onboard the vessel. The DPA is especially designated to ensure a reliable connection between the company and the crew and supervise the safe operation of the vessel. His duties are outlined in the ISM Code and are as follows: 1) monitoring the safe and efficient operation of each ship, in particular regarding the safety and pollution prevention aspects; 2) take such steps necessary to comply with the company safety management system, ensure the proper provision is made for each ship to be so manned, equipped and maintained that it is fit to operate in accordance with the SMS and with statutory requirements, 3) to provide sufficient authority and resources and has the appropriate knowledge and sufficient experience of the operation of the ship at sea and in port, to enable him to comply with the two duties above (1 and 2).
- **Ship manager;** for the ship manager he needs to be kept in the loop for everything that is taking place on the ship. While the others have specific responsibilities, the ship manager must know what is taking place and what to do with the ship, being part of a fleet of ships. It is important that records of events is kept up to date and correctly. The set of records must be exactly the same on board of each ship. Some records are maintained manually while others are recorded automatically. Examples of automatic data recorders on the bridge are: course and speed recorder, echo sounder trace recorder, GMDSS installation, Vessel data recorder (VDR), AIS, bridge log book. In relation to cargo operations: oil discharge monitoring equipment, NOx recorder, SOx recorder, Inert gas recorder pressure and oxygen content, sounding book, cargo record book.

Question 2: Emergency Response plan

- What activities would you put in motion? Organise your team. Who do you want to be part of the Emergency Response Team?
- Set up an Emergency Response plan and organize the work within your ship management company to cope with the situation. Who does what?

Answer:

Ship manager will probably find himself part of the office emergency response team in case any of their ships gets involved in an emergency situation. The reason is that the ship manager should be kept up to date at all times – under normal circumstances – and receive the latest and most up-to-date data. This is even more so in case of emergency situations.

The structure of the emergency response team depends on the structure of the company, how many people are employed and who has the necessary tools to be productive in doing the job. There is no rule of thumb who should be in the Emergency Response Team. The company will have to ensure that it has the ability to respond to any situation 24/7/365. The set up of the shore-side emergency response team requires good thought and a proper process for operation.

Emergency Response Team would consist of people from the following departments:

Function	Description
Chief Executive Officer	May be part of the team or will require to be given updates on the situation. The CEO should only be given factual information.
Operations department	Must be someone who has in-depth knowledge of the operation of the ship in question
Personnel department	Must have access to all crew files and contact details. Should be able to contact the manning agency if crew is not directly employed by the company
Technical department	Will be the technical superintendent of the ship in trouble. Needs to have in-depth knowledge of the technical specifications of the ship and current state of certificates, and outstanding deficiencies, that may impair the ability to handle an emergency situation.
Legal department	The legal implications of every action taken must be assessed. The person may either be a legal advisor from within the company or someone only for such occasional situations.
Public relations	Maritime incidents usually get high media coverage, especially in this day and age of internet. The media is quick to find out details via various sources. Therefore an expert much be assigned to make sure only designated communication lines are open for the press. People on board of the vessel should be protected from direct contact with the media.
Master of vessel	Usually being under great pressure, the master will have to require full support from the ER team to provide him with accurate information and make sure information is channeled through to the right people. The team should ensure correspondence is simple, and free from non-essential information. Masters should decline to speak with anyone outside of the team and instead direct inquiries to the contact number of the team.
Third party interests	This can include the owner, charterer, P&I insurance, hull and machinery insurance, flag administration, classification society and national administration of the water where the vessel is located.

What to do?

1. Check your emergency response manual (SOPEP in case oil pollution is involved).
2. Set up an emergency response room which is equipped with large screen tvs, computers, dedicated telephone lines, access to ship's drawings and plans, recording devices for visual and audio. Make sure people have been trained how to use this equipment. During emergency situations there is no time to learn how tools work.
3. Make sure there is a list of contact details for external organisations with clear instructions who communicates with whom.
4. Make sure there are other relevant documents available, such as the shipboard marine pollution emergency plan (SMPEP) for noxious liquid substances, and the vessel response plan (VRP).
5. Keep your records at all times. Be aware that this information may need to be used in legal proceedings

Question 3: Prevention

- What would you do to prevent such accidents from happening in the future?

Answer

The ISM Code sets the standards to prevent such accidents from happening in the future. The continuous improvement of safety management skills is the third pillar of the ISM ideology. (The other two are the creation of safe operating practices and working environments and the establishment of safeguards against all identified risks.

1) *Having the safety management system in place as a 'living' system*

The safety management system is mandatory and needs to address:

- What the safety and environment protection policy is and how the ISM Code objectives will be achieved, maintained and implemented throughout all tiers of the company and its operations;
- It also provides instructions and procedures;
- Defines levels of authority and channels of communication;
- Reporting procedures for accidents and non-conformities;
- Preparation for emergencies and emergency response planning;
- Procedures for management reviews and audits.
- On individual ships the roles and responsibilities need to be assigned to named individuals, to prevent people from not being addressed. Management reviews and

audits will have to take in all the opinions and experiences of all involved, which have to be noted down, reflected upon and drive further improvements towards safety on board.

2) *Document of Compliance (DOC).*

The Document of compliance indicates that the company is capable of complying with ISM Code requirements. It relates solely to the ships indicated explicitly at the point when the verification was undertaken. Any new ships added to the fleet at a later stage must be verified individually. When the company has ships that sail under different flag administrations it will have to have made sure that the DOC from each flag administration is correctly issued, showing the ship types operated by the company for each flag. The DOC has a validity of a maximum of five years, subject to it being maintained by endorsement at annual verification.

There is an important thing to remember: if a Safety Management Certificate (SMC) does not pass an external audit, only that ship is affected. When a DOC is lost, all ships connected to that DOC lose their SMC.

3) *Internal audits and external audits*

To achieve ISM Certification the company needs to be audited. Both vessels and owner/managers' offices will have to undertake annual internal audits before both are subjected to external audits. The full term certificates have a time frame of five years, which is from the date of completion of the internal audit. The cycle, once it is established will have to be maintained and the company will need to ensure the audit windows are met. That is more difficult for the offices than it is for the ships. Non-conformities will have to be resolved and closed out within the time agreed on in each non-conformity report, otherwise it will get the status of a major non-conformity. If a major non-conformity is raised at the internal audit, a certificate will not be recommended for issuing until the major non-conformity is resolved.

The audit cycles:

Office	Ship
Initial	Initial
Annual (every year)	Intermediate (between 2 nd and 3 rd anniversary)
Renewal	Renewal

4) *ISM Code audits for certification*

The audits can be done by the flag administration or administrations with which the company has the ship registered, or by a Recognised organization (RO). There are four certificates: Interim

Document of Compliance (one-off certificate with a validity of maximum 12 months), Interim Safety Management Certificate (ISMC, max 6 months + 6 months extension possible), Document of Compliance (DOC, 5 yrs validity) and Safety Management Certificate (SMC, max. 5 yrs).

5) Educate and train staff and crew

Just like with any management system that needs to be in place by law, a SMS does not serve the purpose of passing the audits. If this is the case, often it becomes an administrative burden and will fail to fulfil its real purpose, namely to make staff continuously aware of safety issues and how to control them. The personnel both ashore as well as on board will need to be able to work with it efficiently and effectively. Audits are not repetitive, they are cyclical, which means there is a process of continuous improvement and learning.

For a more elaborate answer on all answers to the above questions, refer to the book 21st Century Ship Management by Capt. J.W. Dickie.

Teaching note

Lecture plan Ship Management example (Zoom session)

Time	Zoom	Teacher role	Student role	Teaching assistant role
09:00-09:05	Main Zoom	<p><i>Explaining</i> Providing the learning aim and the set-up of the two-hour session.</p> <p>Learning aim <i>Understanding the effect of disruptive events from a ship management perspective.</i></p> <p>Set up</p> <ul style="list-style-type: none"> Lecture about the Ever Given (providing background information for the case) Make the study case about the Ever given Discussion and providing answers of the case study. 	<i>Listening and asking questions</i>	<i>Starting zoom</i>
09:05-09:30	Main Zoom	<p><i>Lecture</i> In this part the teacher explains the event of the grounding</p>	<i>Listening and asking questions were needed</i>	<i>None</i>
09:30-9:45	Main Zoom	<p><i>Providing instructions Study case</i> Instructions:</p> <ul style="list-style-type: none"> First you will start with reading the document and question 1 and 2. Then you will be placed in a breakout room for providing answers for the first three questions with a random assigned group. After 15 minutes you will come back to the main zoom and we will discuss the answers. I will ask per group (or per person) what the possible answer is. 	<i>Listening to the instructions and reading the introduction and narrative of the case study</i>	<i>Preparing breakout rooms (12 rooms: 6/7 students per group)</i>
9:45 – 10:00		Coffee break		
10:00 – 10:30	Breakout rooms	<p><i>Standing by for questions by students.</i> In the meantime, the teacher can go to different breakout rooms.</p>	<i>Providing answers to the first two questions, 15 minutes per question.</i>	<i>Assigning everyone to a group and send notification when 5 min left</i>

Case study – Ever Given

Ship Management

10:30 – 10:50	Main Zoom	<p><i>Discussing the answers of the first two questions (Q1, Q2)</i></p> <p>Ask per group what their answers are. When nobody unmutes him/herself, ask personally. The TA has a list of names per group.</p>	<p><i>Participating by providing possible answers and learn from the correct answers.</i></p> <p><i>Asking questions when something was unclear</i></p>	<p><i>End breakout room and move everyone to main zoom.</i></p> <p><i>Providing names per group to the teacher when necessary</i></p>
10:50-11:00	Main Zoom	<i>Break</i>	<i>Break</i>	<i>Break</i>
11:00-11:10	Main Zoom	<p><i>Launch question 3.</i></p> <p>Introduce question 3 (Preventive measures).</p>	<i>Asking questions when something was not clear in the first part.</i>	<i>Checking whether everyone is back from the break</i>
11:10-11:15	Main Zoom	<p><i>Providing instructions for the second part of the study case</i></p> <p>Instructions</p> <ul style="list-style-type: none"> You will be randomly assigned to a breakout room In the breakout room you will try to answer the last question (Q3) After 15 minutes you will come back to the main zoom. We will start a poll with multiple answers to the question. 	<i>Listening to the instructions</i>	<i>Preparing breakout rooms (12 rooms: 6/7 students per group)</i>
11:15 – 11:40	Breakout room	<p><i>Standing by for questions by students.</i></p> <p>In the meantime, the teacher can go to different breakout rooms.</p>	<i>Providing answers to the last three questions (Q4, Q5 & Q6) with the group.</i>	<i>Assigning everyone to a group and send notification when 5min left.</i>
11:40 – 11:55	Main room	<i>Discussing the answers of Q3.</i>	<i>Asking questions when something was unclear</i>	<i>End breakout room and move everyone to main zoom.</i>
11:55 - 12:00	Main room	<p><i>Asking whether there are still questions about the overall session.</i></p> <p><i>Wrapping up the session by summarizing the topics that are discussed</i></p> <p>End session</p>	<i>Asking the last questions</i>	<i>End session when needed</i>

Disclaimer

The materials and information contained in this study case is for educational purposes only. You should not rely upon the material or information of this presentation as a basis for making any business, legal or any other decisions. Whilst we have endeavored to keep the information up to date and correct, Erasmus UPT makes no representations or warranties of any kind, express or implied about the completeness, accuracy, reliability, suitability or availability with respect to the information in the study case, related graphics or sources contained in this study case for any purpose. Any reliance you place on these materials is therefore strictly at your own risk.

Colophon

The study materials are made in July-October by:

Erasmus Universiteit Rotterdam | UPT

Authors: Maurice Jansen

Rosanne van Houwelingen

The study materials have been made possible with an educational voucher of TKI Dinalog

For more information you can contact Maurice Jansen (m.jansen@eur.nl)