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THE INSTITUTE OF GENERAL AVERAGE:

RELEVANCE IN MODERN TIMES

Dissertation to obtain a Master's Degree in Law and Economics of the Sea

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"*The pessimist complains about the wind. The optimist expects it to change. The realist adjusts the sails."*

William Arthur Ward

Acknowledgments

To all those who are at sea and make the world go around through the seafaring profession, I have the utmost respect for you.

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To all my friends and co-workers at the Port of Sines.

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Citations

The text of this dissertation was written in English.

The citations in this dissertation refer to works consulted, websites, and academic and journal articles, and are identified by APA style.

Abbreviations list

YAR	York-Antwerp Rules
TEU	Twenty Equivalent Unit (container)
IMO	International Maritime Organization
IGA	Institute of General Average
UNCTAD	United Nations Conference on Trade and Development.
P&I	Protection and Indemnity
GHG	Green House Gases
DCS	Data Collection System
MRV	Monitoring, Reporting and Verification
ETS	Emission Traffic System
ETD	Energy Taxation Directive
ICS	International Chamber of Shipping
NOAA DARRP	Damage Assessment, Remediation, and Restoration Program
UNCLOS	United Nations Convention on the Law of the Sea
SCA	Suez Canal Authority
CMI	Committee Maritime International

Declaration of the total number of characters

In accordance with the rules of writing style in force at Nova Law School of the Universidade Nova de Lisboa, it is stated that the body of the paper, including spaces and notes, occupies a total of 181.636 characters.

Abstract

The sea is essential for the survival and evolution of humankind, inspiring both war and separation, and proximity and peace. As the economy has developed into what we know today, the preference for the maritime transport sector has also been strengthened, as it is capable of carrying all types of cargo, in much greater quantities than any other mode of transport, in a quick and cost-effective manner.

At the core of maritime law is the Institute of General Average, one of its oldest mechanisms, the prime discussion of the following dissertation. The term refers to the division of the costs and losses purposely incurred for the salvage of the maritime adventure, its cargo, and other property among the many parties with direct participation in the actions perpetrated.

In order to encompass the rights and obligations of shipowners when cargo on board a ship needs to be jettisoned, a set of model internal maritime regulations known as the York Antwerp Rules (YAR) was created, regularly updated since 1864, and progressively adopted universally. Overall, it is a very honorable and charitable organization, and although General Average is now an insurance risk, this does not lessen its significance.

On the other hand, it is also discussed whether modern piracy could give rise to a situation of General Average, and whether cargo voluntarily handed over to pirates as part of the composition could fall within the Institute.

Moreover, a debate on the modern maritime world would be incomplete without including European and international objectives with regard to decarbonization, particularly due to the fact that these relate to policies aimed at avoiding or reducing emissions, such as the ETS system.

Of equal pertinence is to address the stranding of the "Ever-Given" ship, which blocked the Suez Canal, one of the busiest shipping channels in the world, responsible for the passage of 12% of all seaborne trade, for 6 days in March 2021, and which today has the potential to be one of the largest cases of General Average in history. Due to the severe economic consequences that resulted from this occurrence, the "Ever-Given" controversy has raised awareness in the

international community, not only of the need for caution and oversight in the shipping industry but also of the impact and relevance of General Average.

By discussing various topics, this dissertation aims to demonstrate that although a principle is old in nature, it does not imply that it is outdated, and General Average is the prime example of this.

KEYWORDS: General Average; Maritime Law; Insurance; York-Antwerp Rules; Ever Given; Suez Canal

Resumo

O mar é essencial para a sobrevivência e evolução da Humanidade, inspirando tanto a guerra e a separação, como a proximidade e a paz. À medida que a economia se foi desenvolvendo naquilo que hoje conhecemos, foi também fortalecida a preferência pelo setor do transporte marítimo, capaz de levar todo o tipo de carga, em quantidades muito superiores a qualquer outro modo de transporte, de uma forma rápida e economicamente sustentável.

No âmago do Direito Marítimo está o Instituto da Avaria Grossa, um dos seus mecanismos mais antigos, alvo da principal discussão desta dissertação. O termo refere-se à divisão proporcional, entre os proprietários e/ou consignatários, das despesas e danos propositadamente incorridos à carga/navio para o salvamento da aventura marítima.

Com o objetivo de abarcar com os direitos e obrigações dos armadores e/ou carregadores quando a carga a bordo de um navio precisa de ser alijada, foi criado um conjunto de modelos de regulamentos marítimos internos conhecidos como as Regras de Antuérpia de York (YAR), regularmente atualizadas desde 1864 e progessivamente adotadas ao nível universal. O surgimento dos Seguros Marítimos não diminuiu a sua importância, mesmo estando a Avaria Grossa na cobertura do seguro.

Por outro lado, é também discutido se a pirataria moderna poderá dar origem a uma situação de Avaria Grossa, e se a carga voluntariamente entregue aos piratas como parte da composição poderá ser enquadrada dentro do Instituto. No mais, um debate sobre o mundo marítimo moderno estaria incompleta sem incluir

os objectivos europeus e internacionais no que diz respeito à descarbonização, particularmente devido ao facto de estes se relacionam com políticas que visam evitar ou reduzir as emissões, como o sistema sistema ETS.

De igual pertinência é abordar o encalhamento do navio "Ever-Given", que bloqueou o Canal do Suez, um dos canais de navegação mais movimentados do mundo, responsável pela passagem de 12% de todo o comércio martítimo, por 6 dias em março de 2021, e que hoje tem potencial para ser um dos maiores casos de Avaria Grossa na história. Devido às graves consequências económicas que resultaram desta ocorrência, a controvérsia do "Ever-Given" sensibilizou a comunidade internacional, não só para a necessidade de cautela e supervisão na indústria do *shipping*, mas também para o impacto e relevância da Avaria Grossa.

Ao discutir vários tópicos, esta dissertação tem como objetivo demonstrar que, embora um princípio seja antigo na sua natureza, não implica que esteja desatualizado, e a Avaria Grossa é o principal exemplo disto.

PALAVRAS-CHAVE: Avaria Grossa; Direito Marítimo; Seguros; Regras de York-Antuérpia; Ever Given; Canal do Suez

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Introduction

Currently, 90% of international transport is carried out by sea, and those so-called maritime voyages are based on international purchase and sale agreements, which are governed, depending on the case, by Community or International Law. According to Statista, there are currently more than 50,000 merchant ships sailing the oceans of Planet Earth (Department, Statista Research, 2021), attesting to the rather unknown magnitude of this field.

Diving into the history of shipping, one realizes how rich it is, and why it has this gigantic magnitude today. From the Mesopotamian peoples in ancient days, who used water for trade, to the Egyptians in the Nile River, along with the Greeks and Romans who sailed from this sea to the African coast, to the Phoenicians who controlled the Mediterranean, sailing has been at the core of humanity.

The Institute of General Average, on the other hand, works hand in hand with Maritime Law, being a manifestation by excellence of the solidarity principle, as it continues to guarantee a balanced and fair apportionment of risks; there is no system more specific to maritime law than General Average, a procedure in which there is sacrifice of part of the cargo or ship in order to salvage the maritime voyage. This is done in the name of the common interest, giving then rise to the apportionment of costs among all parties involved. "General" has been used alongside Average, since the owners of the different interests involved are “required to absorb a proportionate share of the loss if any loss is suffered to the common good by a specific interest” (Matin, 2010).

Although not a common occurrence these days, the traditional example of a General Average is the jettison of cargo. The most common occurrences in modern times General Average are fires on board ships to be put out[1], stranded ships to be towed out, and ships with engine difficulty to be towed to a port of refuge for maintenance; essentially, turning damage and expense into a general average claim is more common today.

[1] For example, the case of “Maersk Honam, a container ship operated by Maersk Line. On March 6, 2018, the ship caught fire while traveling across the Arabian Sea, killing five of its 27 crew members, including one who was saved but later passed away from their wounds” (Maersk, 2020).

But the record of this beautiful Institute dates from way back. Once the maritime Republics had lost their strength and influence and the Mediterranean Sea shed some of its importance in trade, the idea was incorporated into the laws and regulations of the emerging maritime powers. It can be found in the "*Consolat de Mar*" in Barcelona, as well as in the "Rolls of Oleron", the first proper maritime codification in northwestern Europe, at around 800 B.C.

Since 1864, a set of rules were established to regulate the institute and to uniformize it at an international level. The York Antwerp Rules (YAR) were created, a set of sample internal maritime regulations that deal with the rights and responsibilities of ship and cargo owners when cargo on a ship needs to be thrown overboard. An international committee drafted the regulations in 1864, the Committee Maritime International (CMI), an association of maritime law associations from throughout the world, is currently responsible for enacting the standards.

Ever since, the YAR freely incorporate and adopt to govern their interactions in that particular contract. They are not covered by national statutes or international treaties. Thus, rather than being imposed on the markets, they might be described as an illustration of contemporary and global *lex mercatoria*, or “new law merchant”.

The whole process begins when the average adjuster makes the General Average allowance, normally centered on one of the variants of the YAR, the standard criteria used globally for calculating and distributing general average claims. On the other hand, the YAR are not mandatory, and not always appropriate to the occurrence at hand, since different variants of the text have been in circulation throughout the years, and they do not provide a complete general average layout.

So, the question of whether a certain version of the YAR is relevant, and if so, which version, can have a significant impact on the final contribution due or recovered; after all, parties other than the shipowner may be entitled to a contribution if they have incurred expenditures or suffered damage.

Even if a loss or an expense is regarded as entitled to general average, that does not mean that a contribution claim must be made at the same time. Most legal

systems provide a defense if the party claiming contribution is responsible for the incident that resulted in the general average items (for example, the fire or grounding). The court will finally decide if there is a matter of general average and whether there is a requirement to pay.

In the event of a general average, security is frequently requested for a payment to be paid later. In some jurisdictions, the carrier is even required to provide this security on behalf of all parties with a general average claim. The contents of the security forms (the "average bond" and "average guarantee") are frequently crucial to the case's eventual conclusion. It is critical to examine the wording carefully to avoid damaging any rights.

Nowadays, there is a debate about the need for the institute of General Average, whose function may already be in doubt, and its disappearance, if not its usefulness, as a result of the significant weight given to the expansion of marine insurance. Two developments - changes in the financial organization of marine insurance and changes in the technological organization of international ships - have raised questions about whether or not the General Average is still applicable.

This dissertation aims to provide deep research on the importance of the institute in general, delving through important topics such as piracy and decarbonization, and to conclude that General Average still holds its importance in the global maritime world, since it has been claimed several times throughout the past few years, whereas with Maersk Honam, Ever Given, or even in the most recent days with Ever Forward[2] cases.

1. The importance of global maritime transportation

Water has shaped humanity, has motivated both peace and war, and is essential for human survival. Naturally, the evolution of the economy followed this understanding and invested in this mode of transport capable of carrying all kinds of cargo in large quantities, in a quick, economically viable and less dangerous manner.

[2] Yet another grounding by a ship operated by Evergreen, in the third trimester of 2022.

Within the macroeconomic perspective, it is necessary to know the past few years of shipping to better understand the context of today, as well as the (great) challenges that lie ahead - not only political but economic and environmental[3].

The concept of shipping, however, has changed throughout the years. It was idealized by Egyptian merchants in the third century BC, who realized that exporting goods overseas was more effective and economically viable and less dangerous than delivering them by land. Back in those days, the cargo was packed by groups of dock workers on decks or in confined barrels and other containers before being put into the ship, meaning they usually spent more time in this process than "*per se*" in sailing.

Even though they haven't changed much over their 6,000-year history, ships remain essential means of transportation, and the fact that ships can be plainly recognized in ancient paintings demonstrates how gradual and ongoing this evolution was up until about 150 years ago. Even though steam propulsion started to dominate at that time, it was never widely used for local transportation. There are many ships still in use whose beginnings are forgotten in prehistory because some solutions to the challenge of providing water transport were eminently successful and efficient several millennia ago (Britannica, s.d.).

With this said, up until 1956, hardly much changed, until Malcolm McLean[4], an American truck driver, loaded what were then called '58 metal boxes onto a ship, sailing from New Jersey to Kingston' (Andrews, 2020). From that day forward, the sector was completely transformed, containers could not only keep the goods safe, but they could also be removed in one peace and transported in truck beds and freight trains when the ship anchored in a port. As a result of the profusion of invention, container sizes were standardized (twenty-foot containers, or twenty-equivalent units, TEU), and the first transatlantic container service was launched

[3] Ports also play a key role in the energy transition towards decarbonization since they play a decisive role in countries' energy supply. This is also one of their biggest challenges, since the drastic decreases in the handling of fossil products limit the capacity for investment in infrastructure, forcing a reinvention of the port business.

[4] Malcolm Purcell McLean, also known as Malcolm McLean, was an American businessman who lived from November 14, 1913, to May 25, 2001. He was a businessman in the transportation industry who created the contemporary intermodal container, which transformed global trade and transportation in the second half of the 20th century. By removing the necessity for repeatedly handling individual pieces of cargo, containerization significantly reduced freight costs. It also increased reliability, decreased cargo theft, and reduced inventory costs by speeding up transit times.

by Moore-McCormack lines in 1966, while one of the first contemporary container ships initially set sail in 1968 (Andrews, 2020).

Maritime transportation has since undergone a remarkable evolution and, over the past 70 years, a lot of technological advancements have succeeded[5], particularly the dissemination of the "container" and the increase in capacity of container ships, some of which can reach lengths of more than 400 meters and with a capacity of 23.000 TEU[6]. “Currently, there are seven major types of container ships in service. In ascending order, they are – Small Feeder, Feeder, Feedermax, Panamax, Post Panamax, New Panamax (or Neo Panamax) and Ultra Large Container Vessel (ULCV)” (Network, 2021).

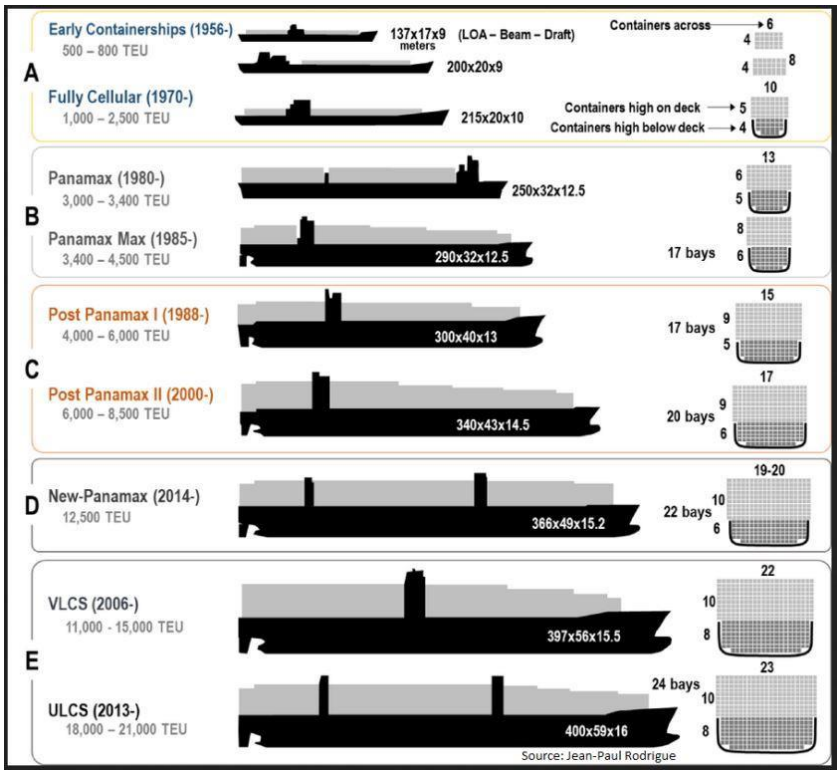

Figure 1 *LOA: Length overall. Source: Ashar and Rodrigue, 2012. All dimensions are in meters.*

This growth trajectory has nonetheless encountered, in the last few years, a few major setbacks.

[5] Mr. Malcom Mclean would surely be proud to see how far we have come with his invention, with Autonomous Container Terminals being developed and enhanced with success, with more than 40 ports around the world having some sort of this equipment: and ships currently sailing with more than 23.000 TEU.

[6] “With a capacity of 23,992 TEUs, Ever ACE is currently the world’s largest container ship. It set sail on her maiden voyage in July 2021. This 400-meter-long giant has 24 rows of side-by-side containers having a massive breadth of 61.53 meters. This modern marvel was built by Samsung Heavy Industries in South Korea. The main engine is a 2-stroke Wartsila engine comprising of 11 cylinders delivering 70950 Kilowatts of power which accelerated the ship to a cruising speed of 22.6 knots” (Network, 2021).

The first major setback on global supply chains was the COVID-19 pandemic, which started to have a negative influence on worldwide markets in the third trimester of 2020. International maritime trade growth has stagnated in 2020, hitting its lowest level since the 2008–2009 financial crisis, as a result of the recession in the global economy and trade. This crisis was accompanied by the blockage of the container ship Ever Given[7], one of the largest container ships in the world, in the Suez Canal.

However, overall, maritime transportation was able to navigate the crisis, and for some components of the supply chain, the impact was less severe than previously anticipated, and prices were going back to normal. Carriers were able to manage decreased levels of demand and the initial shock. Notwithstanding, port and landside operations found it difficult to adapt, and the situation for seafarers worldwide was dangerous as they were engulfed in an unparalleled global crew-change crisis[8].

On the verge of recovering, another major setback occurred, the war in Ukraine, which started on that fateful Thursday, February 24, 2022; this will not only remain etched in the history of Ukraine and Russia, but in the history of all, since in the global world we live in today it is hard for a crisis to stay secluded in one place. But the fact is that “since February 2022, the price paid for the transport of dry bulk goods, such as grains, increased by nearly 60%. The accompanying increase in grain prices and freight rates will lead to a 3.7% increase in consumer food prices globally” (UNCTAD, War in Ukraine raises global shipping costs, stifles trade, 2022).

This inflation is continuing to worsen throughout the months, with some of the most essential products rising to a price never seen before. These two occurrences in such a closed space in time are being designated as a recipe for disaster in terms of living costs, and it is a case to say – living was never this expensive.

[7] Ever Given, from Evergreen, is one of the biggest container ships in the world, became stranded in the Suez Canal on March 23, 2021, preventing the flow of any additional cargo for six days.
[8] During the pandemic, almost every service closed down to the public, meaning that crews did not have a flight home, this caused a massive crisis, and some seafarers had to stay in service for 14 months.

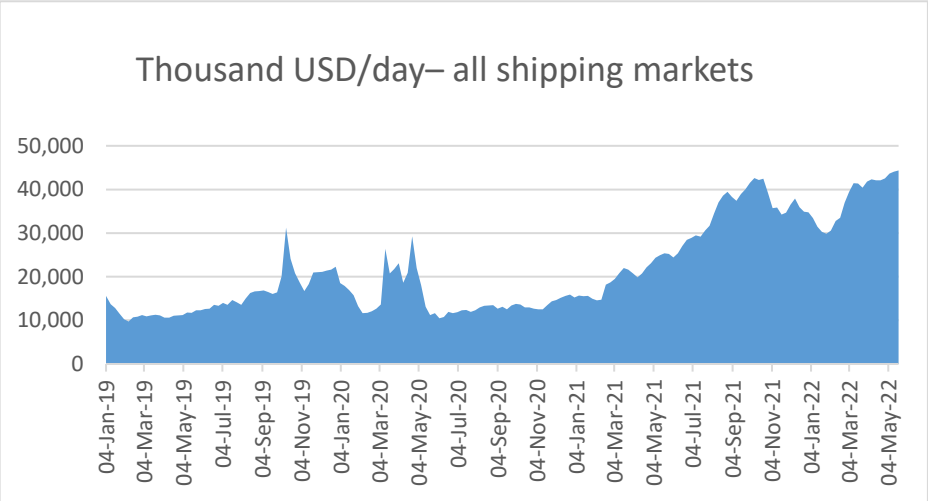

Figure 2 *- The price of shipping is rising again. Source: UNCTAD Secretariat, based on data from Clarksons Research up to 8 April 2022*

Despite the worrisome future, world maritime trade has only slowed down with these events, continuing to reveal massive numbers. The latest UNCTAD report, although written before the war in Ukraine, reveals that the total volume of maritime trade in 2021 was 10.7 billion tons, down 3.8% from the previous year. In terms of containerized cargo, 815.6 million TEUs were handled, down 1.2% from the previous year.

This report predicts a positive short-term future for the industry, noting that there are several factors causing uncertainty, including the pandemic, supply-chain disruption, a change in globalization patterns, rising transport costs, and congestion at ports. Also in this report, UNCTAD expects the world to recover by 4.3%, and that between 2022 and 2026 the sector will expand by 2.4%. (UNCTAD, Review of Maritime Transport, 2021). This report reveals that although the COVID-19 pandemic led to a sudden drop in international maritime trade, the year 2020 showed a high recovery, mainly in containers and dry bulk.

It should be noted that this report had a bright outcome, but it was written well before the Ukrainian War. Regardless of the duration and outcome of the war that began on that Day of Infamy on European territory, the impacts of the conflict have global repercussions in several areas: human, social, cultural, economic, and military (UNCTAD, The war in Ukraine and its effects on maritime trade logistics, 2022).

Although the scenario is not as appealing as in previous years - and probably won't be for a long time - where we saw maritime trade flourish and develop - the importance of maritime transport, as well as globalization, is indisputable. The world would not be the same without the contribution of these two factors: shipping and globalization.

2. The Institute of General Average

Picture a ship full of cargo sailing to its destination; during the course of the voyage something unexpected happens, for example a fire on board, the ship became stranded or grounded due to machinery failure; or even a life-threatening situation, which may be caused by natural or artificial circumstances.

In this situation, the captain of the ship, in order to save the maritime adventure, orders to sacrifice part of the cargo, equipment, or funds (for example, to throw some of the goods/containers overboard or to sacrifice some of the cargo in a fire). In this instance, and because there was a meaning to protect the interests of all parties involved in the transportation (including cargo owners, crew, and the vessel itself), there shall be a collective and proportional contribution to fully reimburse those who sustained loss or damage.

This is the meaning of the Institute of General Average (IGA), a quite magnificent mechanism of empathy and solidarity in what can be considered as the competitive maritime world of "business as usual". Although it might seem strange for most lawyers to accept this system, almost looking like it sits in the Ether, it is a broadly used mechanism in shipping these days, in many ways thanks to its historical origin and the stability that it provides in its common principles and rules.

And so, because there has been a consistent growth of cargo handled and therefore commercialized and transported by vessels around the world, the IGA is consequently more frequently used.

2.1 History and purpose

A maritime voyage is an adventure, or was until quite recently and, as we all know, extraordinary circumstances demand extraordinary solutions. Back in those days

there was little to no shore contact when the ship carrying the cargo departed the port of loading, and it was frequently unclear if she would be able to deliver her cargo until she returned safely.

As a result, it might be required to undergo extraordinary emergency measures during the maritime voyage to save the ship as well as the goods and people on board. The extraordinary solution found to solve the issue, and probably the most unusual of all in maritime law, is the concept of general average.

The financial consequences of such planned reactions to protection from hazards would be unfair to leave where they have fallen for at least 2000 years, and most likely much longer. This is something those maritime practitioners have recognized. The concept of the general average allows for the apportionment of these losses and expenses among the stakeholders with an interest in the heritage of the maritime adventure, and as a result this can be seen as a way of distributing the cost of the voyage.

Nonetheless, the details of the general average concept have evolved throughout time and continue to depend on the local rules of each jurisdiction, but its application is still widely recognized, which is truly remarkable.

But before further analyzing how this mechanism is used, it is important to know the origin and history of the term average and the concept of general average.

2.2 The origin and use of the word

Knowing the origin of a word allows us to better understand how to use it in the day-to-day basis, it requires that the person who's applying it understands what it initially meant and how others used it in the past; as well as how its meaning has grown over time. This deep understanding on the origin of the word gives us a tremendous upper hand when it comes to figuring out how to use it most effectively, therefore it's worth looking into.

The word average in English is a transliteration of the medieval Italian term 'Avere' or 'Avaria'[9] which denoted in its first meaning the ownership of property (Musolino,

[9] This term is still used in most Latin countries, for example in Spain 'averia' or in Portuguese 'avaria' which do not necessarily correlate with the maritime field nowadays, they are simply denoted as a damage in general.

2015). In Arabic, the root is ‘awar’, in French, ‘avarie’, in Dutch, ‘averij’, in Portuguese ‘avaria’, which mostly mean, up until this day and using it solely, damage.

“Many theories have arose regarding the origin of the word, which eventually in its English version evolved into the concept of expenses or losses sustained for the common good, at least in the form of “general average”[10]; for example, in the 16th century, Dutch Supreme Court Judge Weysten argued that the word 'averij' stems from the Greek word load/cargo, while others believe the word 'havarije' stems from the French word 'havre' port, where the average was to be paid and that, as a result, an average adjuster is today someone who evaluates an insurable loss” (Kruit, 2017).

The earliest definition of the word average came about in the 1500’s, and it was deemed to be “damage sustained at sea”. In the late 1500s, it was denoted as

> *"any small charge over freight cost, payable by owners of goods to the master of a ship for his care of the goods," also "financial loss incurred through damage to goods in transit”* (Online Etymology Dictionary, n.d.).

Because of the type of calculations required to change the general average, the term "average" evolved into a somewhat "arithmetic meaning", developing into the meaning of “equal sharing of loss by the interested parties” by 1735.

The initial English usage of the term (at around 1489, or even before) appears to have the meaning of an old legal phrase for a tenant's day labor obligation to a sheriff, most likely anglicized form ‘avera’ mentioned in the English Domesday Book (1085); likewise, when a synonym for ‘avarie’ was needed, this pre-existing name came in handy (Average - Etymology , n.d.).

The Dutch word ‘averij’ and German ‘haferei’ come also from this Romanic origin. With that said "Few words have received more etymological investigation" (Online Etymology Dictionary, n.d.).

[10] Marine damage (better known as “average”) can be either particular or general, the first one is where the owner of the damaged property bears exclusive responsibility, whereas the second one is where the owner can seek a proportional contribution from all parties involved in the marine operation, concepts to be developed further on (Average - Etymology , n.d.), in chapter 2.3.

The institute of General Average is referred to as Avarie Commune in French, *Avaria Grossa* or *Comum* in Portuguese, *Averij Grosse* in Dutch, *Havarie-Grosse* in German, and *Avaria Generale* or *Comune* in Italian. These terminologies, with practically the same wording, prove a point in the institution's true meaning better than the English translation, in part because the term Average carries more uncertainty when compared to words used on a day-to-day basis.

This is frequently a linguistic barrier for cargo shippers and consignees, with an institution that is already challenging to completely comprehend the substance and finality.

2.3 The concept

General Average is a unique, and perhaps even somewhat mysterious, concept for maritime law that demonstrates how uncertain and dangerous the industry is, especially due to the fact that it is one of the oldest mechanisms, one of the first used in Maritime law. The most curious thing is, however, the fact that, since the Middle Ages, this institute has been treated separately from marine insurance.

The concept was embraced in the statutes and rules of the growing maritime powers as soon as the Maritime Republics lost their authority and influence, and the Mediterranean Sea lost some of its importance in trade. It can be found in the 'Consolat de Mar' at Barcelona, as well as the 'Rolls of Oleron', the first proper marine codification in Europe's northwestern region (Musolino, 2015).

William Dwight’s concept from 1895 is still very updated, stating “when for the safety of a ship in distress any destruction of property is incurred, either by cutting away the masts, throwing goods overboard or in other ways, all persons who have goods on board or property in the ship (or the insurers) contribute to the loss according to their average, that is, according to the proportionate value of the goods of each on board” (Whitney, 1895).

There seems to be no debate that the Rhodian Law, which dates from around 800 B.C., established, and implemented the essence of what became the Law of General Average. The Rhodian Law is only referenced in Roman law, which was

then replicated and elaborated upon in the Rules of Oléron and all other codes up until today.

The earliest documented legal instrument was Section II of "*De Lege Rhodia de Jactu*" in Digesta, Book XIV, dated 533 AD. This document refers to the principle in which:

> "*The loss to arise from the jettison of cargo for the common safety will be covered by all parties*"

Or in its original form:

> "*Cum arbor aut aliud navis instrumentum removendi communis periculi causa deiectum est, contributio debetur*." (KURUL, 2016)

And today this principle mostly applies to the "jettison of cargo" rule applied to the general average.

The actual fragment that cites the Rhodian law and supports the mentioned historical perspective comes from Justinian's Digest and should be read as follows:

> *'[t]he Rhodian law decrees that if to lighten a ship merchandise is thrown overboard, that which has been given for all shall be replaced by the contribution of all"* (Rose, 1997)*.*

The Digest is a Roman law compendium compiled by order of Emperor Justinian I of Byzantium (East Roman Empire) in the VI century and was completed fairly quickly in the year 533 A.D. It consists of 50 volumes that arrange, synthesize, and compress the body of Roman laws in use at the time organically and methodically.

There is evidence, nonetheless, that Roman Laws used and approved General Average as an institution centuries before the Digest. We may find indirect evidence of it in the Bible, where it is characterized - General Average – as an act committed for the common safety of the vessel that took St. Paul on his journey as a prisoner to Rome in the Acts of Apostles, and it is thought that the principle

originated far earlier, maybe from Phoenician rituals dating back to before 1000 B.C. (Ashburner, 1909).

It is important to note, however, that the excerpt above is frequently quoted as the sole proof of the existence and usage of General Average in Roman times, especially by modern English-speaking authors. On the contrary, it is only a small part of a much larger structure that governed the establishment of what we now call the General Average. Richard Lowndes, one of the most brilliant minds in the field of General Average, has stated that:

> "*we find in the Digest of Justinian a body of law concerning General average which, when arranged, exhibits a complete and systematical system, scarcely if at all inferior to any of modern times*" (Lowdnes, 1873).

Starting with the founding of Rhodes in the Eastern Mediterranean basin, Roman Law began to enforce these laws in a quite unique way. The common law of the sea area shaped the norms controlling the general average after the Roman Empire fell apart and, since the 11th century, the most notable compilations connected to the general average have been "The Rules of Oleron".

Three articles govern average in The Rules of Oleron, articles 8, 9, and 35. "Article 8 concerns the components of the general average for jettison of cargo; article 9 concerns the cutting away of the masts, the mooring cable, and anchor for saving cargo; and article 35 which concerns the adjustment of the general average for jettison of cargo among merchants" (Lowdnes, 1873).

Conflict and political upheavals in the Western portion of Europe, particularly in the V and VI centuries, influenced trade and commerce, particularly those bound for international routes. The Roman Empire carried with its invaders' traditions, which is unsurprising given the supranational character of international commerce and shipping rules, which can be found until this day through the rules that began to be formed.

On the other Northern side of Europe, the *Farmannalog* emerged, or 'The Law of Seafaring Trading', which was a chapter in the latter that dealt specifically with

maritime law, from the 1270s. The following is a description of how the General Average should have occurred and compensated:

> *"If men are in such situation at sea that the majority think it is advisable to jettison cargo, then what heavy goods are stowed uppermost are to be jettisoned first, but the loss of what is jettisoned is to be shared equally by all, even though it was owned only by a few of them. The penalty is a fine for anyone who will not pay out compensation for loss to a man who owned what was jettisoned, as well as double the sum it was his place to contribute to making good the loss"* (A. Dennis, 2000).

In this geographical area, the oldest written evidence can be found in the statutes of various Norwegian municipalities from the X-XI century. These written texts contain the conventions and laws established at general gatherings of all free men by the "logmað" (lawmaker). In 1270, King Magnus Hakonson, dubbed the 'Lagaboetir' (the 'Law-mender,') edited the *Boejarlog*, a county law for the entire kingdom as well as a town law.

Similar laws can be found in the "*Consulado del Mare*", which codified the customary law of seafarers in the Western Mediterranean from the 14th century onward. The decision to insure oneself against maritime risks, which first emerged in the 14th century, appears to have been made by ship and cargo owners for the first time.

The Portuguese made the first significant maritime discoveries in the 15th century[11], and this put an end to the ship-load alliance that existed in the Middle Ages. The concept of general average was incorporated into the 16th century book "Guidon de La Mer", which is a book on private law and served as a guide and also dealt with other aspects of maritime law (e.g., freight, maritime loans, etc.).

[11] The conquests made by the Portuguese on their expeditions and maritime explorations are known as the Portuguese discoveries, which began in 1418. The Reconquista and the quest for alternate trade routes outside of the Mediterranean were the driving forces behind the Discoveries, which led to Portuguese expansion and played a crucial role in defining the world map. With these discoveries, the Portuguese started the Age of European Discovery, which lasted from the 15th to the 17th centuries, and was responsible for significant advancements in astronomy, cartography, and nautical science. They also built the first ships that could safely navigate the open ocean in the Atlantic.

In article 7/2 of the 1681 "Ordonnance de la Marine", general average is defined the same way it is today, and Napoleon's Commercial Code was then amended to include these clauses. Countries began to create maritime laws that contained general average clauses, which, unlike in Continental Europe, did not exist in the USA and UK.

“The first English decision referring to “general average” was in 1799 and the first recorded American decision was in 1978, with Campbell v. The Alknomac. General average was then viewed as a civil law/maritime law concept in origin and practice and was very restricted in its application” (Tetley, 2021).

The Rules of Practice of the Average Adjusters' Association were considered English law and practice, which were in use from the beginning. The concept of general averaging was inserted into Section 66/2 of the Marine Insurance Act of 1906:

> "*There is a general average act where any extraordinary sacrifice or expenditure is voluntarily and reasonably made in time e of preserving property imperiled in the common adventure*" (Act, 1906).

As international trade progressed, it became essential to improve the concept of general average and, as a result, there was a need for international uniformity because general average fluctuated in its development between countries, resulting in significant differences in law and practice. Consequently, after 1850, several national laws were enacted that established criteria for general average, resulting in disparities between English and Continental jurisprudence. These discrepancies have been a cause for concern, motivating efforts to combine general average standards to address the problem on a global scale.

With the growth of the shipping industry, general average also began to evolve as a type of marine insurance, sharing the risks and losses of a common maritime adventure. Along with the cargo owner, the shipowner may file a claim for damages that were not his fault.

The first eleven rules that defined the concept and applicability of the general average were called the "Glasgow Rules" in 1860, and research in order to draw a

General Average Code in 1864, however, these attempts were unsuccessful. The rules were updated in 1877 and 1890, and in 1924, the Lettered Rules of A through G with comprehensive provisions were adopted. The roman numeral rules were also modified and expanded to fulfill practical and commercial requirements.

Then the York-Antwerp Rules appeared, and were subsequently revised in 1950, 1974, 1990, 1994, 2004 and 2016 to reflect changes in the maritime and insurance industries, so it is undoubtedly at first glance what would seem like a strong ancient institute. Now that marine insurance is so prominent, one would wonder if general average were still essential, especially because the use general average has become a risk protected against these insurances. Although quite a bold statement, it is a beautiful institute, the essence of Maritime law, being a manifestation, by excellency, of the solidarity principle, so this dissertation does not agree with its abolishment, as Tetley[12] defends.

Also, as a result of growing piracy off the coast of Somalia at the turn of the 21st century, the question of whether ransoms paid to pirates might be divided on a general average drew a lot of interest, “since neither the YAR nor most national regimes explicitly resolve the question of whether and, if so, which, highjack-related costs can be incorporated into the general average.

Although the issue has not yet been definitively answered in case law, it appears to have been recognized that some of the expenses associated with freeing a ship from a hijacking, such as ransoms paid to pirates, can, in theory, be recovered on a general average” (Rudolf, 2013).

2.4 Particular and General Average – differences

Average is considered to be every unusual expenditure made for the ship and its cargo, whether together or individually, and any damage to them from the time of loading and departure until the time of return and discharge.

The claim is that the word "general" is or was only used to distinguish between "general average" and "particular average." General average, in contrast, was, in theory, supported by all or some of the parties to the maritime adventure,

[12] Tetley defended this argument in his book “General average now and in the Future” (Tetley, 2021).

"whereas particular average fell exclusively upon one of the parties" (Lowdnes, 1873). But let's look more closely.

Generally, as a rule of thumb, unexpectedly incurred losses due to maritime perils are of particular average; the surveyor inspects the items when they arrive at their destination and confirms that they are in excellent shape. After the survey, a particular average declaration is provided.

The following steps can be used to divide particular average:

- Actual loss measure, loss (meaning the difference between the selling price of the items and the selling price of the damaged items).
- The actual loss measure must be modified based on the amount covered when an appraised insurance[13] policy is taken out.
- In the case of an unapprised policy, the insured can charge this amount to the underwriter up to the amount covered.
- In addition, the insured can claim certain expenses such as survey fees and sales commissions.

The responsibility of Particular Average "relies on each party, either the master and shipowners or the merchants whose goods were damaged" (Lowdnes, 1873). As per the Ordinance of Marine of 1681:

> *"Every extraordinary expense which is made for the ship and merchandise conjointly or separately, and every damage that shall occur to them for their loading and departure until their return and discharge, shall be reputed average. Extraordinary expenses for the ship alone, or the merchandise alone, and damage which occurs to them in particular, are simple and particular average (...)."* (France, 1681).

On the other hand, the gist of the general average can be summed up in five essential characteristics:

- "The loss must be the direct result of a general average act.

[13] An appraised insurance policy "is usually a mandatory step that must be taken before you could sue your insurance company if you feel that you have been underpaid." (claimsmate, 2019)

- The sacrifice or expenditure must be extraordinary, the sacrifices must be intentional and not accidental, they must be reasonable and prudent, carried out in times of danger.
- Their purpose must be the preservation of property and not the security of any specific interest.
- It must result in the preservation of the ship and a portion of the cargo.
- The common danger must not be the result of a default. It is an extraordinary expense "incurred, and damage suffered for the common good and safety of the merchandise and the vessel (…)" (France, 1681).

In short, the general average and the particular average differ in several ways, including the type of loss, the type of circumstance, the insurability, the effect and reasonableness, the form of the loss, and, of course, the sharing of the loss, to retain (Accountlearning, 2022):

	Particular Average	**General Average**
Types of Loss	Particular Average Loss is partial loss accidentally insured by sea perils.	General Average Loss is an extraordinary loss incurred to preserve the common interest.
Type of situation	Particular Average Loss is purely accidental and unforeseen loss.	General Average Loss is a voluntary and deliberate loss.
Possibility of insurance	The cause of a Particular Average Loss can be insured.	The cause of General Average Loss cannot be insured.
Effect	Particular Average Loss involves only particular property or interest.	General Average Loss affects general or common interest, hence termed general average.
Reasonableness	There is no such condition for Particular	General Average Loss must be reasonable and

	Average Loss.	prudent.
Nature of Loss	Particular Average Loss is ordinary and particular in nature.	General Average Loss is an extraordinary character of general nature.
Sharing of Loss	Particular Average Loss falls entirely upon the owner.	In General Average Loss the loss shall be shared by all the owners of cargo.

Figure 3 - The main differences between Particular and General Average. *Source: https://accountlearning.com/particular-average-loss-general-average-loss-insurance-meaning-differences/*

A particular average is incurred and paid for the thing that was damaged or incurred the expense, while the general average is borne and paid for the ship as well as the goods and is equated over the total expense.

Therefore, it is obvious that defining the idea of subsidiarity of general average is crucial in this stage and shall have a progressive reduction of appliance. Once the general average situations have been identified, the average, within the universe of averages, will be designated through exclusion.

A general criterion can be stated, examples of general average situations can be listed, or a mixed approach using examples of both, followed, or preceded by the explanation of a criterion, can be used to identify "a *priori"* general average.

3. Regulation of General Average – or lack thereof

Theories that attempt to explain the question of the juridical nature of general average, in light of classical characters or institutions of civil law, from *locatio operis* to unjust enrichment, passing via equity, communion, have created an interesting but sometimes disjointed field of debate (Gomes, 2008, p. 54).

The main issues would presumably be resolved in consequence of the general implementation of the YAR regulations on a general average. However, this

impression of uniformity is false because the YAR only applies to certain situations, where national contract laws may differ. The legal foundation of the general average and a general average claim is therefore crucial in the absence of a uniform regulation.

To increase legal certainty and uniformity, numerous international frameworks for dispute resolution have been developed over the past 50 years, including agreements with rules of jurisdiction and international conflict rules at the European level. The Rome I and Rome II Regulations[14] established the criteria for identifying the law that would apply to contractual and non-contractual obligations arising from different legal concepts at the European level.

In these Regulations, the idea of the general average is not addressed individually; it is also unclear whether and to what extent gross negligence may be incorporated into these private international law rules, and also in the international maritime conventions on liability, especially in a new framework of civil liability when the international procedures are violated.

Additionally, it should be emphasized that the YAR and the majority of national legislation are built on the premise that it makes no financial difference to one party to the maritime adventure whether the costs are spent by them or by either party, even though this is occasionally not the case, especially if the insurance policies will cover, at first look, the damages.

Due to the relatively considerable variations, we should be cautious in using the concept of general average in modern times, at least at the civil law level, and avoid literal interpretation of previous laws and historical precedents.

3.1 Lack of uniform regulation at an international level

The general average is remarkable in more ways than just its equitable nature. It is quite odd because it allows for the creation of obligations among different parties, where debtors and creditors can both be indebted at the same time, the simultaneous indebtedness of both creditors and debtors.

[14] "Rome II", which refers to both the Rome Convention of 1980 on the law applicable to contractual obligations and EC Regulation No. 864/2007 of July 11, 2007, on the law applicable to non-contractual obligations, establishes the legal framework for determining the law applicable to contractual obligations within the European Union.

Perhaps this shall be considered to be a unique notion, which establishes many obligations in a frequently global context, that would be effectively and legally bindingly governed at an international level. Surprisingly, this is not the case; governments cannot sign a version of the YAR, and there is no convention in place to regulate GA.

The application of the concept of General Average appears to be so widely acknowledged in day-to-day basis, that the idea of customary law may come up whether or not it has anything to do with YAR; but private customary law is not recognized on the public international law scale. At the national level, decisions are made about whether and how private customary law should be ordered.

But because YARs are considered to be the ultimate holy grail of regulation of the general average, their legal status is discussed in some detail further on.

Moving on, it was earlier stated that there is no international legislation that establishes what constitutes the General Average and applies uniform rules to the notion, in a consistent way. With this said, the logical conclusion that can be drawn is that, in the absence of a general average rule, national law should be applicable to the average and the obligations that result from it, due to the fact that it has specific substantive constraints, is authorized by, and recognized as being within the bounds of the law by the applicable national legislation.

In this context, the substantive regulations, which include national legal frameworks, chartering agreements, and safety forms, particularly average bonds, serve as the primary grounds for the contribution to the general average.

Legal systems all across the world have general average rules that have been established in the last 1500 years on both a national and international basis. The majority of European States, if not all of them, have laws that govern the idea of the general average; Additionally, this idea can also be found in Asian legal systems, such as the Chinese Maritime Law[15].

[15] Under article 193 of the Chinese Maritime Law, the term “general average” refers to “*an extraordinary sacrifice or expenditure intentionally and reasonably made or incurred as a direct consequence of measures adopted for the common safety of the vessel, cargo and other property that are exposed to a common danger on a common voyage*” (MARITIME CODE OF THE PEOPLE'S REPUBLIC OF CHINA, 1992).

National regulations often include a general average definition, instructions on how to prepare the adjustment, information on the contributors and creditors that make up the general average, and instructions on how to protect a general average contribution. Also included are deadlines, requirements for carrying out the adjustment, and the classification of a running average claim. The right to assignment in general average follows directly from the law or indirectly from law.

A contract amongst the parties in the maritime adventure is not necessary for a situation to qualify as general average and cause general average provisions to apply. General average will typically arise during the transportation of passengers ashore to one or more contracts of affreightment; in fact, such a contract will typically be *conditio sine qua non* (Kruit, 2017).

Given this, it is clear that universal average is a particularism not only because of its equitable nature but also because there is no single international regulation. Conventions that govern "wet shipping" don't offer any in-depth definitions of general average or substantive General Average norms, since neither the conventions nor the European legislator have established a legal basis for a claim. Instead, they either exclude "General Average" from their respective purviews or just acknowledge that claims can emerge from "General Average" without giving any contractual standards (Kruit, 2017).

Customary private law, the one applied to the general average concept, lacks a generally recognized international status, and it is up to each country to decide how customary private law should be applied. In this regard, a distinction between private law and public law must be made. The International Court of Justice's Statute (art. 38(1)(b)), which defines the concept of customary international law, is frequently employed in public law:

> *“Article 38*
>
> *1. The Court, whose function is to decide in accordance with international law such disputes as are submitted to it, shall apply:*
>
> *subject to the provisions of Article 59, judicial decisions and the teachings of the most highly qualified publicists of the various nations, as subsidiary means for the determination of rules of law.”*

On the other hand, private customary international law has an impact on hard law and often follows the same course.

In our view, since the general average regime has been so particular from the beginning of shipping, and due to its intrinsic global trade nature, its acceptance as the first customary private law should also be pondered at an international level, especially because since the beginning this regime has been quite unique – although we know this is definitely a bold statement to make.

3.2 Definition of General Average in different jurisdictions

The doubt on the different definitions of general average begin with the “General Average” term itself, specially due to the fact that it is used as a single notion rather frequently. For example, the London Limitation of Liability Convention for Maritime Claims (LLMC), the Hague-Visby Rules, and the Arrest Conventions all use the concept without clarifying the definition and purpose, nor in the text itself, or the preparatory documents. In carriage contracts, the concept is many times used without explanation of the purpose of it (Hudson, 2017).

Understandably, this broad employment of the concept “general average” may perhaps give the idea that it is a somewhat not discussed subject amongst peers, nor what criteria must be satisfied to qualify a circumstance or disbursement as general average.

Nevertheless, one should elaborate on the term and, in doing so, understand that it is used in several regulations, revealing that there seems to be a mutually agreed understanding of the basic contents of the concept, although national legislation may impose additional conditions that must be met for it to be applicable, and so the use of the undefined term "general average" implies a level of homogeneity that, in reality, does not exist at all.

Several modern definitions of General Average presented in national jurisdictions are comparable to Rule A YAR's definition, and hence to one another (Kruit, 2017). Even if a YAR version has been incorporated into the national legal system, they are not identical, and new or alternative criteria may be formed.

For example, the Dutch Civil Code integrates the YAR but also includes a general average definition that is slightly more comprehensive than the YAR's definition (Kruit, 2017).

3.3 Definition of Artificial General Average

Artificial general average was developed as a result of slow evolution that favoured shipowners (Tetley, 2021). If "peril" had been a necessary component of the general average, its significance would have been diminished between 1890 and 1950 due to the "safe prosecution" criterion in Rules X(b) and XI(b) and the absence of the "peril" requirement in these two rules as well as in Rules X(a) and XII. This is general average "by agreement" or "manufactured general average," as Buglass and Tetley put it (Buglass).

The lettered Rules A, B, C, D, E, and F, outlining broad principles, were added to the York/Antwerp Rules in 1924 for the first time, in addition to the numbered Rules, which refer to particular cases and circumstances. Peril did not have to be "immediate" for the purposes of Rule A, as it was written in 1924, as long as it was "real and not imaginary," "serious and not simply slight or nugatory." The 1950 Interpretation Rule, which gives precedence of the numerical rule over the lettered rules, was adopted as the following stage (Tetley, 2021).

Only in situations when a particular scenario was not entirely covered by the numbered rules were the lettered rules to be used. The Interpretation Rule was then changed by the YAR in 1994 to state that, to the extent of any discrepancy between them, the Rule Paramount and the numbered rules take precedence over the lettered rules. In the first paragraph, the words "lettered and numbered" subsequent "following" have also been removed, though their removal has no bearing on the Rule's content.

Detail was prioritized over concept as a result and thus, unless specifically stated otherwise in the numbered regulation under which the claim is made, the general average may now be disclosed whether or not an extraordinary sacrifice was made for the common safety or to avoid a risk. The single component of the Rule is reasonableness. Thanks to the passage of the Rule Paramount and the 1994

concordance adjustment to the Interpretation Rule, a requirement that supersedes the numbered rules (Buglass)..

Rules X(b) and XI(b) do not specify a "risk" requirement, therefore claims for general average expenses may be filed at the port of discharge even if there is no peril. This serves as the "by agreement" or "fake general average" for the population.

Non-separation agreements aim to lessen the difficulties that “cargo owners frequently experience as a result of the delays in demobilization by allowing cargo owners to have their cargoes forwarded from the port of refuge to the original port of destination aboard other vessels while the original vessel is undergoing repairs at the port of refuge in exchange for agreeing to pay their respective general average contributions as if the cargoes had remained aboard” (Tetley, 2021).

And so, the “artificial general average is a term invented by Leslie J. Buglass to refer to the general average claimed under the York/Antwerp Rules, despite the absence of one of the basic historic characteristics of general average, e.g., “peril”, meaning the granting of a claim for general average even when one of the five basic principles of General Average of the YAR are not present” (Tetley, 2021).

3.4 Brief Analysis of the Portuguese regime

According to Portuguese law, General Average is defined in Title V of the third book of the Commercial Code, which is devoted to "Avarias" or "Average."

“Avaria” is a term used in this context that, despite its origin, previously discussed, has a very different meaning in the everyday Portuguese language (failure or damage). Nonetheless, it has a special meaning in both maritime law and transport law. For instance, in transport law, the latter has areas where "average" refers to damage, such as the air transport of goods in the Warsaw Conference of 1978. In maritime transport, average is interlinked with damage but is not solely that.

So, it is crucial to keep in mind that the word "average" does not equate to "failure" or "damage" in the shipping language, they are not synonyms instead, it refers to a broader mechanism and, although it essentially merely refers to the concept of

general average, it is the correct term to use when there is a case with the five principles of General Average present.

For instance, the Hamburg Rules of 1978's article 5/1 stipulates that the carrier

"*Is accountable for loss resulting from damage or loss of the products*".

Article 634 of the Portuguese Commercial Law defines the term "avaria" or "average" as a broad notion that encompasses both general average and particular average. The article can be loosely translated as follows:

"Article 634

Concept of average

Averages are considered all extraordinary expenses incurred with the ship or with its cargo, jointly or separately, and all damages that happen to the ship and cargo from the beginning of the sea risks until they end.

§ 1. Are not considered average, but simple expenses borne by the ship, those ordinarily made with its exit and entry as well as with the payment of duties and other fees for navigation, and those intended to lighten the ship to pass the basses or sandbanks known on leaving the place of departure.

§ 2. Averages are regulated by agreement of the parties and, in their absence or insufficiency, by the provisions of this Code."

We can draw the following conclusions from this article: All extraordinary costs associated with a ship or its cargo, whether they are incurred jointly or separately, are regarded as average; All damages that occur to the ship from the time that sea risks begin until they finish.

The idea of average included in article 1 of Title VII of Book III of the Maritime Ordinances of Luiz XIV is generally continued in article 634 of the Portuguese Commercial Code, which is the natural extension of that idea.[16]:

[16] The marine code, or Great Ordinance of Marine of August 1681 (French: grande ordonnance de la marine d'août 1681), is a royal ordinance drafted during the reign of Louis XIV that thoroughly codifies maritime shipping.

> *“All extraordinary expenses incurred, with ship or cargo, together, or separately, and all the damage that happens to it from its handling to its departure, is considered Average”.*

This term would have an internal impact on the concepts of the Ferreira Borges Code of 1813, the Average Regulation of 1820, and the Commercial Code.

The Commercial Code's concept of "average" can be broken down into two main categories: "average" expenses and "average" damages. The first paragraph of Article 634 sets a negative average record for expenses, only taking into account costs incurred by the ship:

> “*those ordinarily made with its exit and entry as well as with the payment of duties and other fees for navigation, and those intended to lighten the ship to pass the basses or sandbanks known on leaving the place of departure.”*

However, the only ones that matter are the extraordinary expenses that don't fit here, like regular expenses, some of which are listed in the negative record. With regard to these, the appropriate insertion on the negative record appears repetitive because they were already disregarded – in contrast – from the owner's notion of average. Curiously, there was no reference of the average negative idea of costs in the 1833 Commercial Code. Nevertheless, the outcome was exactly the same as what is said now. The biggest question is whether the damages occurred within the temporal arch, which is difficult to determine, which runs from the start of the maritime adventure until the end of the damages, or if they occurred before or after that timeline. Article 634 does not make any other classifications for average-damages.

We can infer from paragraph 2 of article 634 that the regime described in paragraphs 634 and 635 is subsidiary because averages are governed by the agreement between the parties, and the rules of the code only apply in the absence of that agreement. This subsidiary feature is particularly intriguing in circumstances that are of general average.

The Commercial Code introduces the notion of general average and particular average. Both average-damages and average-expenses can be general or particular; to distinguish the last two terms we are making structural distinctions in

the repercussion of regimes. The truth is that the articles 636 and 637 of the Commercial Code are evident in this distinction. However, the legislator could only have regulated general average, as for example the Italian Legislation in the "Codice Della Naviagazione". Freely translating the Portuguese articles:

> *"Article 636*
>
> *Apportionment of general average*
>
> *General average are apportioned proportionally between the cargo and half the value of the ship and freight.*
>
> *Article 637*
>
> *Incidence of the burden of particular average*
>
> *Particular average is borne and paid either by the ship alone or by the thing which suffered the damage or caused the expense."*

Despite the fact that both general average and particular average are defined in these articles, it is clear that the intention of the legislature was to define the general average regime rather than focus so much on the particular average, because these averages fall under the common damage legislation rather than the special maritime regime that is the general average. They are governed by an apportionment and contribution system that takes as its basis the community of interest in a marine experience.

Delimiting the general average is crucial because once those are determined, the particular average instances, by a process of elimination, will be excluded (Gomes, 2008). This interpretation of paragraph 2 of Article 635 is misleading since it implies – incorrectly - that the particular average can only concern to the ship or the cargo. This assertion is false, particularly given that damage caused by a force majeure event could affect both the ship and its cargo. For instance, if a storm causes damage to the ship and its laden cargo, we are on the grounds of a particular average.

As previously mentioned, paragraph 1 of Article 635 of the Commercial Code lays out three requirements for General Average to occur, in rather literal terms: the character must be voluntary; expenses must be incurred to avoid danger; and

expenses must be incurred for the safety of the ship and cargo. The Portuguese legislation should have included an additional requirement "*the reasonably made or incurred*" in light of the YAR in the Rule Paramount.

Silva Lisboa (Lisboa, 1801) took an interesting approach on the requirements for the general average, asserting that usefulness should be one of them; however, article 639 appears to state this usefulness, establishing that the division of the general average by contribution should occur when the ship and its cargo are salvaged entirely or in part:

> *"Article 639*
>
> *General Average Apportionment*
>
> *There shall be apportionment of General Average by contribution whenever the ship and cargo are salvaged in whole or in part.*
>
> *§ 1. The contributing capital shall consist of*
>
> *1st The full net value that the things sacrificed would have at the time at the place of discharge.*
>
> *2nd The full net value of the things saved at the same place and time, and also the amount of the loss they suffered for the common salvation.*
>
> *3 ° The freight to be earned, less the expenses that would have left if the ship and cargo were lost at the time the damage occurred.*
>
> *§ 2. The objects of use and suit, the welds of the sailors, the luggage of passengers, and ammunition of war and mouth in the quantity necessary for the journey, since paid by contribution, are not part of the contributing capital."*

In addition, Article 643 specifies that "the saved objects are not liable for any payment in contribution for the damage of the dropped, damaged, or cut cargo" if the ship is not rescued despite the cargo thrown overboard.

We don't agree with the usefulness component of the general average; of course, we agree that the result must be useful, but that result will be a requirement for the liquidation and contribution of the general average, not the own definition of

general average; since there won't be anything to divide if all the requirements are satisfied and the sacrifice is voluntary, but, at the end, everything is still lost.

In terms of the Portuguese regime, it is impossible to distinguish and separate the captain's diligence in general average with a contribution act. The statute of the captain, which has the conscientious responsibility to maintain the good success of the maritime adventure (article 5/2 of Decree-Law 384/99), explains the act of general average, as freely translated:

> *"2 - The captain shall exercise the powers conferred by law or contract for the good conduct of the maritime adventure, namely those relating to the vessel, the cargo and any other interests involved."*

According to article 5/3 of the same decree-law, a diligent captain will act in accordance with the objective of a successful maritime adventure, sacrificing goods, if necessary, to ensure that the sea voyage is successful, in a situation of general average to the ship and its cargo. Therefore, according to Portuguese law, in this case, the sacrifice of goods is not illegal and is meaning to the concept of general average.

To conclude this brief analysis, with regard to the statute of limitations for general average, the Code of Civil Procedure (Law n.º8/2022), in its article 1068, establishes a time limit of one year for intentional general average, the starting date beginning with the unloading of the cargo, or in the case of cargo thrown overboard, with the arrival of the ship at the port.

This rule therefore excludes the application of YAR XXIII, which establishes a timeline of one year after the general average claim date; however, YAR XXIII also states that this cannot be extended beyond 6 years from the end of the maritime adventure. The Portuguese Code of Civil Procedure thus establishes a more rigorous time period that cannot be disregarded.

4. The 1994 York/Antwerp Rules

The necessity to standardize the general average regime led to the creation of the York-Antwerp Rules (YAR 2016).

The Glasgow Congress of 1860 gave birth to 11 of these Rules after the York Rules were adopted at the previous Congress in York in 1864. A new Conference was later held in Antwerp in 1877, at which some of the York-Antwerp Rules were amended. Over the years, these rules had successfully found new iterations while maintaining their original names, such as in 1889 (Liverpool), Stockholm (1924), Amsterdam (1950), Hamburg (1974), Sydney (1994), Vancouver (2004), and New York (2016).

> "*The new rules, entitled York-Antwerp Rules 2016, are the culmination of a drafting process which began in 2012. Having been approved by the shipowners' association, BIMCO, these rules stand a good prospect of being adopted in place of York-Antwerp Rules 1994, the rules which are at present most commonly incorporated by reference into charterparties and bills of lading. In so doing, York-Antwerp Rules 2016 will fill the gap created by the failure of the 2004 Rules which, whilst promoted by cargo concerns, never found acceptance in the ship-owning community*" (Kemp R. S., 2016).

The York-Antwerp Rules only apply if they are included in, for example, the bill of lading or insurance policies, and their applicability depends on the convention. The truth is that the Y-A Rules have a lot of relevance and application, even if they are not mandatory/obligatory, in the opposite direction to what would happen to ratify nations if they were subject to the approval of an international convention.

This success is largely due to the numerous amendments and updates made by experts, which ensure that they are "up to date" on the realities of shipping. The circumstances of the YAR's application, depending on its conventional incorporation, do not preclude its use in international trade or the consequences that follow.

The YAR are arranged according to letter rules (A-G) and numbered rules (1–22), like other Rules of a similar nature and importance, such as the 1987 Lisbon Rules. The numbered rules deal with specific examples of sacrifice and expenditure and set down specific criteria *i.e*., allowances, whereas the letter rules set forth various basic principles regarding what constitutes a general average.

A Rule of Interpretation and a General/Predominant Rule, known as the “Paramount Rule”, are included in that classification, in addition to the Rules, which state as follows:

> *“In no case shall there be any allowance for sacrifice or expenditure unless reasonably made or incurred.”*

Therefore, it is the burden of the party asserting the general average to establish the reasonableness of both the general average act and the amount of any allowance. It is proposed that when interpreting this criterion, there cannot be a single, unchanging definition of "reasonableness," and that instead, the specific factors in play at the incident's time and location must be used to decide (Cornah, 1994).

The aim of the Rule and the general average regulation is stated in the first paragraph of the “Rule of Interpretation”, along with their priority over any incompatible laws or customs. The “Paramount Rule” and the alphabetically numbered Rules are given precedence in the second paragraph of the same rule; nevertheless, if a circumstance does not meet the criteria for the general average under the numerical rules, it might under the alphabetized rules.

The “Paramount Rule” is understandable and sensible, but it has the drawback of adding more discretion when determining what counts as a general average. According to this rule, this condition does not align with the captain's attitude of sacrificing more goods than are logically necessary for the intended purpose (by dropping cargo, for example), which has the consequence that sacrifices exceeding this measure will not be counted as general average, which therefore leads to delicate delimitation procedures.

We disagree with the notion, supported by several authors, that reasonableness should be established as a stand-alone requirement of the general average, notwithstanding the necessity to stress the need for the captain to behave reasonably in the measure and extent of expenses or damages. In our view, the requirement of reasonableness is inherent to the duty of a diligent captain.

4.1 The wording of the YAR

Digging into the rules we find, in the first half of Rule A, the following statement:

> *"There is a general average act when, and only when, any extraordinary sacrifice or expenditure is intentionally and reasonably made or incurred for the common safety to preserve from peril the property involved in a common maritime adventure"* (York-Antwerp Rules, 2016).

Here one can see four essential features of the general average: its *extraordinary* nature; its *intentionality*; it must be *peril* and for the *common safety* of the adventure.

Ordinary costs incurred or losses suffered by the shipowner in carrying out his contract of affreightment are not accepted as general average due to its *extraordinary nature*. The use of this approach is illustrated specifically in Rule VII of the regulations, which addresses damage to a vessel's machinery. According to that regulation, there is a distinction made between damage to machinery that takes place while the vessel is floating and not in danger of running aground.

Working on a ship's engines from ashore is regarded as abusing the machinery and is therefore extraordinary; however, working on the engines while the ship is in motion is regarded as a normal function of the machinery, regardless of how dangerous the adventure may have been, and any damage that results is not considered to be general average (Cornah, 1994).

Property cannot be claimed to have been "sacrificed" if it has already been lost at the time of the alleged sacrifice due to its *voluntary and intentional nature*. Rule IV's application to the cutting away of wrecks serves as an illustration of that idea. If there is a situation where some merchandise on deck falls overboard due to the strength of the waves, it will not be considered a general average situation because it does not fit this condition. In this scenario, we would be dealing with a particular average, and the level of responsibility or damage would be distributed accordingly.

In this case, the cargo either suffers harm as a result of *force majeure*, or a way is found to hold the freighter accountable for improper allocation or storage of the cargo.

It should be noted, however, that currently, namely under the YAR, the voluntary nature of the act as a requirement of general average cannot be absolutized; it has exceptions that whose existence, whilst not calling into question the requirement of the voluntary or intentional nature as a rule, no longer allows us to say that voluntariness is an essential requirement of general average. The situation that embodies these exceptions is the expenses incurred with the salvage of the ship (and respective cargo).

The *peril* must be genuine and substantial, even if it is not imminent. A very narrow line must be drawn between a step done for everyone's safety during an emergency and one that, while reasonable, is only preventative, this is to say that even though the power in mid-ocean might be quiet at the moment and there was no imminent risk of further loss or damage, a vessel adrift without motive power would be considered to be in danger for this purpose. Notwithstanding, it would not typically be considered to be indicative of the overall average if a master chooses, quite rationally, to seek refuge for a sound vessel in an anchorage due to reports of an incoming cyclone.

Last, but not least, action must be taken for *common protection* and not just for the safety of a specific piece of the implicated property. To use a frequent expression that is also included in Rule A of the YAR, the consideration of the community of interests between ship and cargo, or the common maritime adventure, forms the basis of this obligation (common safety adventure).

If a fire breaks out in certain merchandise that, by its nature and placement in the area of the ship, does not jeopardize the safety of other merchandise and the ship itself, the damage caused in fighting the fire does not fall into the category of general average, and consequently, there is no liability to share based on this regime. Another example could be a ship carrying cargo that must stop at a port to make repairs when the refrigeration system malfunctions while it is sailing through the tropics. Any risk of loss or damage would only apply to the refrigerated cargo in this scenario, and as far as the ship and the remaining cargo were concerned,

the voyage could go fairly safely. As a result, the general average would not be affected by the diversion to the port of repair (Cornah, 1994).

Whether common safety or common benefit is applicable under this condition is a contentious topic. Can expenses incurred for the common benefit of the ship and cargo, but not, *summon rigore*, for the common safety, be considered as general average? This question has been well-present in revisions of the YAR and is of special importance with regards to expenses, we are dealing with various definitions of general average and its range of use. This division between common benefit and common safety reflects a distinction between English law, which is focused on the former, or the "protection of the property," and continental European law, which is focused on the latter, or the "self-prosecution of the adventure," or on common benefit.

It is discussed if, besides the requisites mentioned above, usefulness is another requisite. We do not think that the useful outcome is a requirement or a constituent part of the general average, despite the backing of several authors. A useful outcome is required, sure, but not for the accurate diagnosis of the general average - rather, it will be a prerequisite for the liquidation and contribution of the general average.

Moving on to Rule C - helps assess whether the principle of contribution applies to the damage by referencing the causal relationship between the damage and the legal conduct that is "at fault", as stated:

> "*1. Only such losses, damages or expenses which are the direct consequence of the general average act shall be allowed as general average."* (York-Antwerp Rules, 2016)

The "direct consequence" of the damage is required for it to be deemed a "severe fault," meaning that it must be immediate and direct. However, its second portion exempts from coverage environmental damage caused by gross negligence or as a result of polluting substances escaping or being released from the properties engaged in the joint maritime transport, as stated:

> "*2. In no case shall there be any allowance in general average for losses, damages, or expenses incurred in respect of damage to the environment or*

consequence of the escape or release of pollutant substances from the property involved in the common maritime adventure.

3. Demurrage, loss of market, and any loss or damage sustained, or expense incurred because of delay, whether on the voyage or subsequently, and any indirect loss whatsoever, shall not be allowed as general average." (York-Antwerp Rules, 2016)

This is a recent addition to the YAR's 1994 version. For instance, this section of Rule C addresses the delicate issue of environmental degradation brought on by the discharge of oil into the water to unhitch the ship. Because it is not considered a general average, the obvious solution would be to apply the *res permit domino* principle and to assume that the statements of Rule C's second portion are true, but this objective liability is typically transferred to one of the parties involved in the maritime voyage (Lobianco, 2009). According to the third paragraph, delays-related damages and any other types of indirect losses are also excluded. The need for the damage or expense to be a direct result of the act, as per the aforementioned Rule C, results in the situation where the captain must sell goods on board to pay an extraordinary expense incurred for the common salvage of the ship and cargo. However, only this expense is regarded as a general average, since the consequences of the loss, particularly about the protection of the position of the owner of the goods sold, are treated by national law.

The party claiming contribution has the duty of demonstrating that the loss or expense is permissible as the general average, as stated in Rule E:

"The onus of proof is upon the party claiming in general average to show that the loss or expense claimed is properly allowable as general average."

Simple events that can give rise to a general average claim:

Casualty	**Type of sacrifice or expenditure**
Stranding	Damage to vessel and machinery through efforts to refloat. Loss of or damage to cargo through jettison or forced discharge.

	Cost of discharging, storing, and reloading any cargo so discharged. Port of refuge expenses.
Fire	Damage to ship or cargo due to efforts to extinguish the fire.[17] Port of refugee expenses
Shifting of cargo in heavy weather	Jettison of cargo. Port of refuge expenses.
Heavy weather, collision, machinery breakdown, or other accident involving damage to ship and resort to or detention at a port	Port of refuge expenses.

Figure 4 *- Events that can lead to a general average claim. Source: (Cornah, 1994), page 8.*

4.2 Adjustment of General Average

The first step in the process of adjusting a general average sacrifice or expenditure is the "declaration" of general average, which is frequently issued by the shipowner through his underwriters. General average claims must be submitted in writing to the average adjuster within a year of the completion of the common marine adventure.

In the absence of such communication, the average adjuster may calculate the allowance or contributory value based on the information at his disposal. When a claim is not supported by proof or when information about a contributing interest is not provided within a year after a request for it, he may act similarly. Where cargo has been given up, the shipowner needs to get new cargo before delivering the

[17] Cases of general average where a fire occurred and cargo was thrown overboard or intentionally damaged in the fire extinguishing activities were the Hyundai Fortune, in march 2006, the MSC Napoli, in January 2007, and the MSC Flaminia, in July 2012.

sacrificed cargo. Such security typically comes in the form of a cargo underwriter's undertaking or a "general average bond."

Ordinarily, the general average is modified by local law in the location where the voyage comes to an end. However, unless the parties agree to another method of adjustment, the contract often states that the adjustment will be made by the York/Antwerp Rules. Rule G stipulates as follows:

> *"General average shall be adjusted as regards both loss and contribution upon the basis of values at the time and place when and where the common maritime adventure ends.*
>
> *This rule shall not affect the determination of the place at which the average adjustment is to be prepared."* (York-Antwerp Rules, 2016)

The value of the property forfeited for the sake of general safety, as well as the corresponding contributory values of the ship and remaining cargo, are measured as of the date of discharge at the port of destination or as of the date on which the journey was divided.

The actual "adjustment is usually carried out by a professional average adjuster" (Rudolf, 2013). If it is determined that the fault is substantial or widespread, an allocation and contribution mechanism will be in effect. The apportionment of general average damages assumes the creation of a creditor body and a debtor body during its construction and development and rules G and XVII point to the full values of the contributing assets. The contributing products and values make up the debtor mass, whereas the extraordinary costs or damage sustained during the seafaring adventure make up the creditor bulk.

Accordingly, if the loss of the cargo is classified as a general average, its value will inevitably join the creditor mass. It is possible that certain values must enter both the creditor and debtor masses. To ensure that the owner of the sacrificed goods does not ultimately benefit relative to the other interests in the maritime adventure, it must also be a part of the debtor's mass. If not, the other parties would be forced to pay the owner of the items the entire worth of the goods.

If we divide the debtor bankroll by the creditor bankroll, we get the percentage or rate, and in the end, the outcomes are the same. However, once the creditor

bankroll and the debtor bankroll have been computed, the coefficient of breakdown is acquired by dividing the first by the second. The measure of each party's contribution is thus determined representing the total value according to the YAR, for example, if the creditor mass is 60,000 euros and the debtor mass is 750,000 euros, the coefficient of the breakdown is 8%. If shipper Y's goods, which were included in the debit mass and were valued as such, are worth 35,000 euros, then his contribution is 2,800 euros. Notwithstanding, after the apportionment has been established, it is possible that the contribution received must be refunded because of an unexpected event. The process of a general average claim will be explained further on.

The particular average, on the other hand, will, in theory, be borne by the owner or, to use a crude English expression, "shall lie where they fall"; however, there may be an impact in terms of civil liability, all of this regardless of whether there may have been a transfer of risk through another party. In the case of a particular average, there is, as stated, no apportionment; the regime to be applied will be, in principle, the application of the principle of *cause sentit dominus*, he who suffers a loss, bears the consequences.

According to the contract that governs the transport operation, the shipper or the consignee will bear the cost of damage if the cargo is destroyed by a storm without the carrier's fault. However, there will be a foundation for changing the situation from one of supporting the damage to one of imputation and obligation if the commodities are contracted to be conveyed in the hold but are instead transported on deck.

Rule XIX states the undeclared or wrongfully declared cargo:

> *“a) Damage or loss caused to goods loaded without the knowledge of the shipowner or his agent or to goods willfully misdescribed at the time of shipment shall not be allowed as general average, but such goods shall remain liable to contribute if saved.*
>
> *(b) Where goods have been wrongfully declared at the time of shipment at a value that is lower than their real value, any general average loss or damage shall be allowed on the basis of their declared value, but such*

> *goods shall contribute on the basis of their actual value."* (York-Antwerp Rules, 2016)

The fight against fraud and clandestine transportation is the obvious justification for this regime, which also justifies the sanction, or punishment, of not being included in the mass creditor. However, inclusion in the mass creditor makes perfect sense because the captain could present items that were not on board as having been thrown away in cooperation with one of the shippers, or a shipper could clandestinely ship certain goods, or dangerous ones, to harm the recipient.

Due to the complexity of these calculations, it can often take years for the adjustment to be finished and for the average adjuster to give a final "general average statement".

4.3 Salvage

Salvage expenses, on the other hand, are incurred when a ship or its cargo needs to be saved from peril. Salvage money should be treated as general average, according to YAR Rule VI:

> *"(a) Expenditure incurred by the parties to the common maritime adventure in the nature of salvage, whether under contract or otherwise, shall be allowed in general average provided that the salvage operations were carried out for the purpose of preserving from peril the property involved in the common maritime adventure and subject to the provisions of paragraphs (b), (c) and (d)."* (York-Antwerp Rules, 2016)

The wording of Rule VI Paragraph (b) is new to the YAR 2016 due to apprehensions that arose with experience in the case, for example: if the ship and cargo have already made separate payments for recovery, based on salvage values, allowing salvage as general average and re-apportioning it over contributory values, this may lead to additional costs and delays, while making no appreciable difference to the proportion payable by each party. A range of solutions has been suggested to address these concerns, from the entire exclusion of salvage to the adoption of a fixed percentage system, to define which

costs incurred by a Salvor in preventing or reducing pollution should be accepted as the general average.

4.4 The process of a General Average claim

We can derive from what was explained above two main types of general average costs, one at the sacrifice level and one at the expenditure level:

Sacrifice General Average	Expenditure General Average
The jettison of cargo to prevent a ship from sinking is an example of general sacrifice.	In the event of a fire, fire extinguishing costs are classified as general average expenditures.
The amount payable by ship and cargo interests is the general average contribution. It is calculated by the average adjusters.	

Figure 5 *- Types of general average costs. Source: https://www.morethanshipping.com/an-overview-of-general-average-and-its-procedures/*

Knowing that the damages incurred are of sacrifice or expenditure, the shipowner declares general average. Once general average is declared an average adjuster is assigned to the case.

But the first concern for the cargo owner when such situation occurs will be to retrieve the cargo that was left undamaged, but before the cargo owner can do that they must first place what is called an Average Bond; the Average Bond is "distributed to the cargo owners involved to establish a mutual understanding between shipowner, insurance adjustors and cargo owners that all cargo details are shared without reserve to assist in the adjustments. The Average Bond also serves as notice to cargo owners that they are obligated to contribute to general average"[18] (Kelvinsee, n.d.), and the "amount of the deposit will usually be a percentage of the actual net value of the property at the termination of the venture. See Rule XVII & XXII of the York Antwerp Rules" (Robertson, 2014).

[18] There is also a second mechanism called General Average Guarantee, which is another document ensuring that the cargo owner will contribute to general average. The cargo in the inflicted vessel will only be released to the cargo owner if this document is signed (Kelvinsee, n.d.),.

Moving on, the general average adjuster is a certified expert for General Average, and they are responsible for the practical part of the general average. The general average claim is a long process, as stated above, and it is the adjuster that will calculate and collect the amounts due from all parties concerned in the property.

Alexander Robertson (Robertson, 2014) produced the following table, illustrating and summing up the forms required when General Average occurs, as below:

GENERAL AVERAGE - FORMS REQUIRED		
FORM	**PURPOSE**	**SIGNED BY**
AVERAGE BOND	It confers an obligation on the signatory to contribute a percentage of the value of the cargo saved	The owner of the cargo, the consignee and, possibly, by the shipper. A counter-signature may also be required from the mariner insurer.
VALUATION FORM	Details the contributory value of the cargo.	The owner of the cargo, consignee and, possibly, the shipper.
NON-SEPARATION AGREEMENT	It is a declaration by the signatory agreeing to have his/her cargo share in the costs which may arise later at a port of refuge and after he/she has taken delivery of the cargo, for example, after transshipment onto another vessel.	The owner of the cargo, consignee, and, possibly, the shipper.
GENERAL AVERAGE DEPOSIT RECEIPT	It is a receipt for the deposit which is lodged in lieu of a General Average Guarantee from which the contribution will be deducted.	
	The original receipt must be surrendered on request in order to effect final payment of the General Average contribution.	
GENERAL AVERAGE GUARANTEE	It is an undertaking by the Marine Insurer to pay the amount according o the General Average Adjustment directly to the community of interests involved in the General Average.	The Marine Insurer.

Figure 6 *- Forms required for General Average. Source: (Robertson, 2014)*

So, let's take a look at an example:

A fire arose in a container ship called "Feuer", a 23.000 TEU giant, on a voyage from Rotterdam to Trinidad Tobago. After all efforts to put out the fire, some of the containers were unfortunately sacrificed; the Sea Protest report was prepared by the vessel's captain; and the owner of the ship declared general average. Once

the average adjuster was assigned[19], he/she put together a figure, called the Total General Average Claim Value; this figure includes all expenses that went into the effort to save the ship form peril (which may include, but are not limited to: expenses of safe harbour; tugboat to save harbour costs of forwarding the cargo if the voyage cannot continue).

The expenses that the average adjuster calculated equalled to be 15 million euros – the total amount that must be paid by all parties involved in the maritime adventure. The adjuster then looked at the total value of the voyage and what percentage belongs to each party, in order to calculate how much each party must contribute; those percentages will then be added to the General Average Claim value.

The total value of the ship "Feuer" was 100 million euros, and the total value of the cargo on the boat is 80 million euros; so, the total contributory value is 180 million euros. Then, the average adjuster does the following breakdown: The vessel's owner interest is valued normally by the value of the ship, in the case of "Feuer", 100 million euros; cargo owner nº1's interests, which had 20 sacrificed containers with luxury bags and shoes, were valued at 40 million dollars; cargo owner nº2's interests were valued at 20 million dollars; cargo owner nº3's interests are valued at 15 million euros; cargo owner nº4's interests are valued at 5 million euros.

The average adjuster now divides each of those amounts by the total contributory value in order to get the percentage of each party's interests in the voyage:

- Vessel Owner: 56%.
- Cargo Owner nº1: 22%
- Cargo Owner nº2: 11%
- Cargo Owner nº3: 8%
- Cargo Owner nº4: 3%.

That percentage is then applied to the value of the General Average Claim, multiplying each percentage by 15 million:

[19] Because the Average Adjuster is trusted to sort through claims and settle disputes in addition to determining costs, it is crucial that they behave impartially.

- Vessel Owner: 8.4 million euros
- Cargo Owner nº1: 3.3 million euros
- Cargo Owner nº2: 1.65 million euros
- Cargo Owner nº3: 1.2 million euros
- Cargo Owner nº4: 450 thousand euros

These results are the amounts of the general average contributions for each party involved in the voyage, this is, the amount is what each party in the voyage must pay to cover the cost of the general average event; keeping in mind that the general average contribution is separate from a claim for any lost cargo.

After these calculations were completed, the Average Adjuster makes a statement[20] and the process is finalized.

4.5 The 2016 York-Antwerp Rules

In May 2016, the YAR 2016 were implemented, putting an end of 12 years of uncertainty for shipowners and marine insurers.

The 1994 Rules were well-established and widely known at the time and, when YAR 2004 appeared with all its revisions, shipowners did not support it and they were rarely integrated into contracts. The 2016 YAR retains some of the features of the 2004 revision that were thought to have modernized the way the overall average is handled, while restoring some of the features that made the 1994 YAR such a successful set of regulations.

Some of the most significand changes introduced by YAR 2016:

- “Salvage Remuneration (Rule VI) – in contrast to the YAR 2004, salvage expenses will remain allowable in general average albeit at the adjuster’s discretion.
- Expenses at port of refuge (Rule X) – crew wages (Rule XI) while at the port of refuge will again be allowed in general average. This more or less restores the position as it was under the YAR 1994.

[20] Surveyors are hired to evaluate the damage to the ship and its cargo as well. They differ from average adjustors in that they assign a nominal value to the damage cost. After the sacrifices are made, the Sea Protest aids adjustors in their investigation of the captain's behavior.

- Temporary repairs (Rule XIV) – the cost of temporary repairs carried out at a port of refuge and to enable the safe completion of the common maritime adventure is allowed in general average.
- Contributory Values (Rule XVII) – a new provision is introduced which allows the exclusion of low value cargo from contributing where the adjuster considers the cost of including it would be disproportionate to its eventual contribution. This measure was designed to speed up the adjusting process.
- Provision of Funds (Rules XX) and Interest on Losses Allowed in General Average (Rule XXI) – In respect of commission allowed in general average, the YAR 2016 preserve the position of the YAR 2004 which abolishes the 2% commission. In relation to the allowance for interest, this is now as per the 12-month ICE LIBOR rate for the currency in which the adjustment is prepared +4%.
- The YAR 2016 incorporate the strict one-year time bar first introduced in the YAR 2004. This means that parties claiming a contribution in General Average need to bring their action within 1 year from the date of issue of the average adjustment but no later than 6 years after the termination of the common maritime adventure" (LLP, 2017).

The York-Antwerp Rules 2016 are the result of a three and a half year drafting process that allowed interested parties unprecedented access through the CMI website. The 2004 Rules had restricted some benefits for shipowners (such as the old commission and interest rate), but the new rules restored some of them (salvage under Rule VI; crew wages and maintenance during a general average detention in a port of refuge under Rule XI; and maintenance during a general average detention at a port of refuge); including provisional corrections for damage caused by accident under Rule XIV).

Even after accounting for the significant changes to Rule VI, it is claimed that no fundamental changes have been made to the principles by which the overall average is modified. Instead, the success of this project has been to reach a compromise with which ship and cargo representatives are generally satisfied

with. In doing this, favorable subsequent adjustments have been made that are intended to encourage time and cost efficiencies (Kemp, Alex).

It remains to be seen whether these new set of Rules will now be followed by all.

5. Relevance of General Average in Modern Times

5.1 Insurance – the beginning of the end for General Average?

The owners of the cargo themselves, the carrier in charge of managing the cargo, and the owner of the ship carrying the cargo must all take efforts to protect themselves from misfortunes that may happen and result in material and personal losses. The responsibility for the products is transferred to the insurance provider by the parties and intermediaries involved in the transaction. The goal for each of them must be to ensure that the cargo is transported safely, which is why marine insurance exists.

Nowadays there is a discussion about the need for the institute of general average, whose role may already be in question, and its decline, if not its usefulness, resulting from the huge importance given to the spread of marine insurance. The doubt about whether or not the General Average is still, or not, relevant is intertwined with two developments: Developments in the technological organization of shipping overseas; and changes in the financial organization of marine insurance. The former has made the apportionment and calculation of all salvage cost more costly and time-consuming, while the latter has made them superfluous in each case.

In this day and age, “the vast majority of ships and cargoes, as well as the parties interested in these assets, are insured. In 1994, UNCTAD published a paper to discuss the position of general average in marine insurance. Of all the adjustments taken into account for the study, under 10% of the interests did not have full insurance cover, which represented less than 5% of the total cargo values concerned” (UNCTAD, 1994). Also, “In recent years, the figure of uninsured cargo seems to have increased a little. Figures of adjuster Richard Cornah of Richard Hogg Lindley prepared in 2007 and referred to by IUMI in 2013, show that over 12% of the cargo interested parties were uninsured” (Kruit, 2017).

William Tetley defended the abolishment of the institute stating that "*general average was a useful concept before the advent of marine insurance*" (Tetley, 2021); According to this author, the general average is time-consuming, expensive, frequently unfair, and out of sync with current practice in other areas of transportation law, stating that it also serves little to no useful purpose.

It is a well-known theory that the general average owes its survival to the fact that it constitutes the Holy Grail for maritime lawyers. In our opinion, the general average is far from the decadent prognosis that some give it, it is at the heart of maritime law and is a manifestation par excellence of this principle of solidarity, being the only one that continues to ensure balance and justice when sharing risks with all parties involved.

While it is true that maritime insurance has grown significantly in importance, this does not negate or displace the logic of the general average life; Rather, they both exist in separate spheres and naturally take on different shapes from when insurance first began to diffuse. However, and this point should be noted, we do not see how insurance would replace the general average in a situation, for example, where the captain deliberately causes the ship to run aground for the common salvage of the ship and avoid the possibility of the cargo suffering severe damage.

The logical application of insurance would strongly imply that this damage would be assigned to an insurance company, which would solely support it, without being able to recover anything and without being able to communicate with the other parties involved in the delivery of such damage. Naturally, a solution like this might have a significant impact on insurance rates, which could exponentially increase.

As we have seen, the general average is a long-established method of distributing the risk associated with shipping, appearing way prior to marine insurance; It is however a type of mutual insurance that is based on equity and has been utilized and handed down over the ages; supported and understood by merchants from a wide range of legal and geographical backgrounds. Equity and the historical foundation of the institution were considered the best arguments for the continuation of General Average by the IUMI Committee in 1948, despite the Committee's harsh condemnation of the system.

Therefore, we believe that the continuity of this institute is crucial, if not critical. Consider the scenario where a captain must decide on the financially worst-case scenario for the shipowner in order to salvage the ship and ensure everyone's safety; what type of insurance would cover that situation?

In conclusion, and despite the need for the institute to adapt to new realities, something that is already in process – with the YAR 2016 – noting that creating a uniform law institute, such as an international convention would be crucial, we forsee a long and prosperous life for the Institute of General Average.

5.2 Piracy and General Average

No general average discussion is complete without bringing up the subject of piracy, hijacking, and ransom at some point, especially due to its broadness in application and definition and because, throughout history, this issue has remained one of the most difficult topics to tackle in shipping.

Piracy is not a novel idea, especially for sailors and law practitioners, dating back to ancient times, almost interlinked with the appearance of international shipping. Attacks on merchant vessels off of Singapore and Indonesia in the 1980s, for instance, led to the establishment of the International Maritime Bureau's Piracy Reporting Centre in Kuala Lumpur in 1992. However, piracy in that area mostly consisted of quick attacks on ships to steal jewels from the safe instead of more routine attacks on entire ships and their supplies. A new type of piracy has emerged recently near the Horn of Africa, involving the seizure and imprisonment of ships and their cargoes in order to demand of a ransom (Petrig).

Today, given that more than 6000 seafarers have been held hostage by pirates in the last ten years; and “this estimate is likely to be an underestimation: in the case of West Africa, the IMB has suggested that only one third of attacks are reported, and dataset of attacks built from public data found that indeed only 42% of the attacks found were in IMB reports” (D. Conor Seyle), putting a strain on this high-risk profession.

But the issue with piracy starts with its very own definition. The 1958 Convention on the High Seas, based on the Harvard Draft Convention on Piracy of 1932, was

the first time the notion of piracy was written down. The 1958 Convention on the High Seas' piracy rules were subsequently adopted into UNCLOS with very minimal amendments (Petrig). Because the International Chamber of Commerce's International Maritime Bureau (IMB) "groups all forms of piracy under one category of piracy,' and countries like Malaysia, Indonesia, and Singapore state that piracy should be separated according to the crime committed, current definitions of piracy are inadequate as a tool for policymakers and need to change",according to DANA DILLON (Dillon, 2005). The author considers that the IMO and IMB should alter their definitions of piracy to cover four categories of maritime crimes: corruption, sea robbery, piracy, and maritime terrorism (Dillon, 2005)[21].

The international approach today is set out in article 100 UNCLOS, which states that:

> "*All states shall cooperate to the fullest possible extent in the repression of piracy (…)".*

The definition and concept of piracy used by IMO originate from UNCLOS[22], which defines piracy in article 101, restricting it to acts perpetrated on the "high seas" and "outside the jurisdiction of any state". As can be easily deduced, piracy attacks do not occur frequently on the high seas, nor outside of a state's jurisdiction (only 27% of real and attempted attacks occur in these locations), but they do occur frequently in ports and territorial waterways well within a state's authority (Dillon, 2005). The reason for this geographical restriction in the definition of piracy is because actions in territorial seas are generally subject to the jurisdiction and enforcement authorities of the coastal state, and so are not a shared responsibility of all governments (Feldtmann, 2018). The condition that these acts be undertaken "for private ends" is also difficult to understand; these criteria exclude all actions "*that are not only for the aim of enrichment but, for example, are carried out based on political or terrorist motives."* On the other hand, some argue that the criterion should be a distinction between state-initiated or state-sanctioned actions and private-sector actions. The IMB follows the definition provided by UNCLOS (Centre, s.d.).

[22] U.N. Convention on the Law of the Sea 1082.

IMO identifies armed robbery against ships as:

> *“any illegal act of violence or detention or any act of depredation, or threat thereof, other than an act of piracy, committed for private ends and directed against a ship or persons or property on board such a ship, within a State’s internal waters, archipelagic waters and territorial sea; or ‘any act of inciting or of intentionally facilitating an act described above*.” ((IMO), 2009)

The IMO's proposed broad definition of "armed robbery against ships" is ineffective unless it is incorporated into national legislation and/or the legally enforceable international framework because the employment of armed guards for activities other than piracy (strictly speaking) cannot be justified. Since expanding the definition of "piracy" is extremely strict and necessitates significant changes to the international legal system, particularly the UNCLOS, going back to the IMO definition and extending the scope of armed guard intervention to include "armed robbery against ships" will be the most practical course of action.

Henceforth, while a ship is in or enters its territorial sea or internal waters, coastal states maintain the right to permit the embarkation of armed guards (and may still raise some questions regarding innocent passage). The boarding of military personnel from the flag state (or one recognized by it) on a ship that enters the coastal state's sovereign waters will undoubtedly be difficult to accept because it is a matter of international harmonization of the powers of the coastal state and the flag state in this context.

The term "piracy" must also be understood in the context of maritime insurance, which may not be the same as its meaning under criminal law or to an international lawyer. According to Rule No. 8 of the Rules for Construction of Policy (under the Marine Insurance Act of 1906), the term "piracy" in this context covers unruly passengers and rioters who attack the ship from the shore. Three key components that identify piracy can be determined from the aforementioned: The ship needs to be at sea; There must be a robbery, which is the stealing of or attempting to take someone else's property; must employ force or the threat of force.

The definition of piracy that we have adopted is the same given by Carver's Carriage of Goods[23], in which piracy is forcible robbery at sea, whether committed by offenders from outside the ship, or by seafarers or passengers within it. The essential element is that they violently dispossess intent (Wong, 2009).

Although the definition of piracy will continue to be a controversial topic, there is still one question that remains, "does piracy give rise to a claim for the general average?" (Wong, 2009). The first answer one could give is that yes, it does since where and when cargo is voluntarily given up to pirates by way of composition, the sacrifice is a subject for general average contribution.

There isn't a lot of case law on this subject. The most famous English case is Hicks v. Palington from 1590, where cargo surrendered to pirates as ransom was viewed as a general average sacrifice. In this case, the court determined that the cargo provided as ransom to the pirates qualified as a sacrifice and might therefore be eligible for General Average contribution. The basis for this practice is the notion that any acceptable payment given to the hijackers in exchange for the ship and its cargo reflects a general average sacrifice, to which the ship-owners are entitled to recoup contributions from the cargo and other interests. As stated in the aforementioned case of Hicks v. Pellington, the property would be delivered to the pirates in exchange for their release of the ship, its cargo, and the crew inside.

In modern society, however, this isn't very common. Today, paying a ransom to the pirates is most frequently done. But in the recent Somalia cases, in addition to the ransom, there are additional significant costs associated with securing the release of the vessel and cargo, such as payments to a negotiation team, transportation costs for the ransom, insurance costs for the ransom money, etc., in addition to the initial search costs, do all of these classify as general average?

The four essential features of general average translate to, in the case of a piracy attack with the ransom, five:

[23] Generally approved few court cases including Athens Maritime x Hellenic Mutual War (1992) (Wong, 2009).

1. A common maritime adventure in a piracy attack is most obviously occurring.

2. Because pirates are in charge of the vessel and its cargo, both are in danger, pirates may have scuttled the ship or taken the cargo or the ship itself. It has been proposed that the crew may be the main target of the threat. However, by endangering the crew's safety, the vessel's operations are jeopardized, endangering the safety of the ship and its cargo. In order to protect the ship and cargo, it is important to incur search and ransom fees as well as other related expenses for everyone's safety.

3. Although there may appear to be little else the shipowner can do and the ransom payment is not ideal, it is still an expense made *voluntarily* and *intentionally* during a time of general peril to ensure the safe release of the vessel and cargo. These costs are neither accidental nor inevitable. While two members of the crew are forced to pay the ransom by the pirates, those who do so voluntarily do so as the best way to protect people and property.

4. Charges must be *extraordinary*, and the cargo interest has no legal basis to expect the shipowner to cover them under the contract of affreightment.

5. The shipowner is required to take reasonable steps to regain possession of the vessel, but whether the charges are lawfully and reasonably made or incurred is a factual issue that should be determined by considering what a prudent, competent owner would do in the same situation, taking into account the risks of damage to the vessel and its cargo as well as the risk of crewmember death or injury. In this regard, it is crucial for the shipowner to tell the other stakeholders (such as charterers, cargo interests, insurers, and P&I Clubs) at all times and to get their consent wherever feasible before taking any action. Furthermore, "reasonable" implies "legal," therefore legality issues must be taken into account (Wong, 2009).

The YAR C, as previously explained, implies that any harm expense including maintenance, crew wages, and fuel fall outside the general average. Additionally,

any harm the pirates intentionally or negligently do to the ship and/or its cargo will not be counted in the general average.

The subject of public policy and legality, which might vary depending on countries, is a key consideration when evaluating allowance in general average for the ransom payment and enforcement of general contribution thereto from other participants to the common maritime adventure. Funding for terrorism, whether directly or indirectly, is prohibited by contemporary anti-terrorism legislation. In this regard, it is argued that there is scant evidence to substantiate the claim that ransom payments made in connection with recent Somalia piracy cases find their way to terrorist or political organizations to finance terrorist activities, given that the consensus is that Somalia piracy is committed for personal gain.

According to Richards Hogg Lindley, the top average adjusting company in the world, the general average is recognized, acknowledged, and accepted method of accounting for the cost and effort expended to protect and recover ships and cargo at sea:

> *"General Average is a recognized, respected, and accepted way of dealing with sacrifice and expenditure incurred to safeguard and recover ships and cargo at sea. It is entirely natural that there should be a concern that money paid to criminals for this same purpose should be allowed in General Average. However, the payment of a ransom complies with the defined tests for General Average and has the support of the courts.* (Wong, 2009)*"*

There is increasing agreement, as reported in the media, that the ransoms in these particular instances are general average. One could argue that the issue of piracy has given the general average a new significance as a system for allocating losses voluntarily and purposefully incurred for the benefit of all. It is not, however, a widely favored institution.

5.3 Decarbonization and the ETS system

No discussion of the maritime world in these days would be complete without talking about European and global decarbonization goals, especially in the form of measures to prevent or minimize emissions, for example, the ETS system (Faria,

2022). This discussion is also relevant for the General Average claim, since analyzing the text of YAR C, we can conclude that in most cases, environmentally related disasters are not entitled to an allowance.

The current framework of the economy's decarbonization and the energy transition indicates that maritime transport should likewise be international in its version, primarily, in the new valence of sustainability. On the other hand, sustainability in shipping must be assessed according to the necessary balance of the following three dimensions: economic (competitive and efficient transport), social (inclusive transport), and environmental (green transport), according to UNCTAD; these three dimensions are all interlinked for the success of not only the maritime voyage, but for the whole shipping economy.

This does not take away the importance of prevention, of making sure that the Maritime Adventure goes through its normal course, without ecological disasters, such as the Exxon Valdez that we will talk about below. In order to do this, we have to make a bridge between what General Average clauses state in the form of the YAR, can this be considered a prevention mechanism? Of course, it can.

The YAR state, in Rule C, that damages or expenses incurred in respect of damage to the environment are not entitled to an allowance.

> *"In no case shall there be any allowance in general average for losses, damages or expenses incurred in respect of damage to the environment or in consequence of the escape or release of pollutant substances from the property involved in the common maritime adventure."* (York-Antwerp Rules, 2016)

Nonetheless, in accordance with Rule XI,

> *"the cost of measures undertaken to prevent or minimize damage to the environment shall be allowed in general average when incurred in any or all of the following circumstances:*
>
> *as part of an operation performed for the common safety which, had it been undertaken by a party outside the common maritime adventure, would have entitled such party to a salvage reward.*

> *(ii) as a condition of entry into or departure from any port or place in the circumstances prescribed in Rule X(a);*
>
> *(iii) as a condition of remaining at any port or place in the circumstances prescribed in Rule XI(b), provided that when there is an actual escape or release of pollutant substances, the cost of any additional measures required on that account to prevent or minimize pollution or environmental damage shall not be allowed as general average;*
>
> *(iv) necessarily in connection with the handling on board, discharging, storing or reloading of cargo, fuel or stores whenever the cost of those operations is allowable as general average."* (York-Antwerp Rules, 2016)

That said, we can now go back and say that the General Average, in the form of the YAR, has this particularity, but all parties involved in world trade are directly involved in implementing decarbonization goals, including buyers and sellers (as well as importers and exporters), different players operating in the logistics industry (such as consignees, freight forwarders, and shipping agents), port infrastructure, logistics operators, banks, insurance, and P&I.

The European Union compiled a series of ambitious proposals with the aim to reduce EU greenhouse gas emissions by 55% by 2030, called the "Fit for 55 packages" which includes four proposals, out of ten, that have an immediate relation with the maritime sector:

1. Revision of the EU Emissions Trading System (EU ETS), extending it to the shipping sector.

2. The new FuelEU Maritime regulation.

3. A revision to the energy taxation directive (ETD).

4. A revision to the alternative fuels infrastructure regulation (AFIR).

And so, the EU's goals of decarbonizing shipping, or at least reducing it by 55% by 2030 as part of the "fit for 55 packages", are of huge concern to all these players.

All of these goals today have a very different picture than they had a few decades ago because of the direct intervention of shipping patterns; and also due to the development of new mega-ships, particularly containers (with a capacity of more than 24,000 TEU), increased transport costs, the effects of global logistics chains, and greenhouse gas emissions, in particular the expansion of the world fleet, in terms of ships and capacity, and the handling of goods, increased energy consumption, vulnerabilities and restricted access to port infrastructure, lack of physical and electronic connectivity to ports, all of these all important factors for the creation and implementation of the Fit for 55 package.

It's crucial to remember that these goals can only be achieved if universal benchmarks, metrics, and timetables are created without compromising the competitiveness of international shipping. This could imply that, despite a current trend toward higher marine fleet safety, the most influential shipowners in the world "fly" to "new flags of convenience". (Lynce de Faria, D. & Leegwater Simões, I., 2021).

By 2030, the European Union wants shipping to achieve a 55% reduction in emissions. To do this, shipping must immediately join the carbon market (ETS, Emission Trading Scheme), implement pollution emission caps, research and develop new fuels, and create a fund to support adaptation during the energy transition phase – if this sounds like a lot in such a short amount of time, it’s because it truly is.

The IMO and the EU have both stated that they want to cut back on ship related GHG emissions.

The EU has created its own technique for gathering and analysing emission data about ship emissions ("EU MRV"), even while the International Maritime Organization (IMO) is still debating an international agreement to regulate ship emissions and its standards (known as the "IMO DCS").

Both the EU MRV and the IMO DCS are comparable systems that run in parallel and will require gradual harmonization. As a result, while the IMO's program covers all shipping-related emissions globally, the MRV focuses on CO2 emissions from ships to, from, and sailing domestically.

The main differences between the two systems can be summed up as follows:

	EU MRV *(Monitoring, Reporting and Verification*	**IMO DCS *(Data Collection System)***
Applicability	Ships > 5,000 gross tonnage (GT) calling any EU ports	Ships ≥ 5000 gross tonnage (GT) trading globally.
Reporting focus	• Distance travelled/time spent at sea. • Amount of each type of fuel consumed in port/at sea. • Cargo carried.	• Distance travelled. • Amount of each type of fuel consumed in total. • Hours underway under own propulsion.
Reporting path	• Annual Emission Report to be verified by an accredited verifier - within EMSA's THETIS-MRV database. • The company then submits the verified Emission Report to the European Commission via THETIS-MRV	• Fuel oil consumption to be verified by the flag administration or Recognized Organization (RO), either annually or where there is a change of flag or owner. • Flag state (or RO) reports the verified fuel oil consumption data to the IMO's GISIS database.

Figure 7 *- Differences between The MRV and DCS. Source: https://www.dnv.com/maritime/insights/topics/MRV-and-DCS/index.html*

Now if the MRV and DCS models can be harmonized, then the adoption of the ETS system to marine transportation could pose major issues with relation to

competing with other ships engaging in liner operations outside of the European Union.

The ETS has existed in the European Union since 2005 and operates on a 'cap and trade' system, that is, a limit is set on the total amount of specific greenhouse gases that can be emitted by the installations in the system, and this limit is gradually reduced, with the result that overall emissions are reduced.

It is expected that the ETS model, applicable to maritime transport, to include emissions from ship voyages that originate in the European Union (outbound voyages) and also all those resulting from stays in ports.

Notwithstanding, the ETS system has been heavily criticized by the European Parliament, which in June 2022 refused to approve this European carbon market, along with the carbon border tax and the social climate fund. The ETS system is considered one of the focal points of the Fit for 55 package.

Considering the recent controversy, and putting it aside, the ETS System has its beauty if looked at individually; but on the other hand it is clear that, from the outlook of these news and since there is no international agreement between the member states of the EU and IMO regarding the regulation of ship emissions, there is an urgent need to articulate the DSC (from IMO) and MRV (from EU) in international voyages, with the following steps being taken: Harmonization between DCS and MRV; Ensuring that the revenues collected by carbon tax/fees will be invested in shipping; Harmonization in Bunker Taxation - so that there’s no double-tax on fossil fuels; Applicable to the owners of ships that are subject, additionally, to the ETS mechanism, in relation to the MBM system; Adopt a model of waver of credits/allowances in carbon rights – allowing operators not to simultaneously pay ETS and MBM.

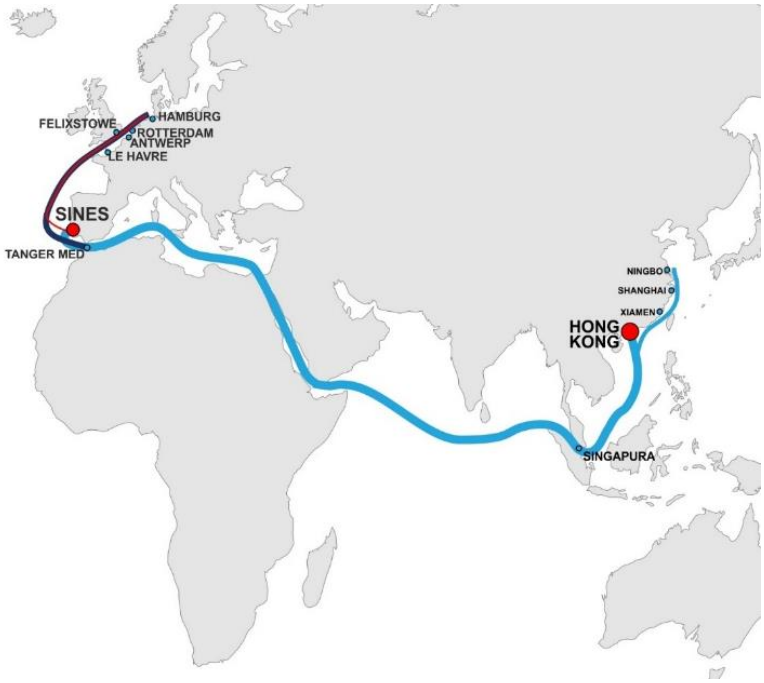

Figure 8 - *Adapted from "The impact of Fit for 55 on the competitiveness of European ports. Virtual meeting, 8 September 2021. ESPO Morning Coffee".*

However, this MBM is strongly preferred since ETS is only applicable to 7% of global shipping and it would massively affect competition in European ports. For example, a container vessel goes from Hong Kong to Sines; If the vessel calls on Sines (a port in the EU), 50% of emissions from that voyage (between the two red dots in the image below) are covered by the maritime EU ETS; If the container vessel goes from China and calls on Tanger Med in Morocco and, in Tanger Med, it unloads containers onto small feeder vessels (the red line), only 50% of the emissions from feeder vessels going to the EU would be covered by the ETS.

The point being, the vessel would choose to unload the cargo in a port outside of the EU, because if it were to make the call in EU, all the voyage would be covered by the ETS, a whopping 50% of it! Therefore, it is natural that the ship would choose to unload its cargo at a port outside the EU before transporting it through small feeders within the EU.

5.4 A new light shining?

With this doomsday scenario, there is still hope and a new light shining at the end of the tunnel, especially since the EU Commission is clearly taking a deeper look at the huge impact this system would have on our market competition; and how small of an impact it would have on the goal to reduce emissions.

The BIMCO Emission Trading Scheme Allowances Clause For Time Charter Parties was released in July 2022 with the intention of enabling owners and charterers to divide liability for vessels adhering to, among other things, the EU's emissions trading scheme (ETS). As previously noted, the application of the EU ETS to shipping is still up for negotiation, but it is anticipated to go into force on January 1, 2023, or 2024.

The ETSA Clause regulates the rights and responsibilities of the parties with respect to any relevant Emission Scheme, which is defined as:

> *"a greenhouse gas emissions trading scheme which for the purposes of this Clause shall include the European Union Emissions Trading System and any other similar systems imposed by applicable lawful authorities that regulate the issuance, allocation, trading or surrendering of Emission Allowances."* (BIMCO, 2022).

The broad scope of the clause, which establishes the duty to "cooperate" and exchanging information "in a timely manner," should ensure that it remains applicable as more policies are implemented to target not only carbon emissions but also any other greenhouse gases. The broadness is apparent as we delve deeper into the clauses.

According to subclause (b), a "*independent verifier*" must monitor emissions and report them. The phrasing may need to be altered to reflect a more universal duty since it is assumed that Owners will need to do this, but this assumption may not hold true for all emissions trading regimes around the world.

Regarding the allowances, in subclause (c), the Charterers have the obligation to "*provide and pay for the emission allowances corresponding to the Vessel's emissions*..."which should be done in the "*first seven days of each month*". As a result, the parties will need to have their own unique accounts for the allowances.

Moving on to clause (d):

> "*If the Charterers fail to transfer any of the Emission Allowances in accordance with subclause (c), the Owners shall, by giving the Charterers' five (5) days' notice, have the right to suspend the performance of any or all of their obligations under this Charter Party until such time as the Emission*

> *Allowances are received in full by the Owners. Throughout any period of suspended performance under this subclause, the Vessel shall remain on hire and the Owners shall have no responsibility whatsoever for any consequences arising out of the valid exercise of this right. The Owners' right to suspend performance under this Clause shall be without prejudice to any other rights or claims they may have against the Charterers under this Charter Party*." (BIMCO, 2022).

In reality, suspending a ship's operations creates problems, such as a greater risk of debt default by owners and likely disputes over bills of lading. The number of bunkers, or the number of planks they own, charterers are required to deposit bills of lading in an escrow account, this to say that some business owners may choose to consider different or additional phrasing to this clause.

There are nevertheless some conflicting provisions. Starting with the words "*notwithstanding any other provision in this Charter Party*…", (BIMCO, 2022), the clause is intended to take precedence over any other clauses that conflict with it. In first few months of 2022, changes have been made to conventional charters and the addition of references to the owner being reimbursed for any charges, costs or fees incurred in relation to environmental compliance at the direction of the charterers.

One can certainly comprehend the purpose of such clauses, especially given that when the charters were being agreed, there were no published standard clauses to cover environmental costs. To avoid disputes over competing provisions, parties should make sure that the intended priority of any agreed conditions is made clear when using an ETS license clause.

We can understand the aim of such clauses, particularly when charterparties were being agreed at a time with no standard published clauses to cover environmental costs. When using an ETS allowance clause, parties should ensure that the intended priority of any negotiated terms is made clear to avoid arguments over conflicting provisions.

The question remains and, although we understand that the targets must indeed be ambitious, they also need to be a realistic choir that the member states must

meet, especially in ports and in the shipping industry, while avoiding a potential "flagging out" or diversion of any ships from EU ports and the main logistic nodes.

Everything really does sum up in this one quote by Guy Platten:

> "*What shipping needs is a truly global market-based measure [of transition] that will reduce the price gap between zero-carbon fuels and conventional fuels*" (Platten, 2021).

5.5 The Exxon Valdez case

Although not a general average case, the Exxon Valdez case is very interesting in terms of the environmental (disaster) aspect of it and its application in marine insurance claims, and might be the most notorious disaster concerning a ship in history (Haig-Brown, 1999), maybe with the exception of the Ever Given on the Suez Canal in 2021, or even the Titanic, on totally different terms; due to very different reasons but that is to be explained further on. This is a case that inspired the concern in Oil Spills, its effects on the environment and the importance of shipping in decarbonization.

The Supreme Court has called the spill of the Exxon Valdez "[t]he most notorious oil spill in recent times and the largest oil spill in United States history" (United States v. Locke, 2000)

The story begins shortly before midnight, in 1989, when the oil tanker Exxon Valdez hit Bligh Reef, a known hazard to navigation in those waters; and ran aground in Prince William Sound, Alaska, spilling 42,000m3 of crude oil, due to the captain's alcohol abuse. Exxon paid about $2 billion in cleanup costs and $1.8 million in habitat restoration and personal injury costs related to the spill.

The spill affected "more than 2km of shoreline, with immense impacts on fish and wildlife and their habitats, as well as on local industries and communities. The oil killed an estimated 250.000 seabirds; around 2.888 sea otters; 300 harbor seals; 250 bald eagles; 22 killer whales; billions of salmon and herring eggs" (Shigenaka, 2020).

Even after more than 30 years, the spill still evokes unpleasant recollections. Numerous restoration and conservation initiatives in Prince William Sound and for migratory species' crucial habitats outside of the state have been funded with settlement money and, matching funding from multiple restorations, research, and monitoring initiatives, more than 600,000 acres of land have been able to be preserved.

But let's delve through the case, which has a very contoured history; before the disaster happened, several concerns arose, mainly the fact that Exxon knew about the condition of alcoholism of the most important element in what regards the safety of the ship, the captain, and that it was a recipe and potential for disaster. The court later stated:

> *"For approximately three years, Exxon's management knew that Captain Hazelwood had resumed drinking, knew that he was drinking on board their ships, and knew that he was drinking and driving. Over and over again, Exxon did nothing to prevent Captain Hazelwood from drinking and driving. Exxon repeatedly allowed Captain Hazelwood to sail into and out of Prince William Sound with a full load of crude oil"* (Sheet, Exxon Valez Fact, n.d.)

Nevertheless, prior to the Exxon Valdez disaster, Captain Hazelwood, who had previously been arrested for drunk driving, had a flawless tanker captain record. Also, there was insufficient proof to demonstrate that the condition of the captain was to blame for the oil spill. The accident was instead attributed to bad weather and inadequate preparedness, as well as a number of inept maneuvers by the individuals in control of the tanker (Editors, History.com, 2009).

Exxon pursued then several claims and suits; sued the State of Alaska in October 1989, alleging that by delaying the approval of the use of disperse chemicals until the night of the 26th, the state had impeded Exxon's efforts to mop up the spill; in 1990, Exxon filed claims against the Coast Guard, requesting payment for any cleanup expenses incurred as well as any damages granted to claimants in any legal actions brought by the State of Alaska or the federal authorities against Exxon.

Then, in 1991, the settlements began, Exxon made an agreement with seafood group in order to compensate for the damages, granted 63.75 million dollars, “but stipulated that the seafood companies would have to repay almost all of any punitive damages awarded in other civil proceedings” (Kroh, Kiley, 2013). There was hoped to be 5 billion dollars of punitive compensatory damages, and the seafood producers was 750 million dollars.

In Exxon Shipping Co.v. Baker, the jury awarded 287 million for actual damages and 5 billion for punitive damages. Exxon acquired a $4.8 billion credit line from J.P. Morgan & Co., who invented the first modern credit default swap so that they would not have to maintain as much cash in reserve against the danger of Exxon's default, to safeguard itself in case the verdict was upheld.

Exxon proceeded to appeal and was able to reduce the punitive damages to 500 million dollars, which were paid in full by 2009. “This amount was 1/10th of the original punitive damages, Exxon remained hugely profitable, the process of payment was drawn out over decades, and long-term damage continues and is not funded by Exxon. Hence, the Exxon spill is often cited as shorthand for corporate responsibility for societal damage not being enforced adequately” (Kroh, Kiley, 2013).

This is an important case study because, in the end, the Exxon Valdez spill prompted a critical evaluation of the state of American oil spill response, cleanup, and prevention. One outcome was the Oil Pollution Act of 1990's[24] passing, which resulted in the creation of NOAA's DARRP program.

An attorney for the oil company claimed that insurers may draw some lessons from the Exxon Valdez case to help them deal with policyholders more successfully, the first one being the fact that 19 months passed before Exxon Corporation received a letter from Lloyd's of London's lawyers refusing coverage for the 1989 Alaskan oil spill that happened after the Exxon Valdez supertanker ran aground:

[24] The Oil Pollution Act (OPA) of 1990 streamlined and strengthened EPA's ability to prevent and respond to catastrophic oil spills. A trust fund financed by a tax on oil is available to clean up spills when the responsible party is incapable or unwilling to do so. The OPA requires oil storage facilities and vessels to submit to the Federal government plans detailing how they will respond to large discharges. EPA has published regulations for aboveground storage facilities; the Coast Guard has done so for oil tankers. The OPA also requires the development of Area Contingency Plans to prepare and plan for oil spill response on a regional scale (epa.gov, 2021).

> "*I guess one of my requests to (insurers) would be if you truly believe that there's no coverage…don't wait 19 months to deny coverage*." (Bradford, 1997).

After the trials, the ship resurfaced as the Sea River Mediterranean and then Exxon Mediterranean and, in 2002, the ship was moved to Asian routes, and after that was temporarily dismantled in an undisclosed location.

The Exxon Valdez oil disaster led to the historic Oil Pollution Act of 1990, which mandated the removal of all single-hulled ships from American seas by 2015. Single-hulled tankers that transport heavy oils were outlawed by the European Union on October 21, 2003. Between 2005 and 2010, a comprehensive ban on single-hulled tankers was supposed to be phased in. Their days are definitely numbered as there is still demanded to ban single-hulled tankers from the global oil trade.

After 20 years under American flag, the Sea River Mediterranean was changed to a Marshall Islands-flagged ship in 2005, perhaps in the expectation that it would ultimately be authorized to re-enter the route for which it had been firstly intended, the Alaska-U.S. West Coast-Panama.

When Sea River sold the Mediterranean to Hong Kong Bloom Shipping Co., Ltd. in 2008, ExxonMobil and its infamous tanker had finally parted ways. The ship was once more given a new name—Dong Fang Ocean—and a new flag—Panamanian registry. The Dong Fang Ocean was transformed into a bulk ore carrier at Guangzhou CSSC-Oceanline-GWS Marine Engineering Co., Ltd., ending its days as a tanker.

The Dong Fang Ocean worked until November 29, 2010, mostly unnoticed in its new form. It collided with the Aali, another bulk carrier, on that day in the Yellow Sea off the coast of Chengshan, China. The Dong Fang Ocean lost both of its anchors, and the Aali "suffered damage to its ballast tanks" (Bradford, 1997). Both vessels were seriously damaged. With the aid of tugs, the Dong Fang Ocean advanced toward the port of Longyan.

The Oriental Nicety was given a final name change, and in July 2012, the court gave the go-ahead for it to be hauled onshore for dismantling after an

environmental audit that was mandated by the court revealed no substantial contamination.

There is a quote by Shanta Barley that sums it all:

> *"The Oriental Nicety (née Exxon Valdez), born in 1986 in San Diego, California, has died after a long struggle with bad publicity."* (Shanta Barley, 2012)

6. Suez Canal and the "Ever Given" case – The resurrection of General Average?

6.1 The Suez Canal - Historic and commercial overview

The connection between the Red Sea and the Mediterranean was first thought out by the Ancient Egyptians, way before the passage to India through the Cape of Good Hope was found by the Portuguese. This thought materialized in the sixth century BC when the Red Sea was connected to the Nile River after the Persians invaded Egypt. At the time, the system was made to split into two sections, one connecting the Nile to the Bitter Lakes[25], and the other connecting the Gulf of Suez to the Lakes. After the Ptolemaic dynasty, the canal was obstructed by desert sands (sand deposition), and later reconstructed and maintained by the Romans and Arabs as they considered it to be a crucial communication channel.

As time went by, the desert sands continued to demonstrate their force, and, by the time the Portuguese discovered a passage to India via the Cape of Good Hope in the 15th century, the canal was effectively put to an end. However, the Venetians attempted to reopen the canal through negotiations with Egypt, after realizing that their trade was in danger due to the new Portuguese spice route, an attempt that was ignored possibly due to the Turkish occupation between 1517 and 1805.

However, Napoleon gained an interest in the subject during the Egyptian war and asked Charles Lepère to conduct research. Later, in 1832, management of this inquiry is assigned to Ferdinand Lesseps, the then-French vice-consul in Egypt.

[25] The Great Bitter Lake was a freshwater lake that was fed by a distributary of the Nile until the Suez canal was constructed in 1869.

Lesseps suggests following the traditional Pharaonic route and opting for the idea of a direct link between the Red Sea and the Mediterranean. But it wasn't until Mohammed Sa'd, a friend of Lesseps, succeeded Abbas Pachá on the throne in 1854, that Lesseps was able to realize this goal.

Lesseps was the executive director of the newly founded Compagnie Universelle du Canal Maritime de Suez (Universal Company of the Maritime Suez Canal), with the authority to cut and operate the canal. Construction on the canal began in 1859, but it was particularly difficult because Mohammed Sa'd's successor, Ismail Pachá, opposed the hiring of Egyptian laborers. This practice was already being compared to slavery at the time, and for good reason—it is estimated that more than 120,000 workers died while building the canal.

On August 15, 1869, the Red Sea's waters reached the Bitter Lakes, which were previously receiving water from the Mediterranean through Lake Timsah. On November 17, 1869, the Suez Canal was officially opened in front of Eça de Queiroz[26], amidst a flurry of joyous celebrations. Significant changes were made to Cairo, including the construction of a road connection to Ismailia and a theatre, so that Verdi's opera Aida, which had been specially commissioned for the opening, could be performed there. They invited representatives from the royal houses of France, England, Russia, and other countries. The procession left from Port-Said on the yacht Aigle, which was carrying Empress Eugénie and Lesseps. The celebrations took place the following day in Ismailia and cost the Kepa 37 million francs (about the same in euros). On the 19th, they set out once more, and on the 20th, they reached Suez.

But by 1875, the Kepa was in serious financial trouble. Under the leadership of then-Prime Minister Disraeli, who accepted full responsibility for the deed, Great Britain purchased all of Kepa’s shares for 4 million pounds, seizing control of the canal, which was essential for the country's connection to British India. President Nasser of Egypt retaliated by nationalizing the canal in 1956 after some Western nations, including France, England, and the United States, refused to provide money for the construction of the Aswan Dam. The proceeds from the Suez Canal

[26] Eça de Queirós (1845-1900), Portuguese writer, was one of Portugal's most important prose writers.

corporation would then aid the dam project. When Israel invaded the Sinai Peninsula in 1967 during the Six-Day War, Egypt was compelled to sink 40 ships in the canal to seal it off. The largest tankers, which once again traveled via the ancient cable route, were constructed at this time. (ancruzeiros, s.d.)

Sadat didn't achieve peace with Israel until 1975, restoring the canal to traffic, “he said in that historical speech before the People’s Assembly (March 29th, 1975):

> *I do not want the peoples of the world to imagine that the Egyptian people want to punish them for a fault that they didn’t commit, they all supported us and we want our Canal as they want it a path towards prosperity. We open the Canal while being able to protect it the same way we protected the Canal cities that we are rebuilding. The time when distance stood in the way of aggression is long gone*.” (Canal, Suez)

When the Canal was reopened for international navigation on June 5th, 1975, Sadat declared, again, in his legendary speech:

> “*The son of this good land who dug the Canal with sweat and tears, the Canal that connects continents and civilizations, crossed it with the spirits of loyal martyrs to spread peace and security over its banks. He is now reopening it for navigation just as he dug it for the first time as a branch for peace and an artery for prosperity and cooperation among peoples of the world*.” (Canal, Suez, s.d.)

When it was fully navigable on November 17, 1969, the canal was 164 km long, 52m wide at the water's edge, and 75 m deep. The highest allowable ship draft was 22.5 meters, before the canal authority allowed night transit on March 1, 1887, and traffic was only permitted during the day for 18 years. The authority implemented numerous programs to develop and improve the Suez Canal between the time of its opening and its nationalization in 1956, which led to increases in the canal's depth to 13.5 meters, width from 22 meters to 42 meters, water sector from 304 meters to 1250 meters, and permitted draft from 2.4 meters to 35 meters. This upgrade cost LE 20 million and 500 thousand in total.

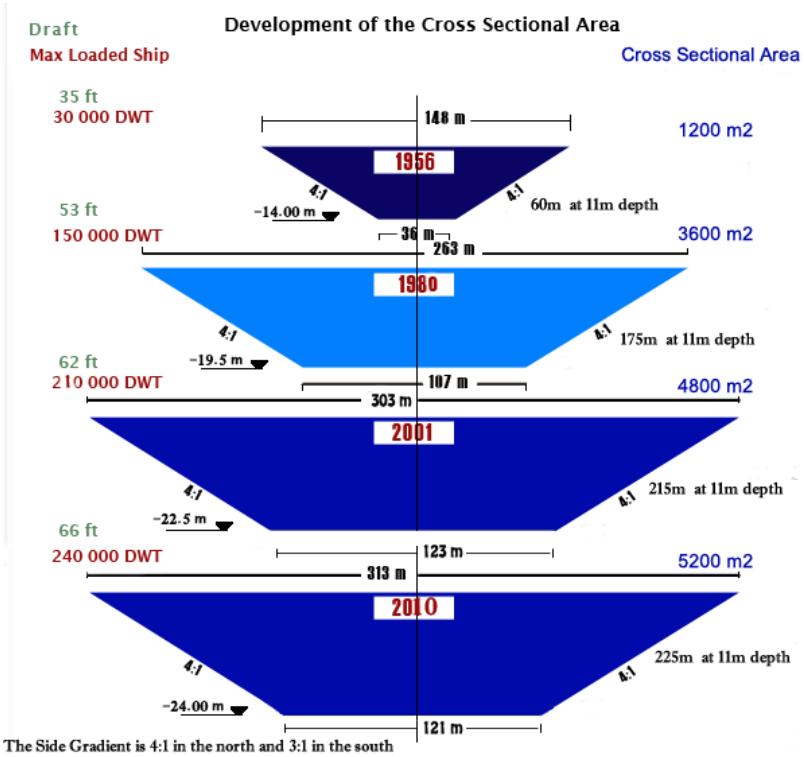

Figure 9 - Development of cross-sectional area of the Suez Canal. Source: SCA - Home (suezcanal.gov.eg)

The capacity of the Canal:

"Suez Canal Authority has completed its planned phase to increase the Canal permissible draft to 66 ft in January 2010.

This enables the Canal to accommodate the following percentage of fully loaded vessels" (SuezCanal):

Figure 10 *- Capacity accommodation in the Suez Canal Source: SCA - Home (suezcanal.gov.eg)*

6.2 The Suez Canal Authority

The Suez Canal is owned, maintained, and operated by the Suez Canal Authority (SCA), a state-owned organization in Egypt. In the 1950s, when the Suez Canal Company caused the Suez Crisis, it was established by the Egyptian government to take its position. The three invading nations—France, Israel, and the United Kingdom—were compelled to retreat after the UN stepped in. The Suez Canal and all surrounding land, structures, and machinery are owned by SCA. SCA publishes the Rules of Navigation, establishes, and collects the tolls for using the canal. The tolls are calculated in XDR and paid in many currencies, including USD, GBP, and EUR.

For example, for a total of 21,415 vessels in 2008, the toll income summed at USD 5,381 million USD, resulting in an average toll of 251,314.5 USD per vessel. SCA is in charge of running and maintaining the Suez Canal, as well as overseeing traffic safety and all other related issues. According to the nationalization statute, SCA is obligated by the Constantinople Convention of 1888, which establishes the right of unrestricted entry and use of the canal to all ships, commercial and military, in times of peace or war, including ships of warring parties, under equal conditions.

The Suez Canal Authority (SCA) is in charge of managing and maintaining the Suez Canal as well as all related matters, including traffic safety. “The Ahmed Hamdi Road tunnel, the Nile Shipyard, the roads alongside the canal, silk production in a farm at Serabium using treated sanitary wastewater for irrigation, water plants in the canal cities, 12,000 housing units, a hospital in Ismailia, and emergency hospitals at both ends of the canal, 4 schools, and various sports and recreation facilities” (SuezCanal) are also listed as part of SCA's facilities on its website.

As with regards to its establishment, in 1956 it is up until today “a public and independent authority with legal personality, and they report directly to the Prime Minister. It has all the authorities needed for running the Canal without being limited by the laws and the systems of the government. The SCA manages, operates, uses, maintains, and improves the Suez Canal. It is the SCA, alone and

exclusively, that issues and keeps in force the rules of navigation in the Canal and other rules and regulations that provide for a well and orderly run canal" (SuezCanal).

Also, "the SCA may, when needed, determine, encourage, or take part in launching projects that are related to the Canal and, for fulfilling its duties and obligations shall have all the relevant authorities and in particular the authority to own, possess the land and real estates. The SCA may rent out its land or real estate and it may hire others' land or real estate as well to serve a purpose set forth for the Canal, for the welfare of its employees and staff, or for establishing projects and utilities related to the Canal that provide for a good performance of the Canal such as water stations and power plants" (SuezCanal), it thus has a quite broad scope of jurisdiction and power.

The SCA also imposes and levies "tolls on navigation and transit through the Canal, and on pilotage, towage, berthing, and other similar actions according to the laws and regulations, it has a separate budget that follows the rules applicable to the commercial projects, and the fiscal year starts on July 1st and ends on June 30th every year" (SuezCanal).

6.3 The Ever-Given case

A severe catastrophe in the Suez Canal, one of the busiest shipping channels in the world, occurred on March 23, 2021, and it absolutely stunned the entire world. The shock by the population was mostly due to ignorance in what regards the shipping world, and how much any constrain like this can affect our day-to-day lives, since 12% of global sea trade uses the Suez Canal.

This stranding prevented the passage of any additional cargo for six days, with losses reaching 400 million dollars per hour due to delays and 400 ships queuing.

6.4 Characteristics of the Ship

In the previous chapter, the relevance of the Suez Canal was explained, with 18.880 ships transiting per year[27]. But as for the ship itself, it is one of the biggest

[27] Data of 2019.

container ships in the world and took about 3 years to construct at the Imabari Shipbuilding shipyard in Japan in December 2015. The vessel has an overall length of 399.9 meters and a full width of 58.8 meters and Evergreen Marine, a container shipping and transportation firm from Taiwan, operates the vessel. Ever Given has a tonnage of 220,940 gross tons and a height of 32.9 meters. This ship has a container capacity of 20,124 TEUs and weighs 199,629 tons. The ship is registered in Panama and owned by Shoei Kisen Kaisha, a division of Imabari Shipbuilding.

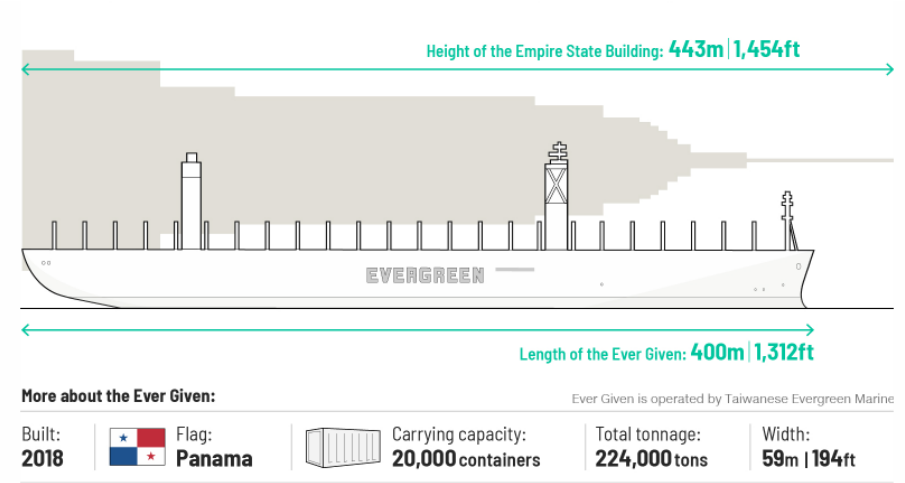

Figure 11 *- Characteristics of the Ship Ever Given, Source: Henrik Pettersson CNN.*

6.5 The largest general average case in history?

Strong winds are alleged to have buffeted the 400-meter-long ship, which forced it to thrust itself across the canal with its bow and stern wedged in the bank, obstructing the passage of other ships through that section of the Suez Canal. According to Egyptian authorities, "technical or human errors" may have also been present. Other ships could not get around Ever Given because the blockage was south of the part of the canal with two lanes. The SCA hired Boskalis[28] to oversee the salvage operations through its subsidiary SMIT Salvage.

This had of course a significant impact on both the cargo carried by the Ever Given and on world trade in general, given that the Suez Canal is one of the

[28] According to their website, “with its roots in the Netherlands, Boskalis has over 100 years’ experience in hydraulic engineering, coastal protection and land reclamation. Our head office is located in Papendrecht and we have an extensive network of branches around the world. We operate in 90 countries and across six continents, with a versatile fleet of more than 600 vessels and floating equipment. Shares in the company have been listed on Euronext Amsterdam since 1971 (Boskalis).

busiest waterways in the world. As a result, a traffic jam arose by the 400 ships that we were unable to pass, some ships even had to take the Cape of Good Hope route around Africa, which added 10 days to their voyages because no one knew when the Ever Given would be released.

After the Ever Given was salvaged, concerns were raised about the costs of the rescue effort, the blockage, and the revenue loss for the Suez Canal Authority. Furthermore, there were concerns about responsibility because container ships like the Ever Given are typically not operated or owned by the same companies, and the cargo on board is owned by thousands of different parties. This incident/accident was a chance to re-evaluate the procedure for salvage of this kind according to the general average principle, considering the massive repercussions for the owners of the shipped cargo.

Apparently, the damage to the ship was limited and there was no damage to the cargo, but there still is the cost of the salvage effort, which involved the employment of 13 tugs and two dredges, as well as potential claims from a number of parties.

On the 1st of April 2021, the owner of the Ever Given declared general average, which is now proving to be one of the most intricate General Average cases in recent memory. LLodys List has previously made it known that the matter could result in litigation involving over 20,000 containers, some of which may have as many as 20 separate consignees.

The Suez Canal Authority and other shipowners with vessels stranded in the canal are on the opposite side, each claiming $1 billion in damages, in addition, there is a chance that perishable cargo on board ships waiting to pass would be damaged.

Because of this, the owner of the ship "Ever Given" filed a lawsuit in London to ensure that liability was limited against any potential parties who might have been affected by the Suez Canal closure. The initial claims will no doubt put a lot of pressure on the insurance market, and policyholders will be looking for ways to reduce their losses. The release of the cargo may be delayed as a result.

Insurers step in at this point, as insured consignees can request a Letter of Guarantee to cover any contribution that may be required in the event of General Average hastening the release of the cargo.

Uninsured consignees will be in a very precarious position because they will have to wait until the regulations are completed before they can give a financial guarantee, which could take several months. The goods will probably be held in storage in the meantime because of the current lien.

As explained in previous chapters, the “job of determining how much the shippers will have to pay is up to an adjuster. The adjuster in the case of the Ever Given is Richard Hogg Lindley” (Khoirunisa).

For reference, the last general average case was the "Maersk Honam"[29], where the average adjuster valued the fixed salvage guarantee at 42.5% of the cargo value and 11.5% as a breakdown deposit[30].This allows the ship owner to exercise his right of lien on the cargo, including the ability to sell the cargo when the deposit, bond, or security is not presented by the cargo owner.

About 15 days before the court decision, the owner of Ever Given and the insurance were trying to reach an agreement on the sum of compensation linked to the SCA dispute. Stann Marine, a group of lawyers for Ever Given's owners, insurers, and the Suez Canal Authority, confirmed this, focusing on the Suez Canal Authority's demand for compensation. In this case, the compensation is intended to pay for the salvage effort, the cost of canal traffic congestion, and transit fees for ships that were lost as a result of Ever Given's week-long canal blockade. The Suez Canal Authority initially requested compensation in the amount of 916 million USD. Later, this amount was lowered to about half of that number, 550 million. Since being refloated, Ever Given and most of her crew were forced to remain in the canal lake while shipowners and canal officials discuss repairs.

[29] The container ship Maersk Honam is managed by Maersk Line. On March 6, 2018, while the ship was traveling through the Arabian Sea, it caught fire. 27 people made up the crew, and five of them perished, including one who was injured while being rescued.
[30] So, for a cargo valued at $100,000, the deposit to obtain release of the cargo was $54,000.

Later, the Egyptian court, to make up for the damages to the cargo, penalized the owner of the Ever Given in 916 million dollars, and seized the ship by an Egyptian court until its owner paid the fine.

Even if the court's ruling was based on Egyptian law, the shipowner's implementation of the verdict is in violation of the Hague-Visby Rules, which contain requirements of international law. In accordance with Article IV Rule 2:

> *"Neither the carrier nor the ship shall be responsible for loss or damage arising or resulting from:*
>
> *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"* (The Hague Visby Rules 1974)

On the other side, it could be argued that by holding with the Egyptian court's ruling, the owner of the Ever-Given ship was demonstrating respect and admiration for the country that administers the Suez Canal, based on 1982 UNCLOS in its Article 2, which declares the following:

> *"The sovereignty of a coastal State extends, beyond its land territory and internal waters and in case of an archipelagic State, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea"* (UNLCOS)

One thing is certain in the case of Ever Given: the captain has (or had) the duty to exercise due diligence to minimize incorrect actions that were taken in handling the vessels, "since the findings of the investigation indicated that the cause in that case was the human factor in the navigation of the vessel. Authorized officials also took steps to prevent accidents similar to these. The officials declared Egyptian efforts in the salvage operation in order to avoid damage to the reputation of the tragedy. In order to prevent a repeat of the disaster, "President Abdel Fattah al-Sisi vowed to quickly invest. In May, he approved a two-year project to widen and deepen the section of the river where the ship ran aground" (Khoirunisa).

The shocking reality is that the "Ever Given" ship case will continue for many more years. Even now, it is impossible to determine the total amount of damages suffered by all parties, let alone the number of claims that will be filed with the

various courts and jurisdictions. All the individuals involved in the ship's maritime adventure, as well as all the other parties who may have suffered damages as a result of the grounding, will have many headaches and a protracted legal battle over the next few years.

The "Ever-Given" case has made the international community aware of the importance of the principle of monitoring, reporting and prevention in international shipping in light of the serious economic repercussions that followed. In addition, the effects of the Covid-19 pandemic on mobility have increased the dependence on the maritime sector. In order to prevent a repeat of the tragedy, various parties must be aware, starting with the carrier itself, which has a duty to exercise due diligence to guarantee and show tot the competent authorities, in a due diligent way that cargo ships have seaworthy grounds, which have a duty to provide efficient mitigating infrastructure.

Only the tip of the iceberg, soon to be fully revealed, is visible to us at this time.

Conclusion

In accordance with the ancient maritime law principle known as general average, all deliberate, extraordinary, and reasonable sacrifices and costs made and incurred to save the ship, the cargo, and other property on board, as well as any freight that is at risk from a common hazard, shall be shared by such interests in proportion to their respective values at the end of the voyage.

In the wake of all the natural disasters, the institute was established as a way to share and lessen the dangers associated with a maritime adventure. The fact that we are discussing a high-risk activity in which ships frequently carry cargo that is more valuable than the ship itself, the requirement for instruments that allow the sharing of risks makes it an additional motivation to investigate maritime transport.

As stated throughout this dissertation, the York-Antwerp rules are one of the most important legal bases for the settlement of a general average, being a set of accepted guidelines for splitting expenses between the vessel and the cargo in the event of an “average”. On the other side, salvage happens when a ship or its cargo needs to be saved from harm, and the shipping corporation may adopt one of several potential legal stances.

The Institute of General Average can be defined in two terms: respectable and ancient. The criticism it has been suffering is the result of modern maritime times, worn down by its antiquated application; When the term "modern day shipping" is used, it conjures up images of a system free of complications and mature enough to handle the technicalities by which the stakes of a shared experience can be set.

But the reality is, there is nothing uncomplicated about a maritime adventure, hence the term “adventure”. And because of this, it cannot be determined to meet modern standards. Its continued existence is an exaggeration of a notion of a bygone era with which it was intended to be compatible.

To be completely blunt and fair, the variables have remained consistent and the YAR has not produced any new features. Without any practical initiatives to truly convert them into practice, the repetition of alternative marine insurance provisions, the revisions to hull and cargo policies, and the removal of the general average for transportation contracts are only embedded in theory.

According to Professor W. Tetley, this Institute can be abolished through international conventions backed by binding national statutes. However, despite this genuine prospect and with all due respect, the likelihood of such a treaty is improbable.

The underlying principle of equity serves as justification for the safe retention of a theory which, in reality, should have been recognized as an important idea in a condition of decay. With the study of the so-called apportionment system that has been provided, it is under no circumstances advantageous to subsidize and compensate for damages suffered by co-sellers in times of imminent danger.

An astonishing 11.1 billion tons and more than 4 trillion dollars in goods are transferred annually by ship, from Ocean to Ocean, person to person. But it should be emphasized that the restrictions of the Covid-19 pandemic created a severe mobility restriction, putting a strain on the shipping industry and making people more aware of its relevance in our daily needs. Essentially, the balance of global supply chains is significantly impacted by the presence of obstacles in this industry, hence, it is crucial that shipping operations are conducted with the utmost due diligence in order to avoid a repeat of the tragedy (Khoirunisa).

This serves as a reminder to shipowners and operators of the significance of performing due diligence to make a vessel seaworthy and the significance of producing proof of doing so. Additionally, it demonstrates to shipboard engineers and superintendents on land that their choices might have significant cost repercussions.

The process of a General Average is indeed time consuming, but nonetheless essential since there is no other system so complete. Consider the scenario where a captain must decide on the financially worst-case scenario for the shipowner in order to salvage the ship and ensure everyone's safety; what type of insurance would cover that situation?

In conclusion, and despite the need for the institute to adapt to new realities, something that is already in process – with the YAR 2016 – noting that creating a uniform law institute, such as an international convention would be crucial, we foresee a long and prosperous life for the Institute of General Average.

In the wake of the emerging of new General Average claims, the continuity of this Institute is crucial, if not critical. Thus, it should never be forgotten that the world of sailing is an adventure, and that the Institute of General Average is the only Institute that can really provide some closure to a worst-case scenario in the world of shipping, essential for the global economy to thrive. Quoting a Portuguese writer who, very pertinently to the subject, said, as freely translated:

"*sailing is necessary, living is not necessary*"

Fernando Pessoa

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