



AUTONOMOUS SHIPS: CARRIAGE OF GOODS BY SEA – LEGAL ASPECTS

DR CEREN CERIT DINDAR

Lecturer at Ankara Yıldırım Beyazıt University, Faculty of Law



**International Maritime And Transport Law Course
Inter University Centre, Dubrovnik, Croatia
7th – 9th September 2020**



Content

1. The shipowner's obligation to provide a seaworthy vessel
2. The charterer's obligation to order the ship only safe ports/berths (safe port warranty)
3. Liability for loading and discharging operations
4. Other problems related to usage of autonomous ships for carriage of goods by sea
 - Limitation of the shipowner's liability
 - Application of provisions related to exclusion of liability



Charterparty

“Where the shipowner agrees to make available **the entire carrying capacity** of his vessel for either **a particular voyage** or **a specified period of time**, the arrangement normally takes the form of a **charterparty**.” (John Wilson, Carriage of Goods by Sea, 7th ed., p.3)

- A particular voyage (Hamburg to Istanbul) → voyage charter
- A specified period of time (5 months) → time charter



The Shipowner's Obligation to Provide a Seaworthy Vessel

- Most charterparties expressly impose an obligation of the shipowner to provide a seaworthy ship at the time of delivery of it
 - Clause 2 of NYPE 2015 → “The Vessel on delivery shall be seaworthy and in every way fit to be employed for the intended service...”
 - Another examples for express seaworthiness obligations → See lines 21-24 of NYPE 46, clause 2 of NYPE 93, clause 1 of Baltime, clause 2.1 of BPTIME 3 and 1(b) of Shelltime 4 forms.
- Even if there is no express seaworthiness requirement, this is implied by law. *Kopitoff v Wilson* (1876) 1 QBD 602.



The Shipowner's Obligation to Provide a Seaworthy Vessel

- What is a seaworthiness?

“A vessel must have that degree of fitness which an ordinary careful and prudent owner would require his vessel to have at the commencement of her voyage having regard to all the probable circumstances of it...Would a prudent owner have required that it (i.e. the defect) should be made good before sending his ship to sea, had he known of it? If he would, the ship was not seaworthy...”

McFadden v Blue Star Line (1905) 1 KB 697

- the **condition of the ship**, **its crew** and **equipment** should be fit enough to withhold foreseeable perils that can be encountered during the charter service
- the ship to be fit **for the contemplated service**



Seaworthiness - Autonomous Ships

- Traditional ship

- single item containing **hull (body)**, containing the **machinery, equipment** and **control centre** that enables members of the crew, to decide what to do, how to do and what not to do

- Autonomous ship

- not one single item, two parts → The sea module and the land module (land module is generally referred as a **control centre**)
- the hull (body) of the vessel is still on the sea
- control centre is on the land (this is not compulsory, in some cases control centre might also be on a platform located on the sea)



Seaworthiness - Autonomous Ships

- While evaluating fulfilments of requirements of seaworthiness in a particular case, will attention be given to two parts or will we focus on only the sea part?
 - The answer of this depends on whether the centre can be accepted as an essential components of the ship or not
 - Under Turkish law, while determining whether one thing is an essential components of the other thing, the attention is given whether those parts can be separated from each other without causing damage or not
 - The modern view → the attention should be given the degree of operational and functional connection between them
 - Conclusion → Seaworthiness analysis should be made focussing on two parts
 - Example → the sea part is capable of proceeding the voyage technically and safely but there is a insufficiency of control centre's staffs that are engaged in operating the ship → UNSEAWORTHY
 - *"Would a prudent owner have required that it (i.e. the defect) should be made good before sending his ship to sea, had he known of it? If he would, the ship was not seaworthy"*



Seaworthiness - Autonomous Ships

- The content of seaworthiness should be reconsidered!
 - while evaluating the seaworthiness of the traditional ship → the attention is given on the condition of the **hull, machinery, equipment, crew's qualifications and certifications**
 - while evaluating the seaworthiness of autonomous ships → in addition to written elements above, **computer programming equipments (both hardware and software) of the vessel, cyber risk management systems, connection, qualifications of the control centre's personnel for handling autonomous ships** should be in consideration
- The carrier's due diligence obligation continues to exist. (Hague and Hague/Visby Rules art.3/1).



The Charterer's Obligation to Order The Ship Only Safe Ports/Berths

- In time charters, it is common to see an express limitation that the chartered vessel trades only between safe ports and safe berths (safe port warranty)
 - Clause 1/b of NYPE 2015 - "Trading Limits - The Vessel shall be employed in such lawful trades between safe ports and safe places within the following trading limits Click here to enter text. as the Charterers shall direct
 - Another example for safe port warranty → clause 2 of Baltime, clause 4/c of Shelltime 4
- It is submitted that in the absence of any express provision regarding trading of the vessel between safe port, such a term is implied if this is necessary to give a business efficiency to the contract. [*Vardinoyannis v The Egyptian General Petroleum Corporation (The Evaggelos TH)* [1971] 2 Lloyd's Rep 200; *Atkins Internaional HA v Islamic Republic of Iran Shipping Lines (The APJ Priti)* [1987] 2 Lloyd's Rep 37, p 42.]



The Charterer's Obligation to Order The Ship Only Safe Ports/Berths

- What is safety - When the port is accepted safe?

“a port will not be safe unless, in the relevant period of time, the particular ship can reach it, use it and return from it without, in the absence of some abnormal occurrence, being exposed to danger which cannot be avoided by good navigation and seamanship...”

Leeds Shipping v. Société Française Bunge (The Eastern City) [1958] 2 Lloyd's Rep. 127, at p. 131.



Safe Port Warranty – Autonomous Ships

- Safe port warranty will definitely continue to exist but what constitutes safety will not be the same
- Connection problem in the port area, absence of particular hardware and sensors to approach the vessel might make the port in question unsafety
- Criteria which are used to determine whether the port in question is safe or not should be reviewed
- Until introduction of new criteria, it will be in favour of the parties to stipulate this warranty in more detail in their contract



Liability for Loading and Discharging

- Currently cargo operations on the port are handled by humans
- It is expected that some of autonomous vessel are designed have a feature of handling loading and discharging operations automatically - Yara Birkeland
- It means that during loading and discharging, there will be no intervention of charterer from the outside
- Under current regime, the liability for loading and discharge is usually imposed to the charterer



Other Problems Related to Carriage of Goods by Autonomous Ships

The limitation of the shipowner's liability

- Some form of limitation has been adopted by many countries relying on the fact an shipowner should not be found himself in a position of being liable for more than the value of his trading asset, in other words his ship.
- Limit of the liability is determined by referring the national value based on the weight on the ship.
- While calculating the limitation of the shipowner's liability, should we count the weight of the control centre too?





Other Problems Related to Carriage of Goods by Autonomous Ships

Application of Provisions related to Exclusion of Liability

- Article 4, section 2 of Hague rules contain long list of exceptions
“Neither the carrier nor the ship shall be responsible for loss or damage arising or resulting from ---
 - (a) Act, neglect or default of the master, mariner, pilot, or the servants of the carrier in the navigation or in the management of the ship ;*
 - (b) Fire, unless caused by the actual fault or privity of the carrier ;*
 - (c) perils, dangers and accidents of the sea or other navigable waters ;*
 - (d) Act of God”*
- If the fire occurs in the control centre without any fault or privity of the carrier, then can we say that the carrier will not be responsible for the loss or is this exception applied only when the fire occurs on the ship.





Thank you for your time!