NUS Centre for Maritime Law Working Paper 25/01

NUS Law Working Paper 2025/001

THE IMPACT OF CONTAINERISATION ON CARRIER LIABILITY

Mustafa Yilmaz

Research Associate, Centre for Maritime Law (CML)

[Uploaded January 2025]

This paper is part of the larger National University of Singapore, Faculty of Law Working Paper Series and can also be downloaded without charge at https://law.nus.edu.sg/repository/#repository-tab-4.

This working paper should be cited in the following manner: Author, 'Title', CML Working Paper Series, Paper Number, Month and Year of uploading, https://law.nus.edu.sg/cml/publications.. For instance, Steven Chong, 'Maritime Law in Singapore and Beyond — Its Origins, Influence and Importance', CML Working Paper Series, No 17/01, March 2017, https://law.nus.edu.sg/cml/publications.

The impact of containerisation on carrier liability

Mustafa Yilmaz[*]

ABSTRACT

This paper examines the impact of containerisation on carrier liability under the Hague and Hague-Visby Rules under English law. Containerisation, one of the most significant technological advancements in modern shipping, has transformed maritime transport by redefining its boundaries and operational dynamics. It has introduced concepts such as the supply of containers, stuffing and devanning, storage periods, and pre- and post-sea carriage processes. Today, most cargo loss or damage arises from defective containers and handling challenges like improper stuffing, management, and stowage. These developments expose the systemic limitations of the existing liability framework, designed in an earlier era when containerisation was not anticipated. This paper explores how English courts have addressed these challenges, focusing on the carrier's period of responsibility and basis of liability. It incorporates comparative perspectives from other common law jurisdictions, including Singapore, Australia, Canada, and the US, as well as some civil law jurisdictions. It also considers container-specific clauses in the standardised bills of lading used by the top ten shipping lines, which control about 85 per cent of global container shipping capacity. Finally, the paper reveals how carrier liability for containerised cargo has evolved, considers potential avenues for further development, and proposes ways to align the existing legal framework with the realities of containerisation.

Keywords: Containerisation, carrier liability, port-to-port transport, door-to-door transport, container handling, container-related loss or damage, period of responsibility, seaworthiness, cargo care.

[*] Research Associate, Centre for Maritime Law, NUS. The author would like to thank Professor Stephen Girvin for his valuable mentorship, revisions, and suggestions and Professor Jason Chuah for supervising the author's PhD thesis at The City Law School, City St George's, University of London, from which the ideas in this paper are informed. The usual disclaimer applies.

1 Introduction

This paper explores the current trajectory of carrier liability in container shipping, focusing on the judicial responses to the challenges introduced by containerisation. It aims to provide a coherent understanding of this subject under the Hague and Hague-Visby Rules under English law. Comparative perspectives are employed where they enhance the analysis, drawing on cases from other common law jurisdictions, including Singapore, Australia, Canada, and the US, and, where contextually relevant, certain civil law jurisdictions applying the Hague or Hague-Visby Rules. Moreover, the analysis considers relevant provisions in standard bills of lading used by the leading shipping lines.

This discussion is confined to the core implications of containerisation for carrier liability, particularly how containerisation has reshaped the responsibilities of carriers before, during, and after the sea voyage and the basis of their liability, with a focus on the fundamental duties of seaworthiness and care for the cargo. While broader issues – such as evidentiary challenges arising from containerisation (including the impact of disclaimers like 'said to contain' and the evolving burden of proof for establishing a prima facie case), as well as limitations of liability – are acknowledged, a detailed analysis of these aspects falls outside the scope of this paper. This study does not distinguish between the Hague and Hague-Visby Rules, as the primary change introduced by the latter – the so-called 'container clause' in art IV, r 5(c), which addresses liability limitation – is beyond the remit of this discussion.[1]

This paper is organised into five parts. The first part, in addition to introducing the paper's scope and objectives, explores the origins and evolution of containerisation before establishing the research problem by identifying the key impacts and challenges of containerisation for carrier liability. The second part exemplifies incidents or events leading to damages or losses to cargo arising from containerisation. The third part analyses the carrier's period of responsibility under the Hague and Hague-Visby Rules, concentrating on the concepts of loading and discharging. This includes discussions on container stuffing, pre-loading storage, transport for loading, post-discharge container storage, devanning, and final

[1] Cf, however, Anthony Diamond QC, 'The Hague-Visby Rules' [1978] LMCLQ 225, 232-233; Francis D Rose and FMB Reynolds, *Carver on Bills of Lading* (5th edn, Sweet & Maxwell 2022) [9-277] et seq.

delivery within the context of discharging. The fourth part evaluates how the carrier liability framework under the Rules operates concerning containerisation. It begins by discussing and singling out liability for defective containers provided by the carrier – the most common cause of container-related damage or loss. It then explores how the duty of care for the cargo becomes relevant in addressing various container-related challenges. The fifth part concludes with a snapshot of how and why the carrier's liability for containerised cargo has evolved and where it may further develop. It also encapsulates the clarifications provided by English courts on carrier liability for containerisation to date.

1.1 Evolution of containerisation

Containerisation refers to the organisation of intermodal freight transport through large, standardised steel containers.[2] It is not a distinct mode of transport like sea, road, or rail but an advanced method of cargo unitisation, seamlessly connecting these modes. Containerisation primarily serves to transport break-bulk (general) cargo, although it is occasionally used for certain dry bulk cargoes. The advent of modern containerisation – commonly termed the 'container revolution' – is often credited to Malcolm McLean, an American trucking magnate. The departure of McLean's *Ideal X*, a converted World War II oil tanker ship, from Newark, New Jersey, to Houston, Texas, carrying fifty-eight 33-foot (ft) aluminium containers, marked the beginning of the container era. At the time, no one, not even McLean – whose interest in containers was simply to enhance the efficiency and cost-effectiveness of his trucking business – could have foreseen the profound impact of this innovation. Yet, containerisation has become the most significant technological advancement in shipping since the arrival of steam-powered ships in the mid-nineteenth century.

[2] See Frank Broeze, *The Globalisation of the Oceans: Containerisation from the 1950s to the Present* (Liverpool University Press 2002); Marc Levinson, *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger* (2nd edn, Princeton University Press 2016); Brian J Cudahy, *Box Boats: How Container Ships Changed the World* (Fordham University Press, 2006); Arthur Donovan and Joseph Bonney, *The Box That Changed the World: Fifty Years of Container Shipping – An Illustrated Histor*y (East Windsor, NJ: Commonwealth Business Media 2006); Hans Van Ham and Joan Rijsenbrij, *Development of Containerization: Success through Vision, Drive and Technology* (IOS Press BV 2012); Alexander Klose, *The Container Principle: How a Box Changes the Way We Think* (The MIT Press 2015); Craig Martin, *Shipping Container* (Bloomsbury Academic 2016); Angus Kress Gillespie, *Port Newark and the Origins of Container Shipping* (Rutgers University Press 2022).

Initially, containerisation faced limited adoption, confined to niche markets in certain countries, primarily the US, due to the substantial development costs, including adaptation of ships and the construction of necessary port infrastructure. At the time, there was also significant scepticism and propaganda suggesting that the new intermodal concept, often referred to as the 'land-bridge concept', would merely disrupt the well-established methods of international carriage of goods and ultimately fail.[3] This perception particularly began to change from 1966, following the launch of the first fully containerised transatlantic service by McLean's SeaLand,[4] with its container ship *Fairland* operating between New York and Rotterdam. The service completed its journey nearly four weeks faster than traditional methods, proving the efficiency of containerisation.[5] From that point onward, demand for containerised shipping grew rapidly.[6] By the 1970s and 1980s, containerisation expanded beyond its initial confines to become a fully internationalised method of cargo unitisation.[7] New maritime nations, notably Singapore, emerged as global leaders in containerisation. In the 1980s, Singapore became a prominent transhipment hub, with container handling growing from approximately 917,000[8] twenty-foot equivalent units (TEUs)[9] to around 40 million TEUs by 2024.[10] Global container throughput also rose dramatically during this period: from approximately 36.5 million TEUs in 1980[11] to about 225.3 million TEUs in 2000,[12] nearly 531.4 million TEUs in 2010,[13] around 815.6 million TEUs in 2020,[14] and close to 900 million TEUs in 2024.[15] The container ship fleet also expanded exponentially. In 1980, container ships accounted for just 2 per cent of the global fleet capacity by deadweight tonnage,[16] rising to nearly 14 per cent by 2024.[17] Notably, container ships are estimated to transport over 60 per

---

3 See sources cited in W David Angus, 'Legal Implications of the Container Revolution in International Carriage of Goods' (1968) 14 McGill LJ 395, 396, n 2.

4 SeaLand was later acquired by Maersk in 1999.

5 Sam Ignarski (ed), *The Box: An Anthology Celebrating 25 years of Containerisation and the TT Club* (EMAP Business Communications 1996) 19.

6 *Review of Maritime Transport 1968* (UNCTAD 1968) 23.

7 *Review of Maritime Transport 1980* (UNCTAD 1980) 8.

8 *Review of Maritime Transport 1981* (UNCTAD 1981) 12.

9 The standard measure of container capacity.

10 Cichen Shen, 'PSA Singapore Hits New Throughput Record of 40m TEU in 2024' *Lloyd's List* (London, 27 December 2024).

11 *Review of Maritime Transport 1981* (n 8) 12.

12 *Review of Maritime Transport 2002* (UNCTAD 2002) 69.

13 *Review of Maritime Transport 2011* (UNCTAD 2011) 88.

14 *Review of Maritime Transport 2021* (UNCTAD 2021) 17.

15 *Review of Maritime Transport 2023* (UNCTAD 2023) 86.

16 *Review of Maritime Transport 2024* (UNCTAD 2024) 37.

17 Ibid.

cent of global trade by value.[18] This figure is, however, based on assumptions as exact figures cannot be precisely established due to variability in containerisation rates, regional practices, and data limitations.[19] Still, this dominance is attributed to container ships primarily carrying high-value goods like electronics and machinery, unlike bulk carriers and tankers, which often carry lower-value raw materials, such as grain and oil.

Container shipping remains the fastest-growing segment in maritime transport. In 2023, container ships accounted for 35.3 per cent of newly delivered vessels.[20] This number nearly doubled in 2024, as the sector added approximately 4.4 million TEUs in capacity, representing a growth of over 10 per cent in that year alone.[21] Since 2006, the average size of container ships has doubled, with vessels exceeding 12,000 TEUs now making up 51 per cent of the total fleet capacity.[22] Demand for Ultra-Large Container Vessels (ULCVs) capable of carrying more than 16,000 TEUs remains strong.[23] As of December 2024, the largest container ship in operation is *The MSC Irina*, with a payload of 24,346 TEUs.[24] Container shipping is also highly consolidated. MSC is currently the largest container shipping operator, with a 20.2 per cent global market share, followed by Maersk, CMA CGM, COSCO, and Hapag-Lloyd.[25] The top ten container shipping lines collectively control nearly 85 per cent of global container shipping capacity.[26]

---

[18] Jean-Paul Rodrigue, Theo Notteboom, and Athanasios Pallis, 'Chapter 1.1 – Ports, Maritime Shipping and International Trade' (Port Economics, Management and Policy, 2024) <https://porteconomicsmanagement.org/pemp/contents/part1/maritime-shipping-and-international-trade/> accessed 2 January 2025.

[19] Achilleas Tsantis and John Mangan, 'What's Inside the Box? Approximating Containerised Trade Flows Based on Trade Commodity Values' [2024] MPM <https://doi.org/10.1080/03088839.2024.2431718> accessed 2 January 2025.

[20] *Review of Maritime Transport 2024* (n 16) 37.

[21] Ian Lewis, 'Container Ship Newbuilding Orderbook Hits All-Time High with Fresh Deals in the Works' (TradeWinds, 30 December 2024) <https://www.tradewindsnews.com/containers/container-ship-newbuilding-orderbook-hits-all-time-high-with-fresh-deals-in-the-works/2-1-1758967> accessed 2 January 2025.

[22] Niels Rasmussen, 'Ships Above 12,000 TEU Drive 100% Increase in Average Ship Size' (BIMCO, 13 March 2024) <https://www.bimco.org/news-and-trends/market-reports/shipping-number-of-the-week/20240313-snow> accessed 2 January 2025.

[23] Rob Willmington, 'Containership Newbuilding Orders Placed in 2024 Reach 3.8m TEU of Capacity' *Lloyd's List* (London, 28 November 2024). See also *Review of Maritime Transport 2021* (n 14) 33-34.

[24] The Maritime Executive, 'MSC Takes Delivery of the World's Biggest Ultra Large Container Ship' (13 March 2023) <https://maritime-executive.com/article/msc-receives-second-ultra-large-and-this-one-is-the-world-s-largest accessed> accessed 2 January 2025.

[25] Alphaliner, 'TOP 100' <https://alphaliner.axsmarine.com/PublicTop100/> accessed 2 January 2025.

[26] Ibid.

Today, while various types of containers exist,[27] the general-purpose container remains the most common, used for goods packed in boxes, pallets, bales, cartons, or similar packaging. Reefer (refrigerated) containers are the most prevalent among specialised containers, designed for temperature-sensitive goods, such as fruits, vegetables, and meat. The revolutionary impact of containers comes from their standardisation, particularly in dimensions and specifications. This was ensured by the International Organisation for Standardisation (ISO), which first established container standards in 1968 (ISO 668:1968). These standards have been periodically updated, with the most recent iteration, the seventh edition of ISO 668, published in 2020.[28] The standards define container dimensions as 10, 20, 30, or 40 ft in length, 8 ft in width, and 8.6 ft in height (or occasionally 8 ft in height). Among these, the 40 ft (FEU) container is the most commonly used, accounting for about 68 per cent, followed by 20 ft (TEU) containers, which comprise nearly 26 per cent.[29] Beyond ISO 668, ISO standards encompass nearly all aspects of containers, including handling, securing, coding, marking, and data exchange (CEDEX).[30] While ISO standards are not legally binding, they are widely followed, with about 80 per cent of containers globally compliant.[31]

1.2 Impact and challenges of containerisation

The treatment of containerisation within the legal framework governing the international carriage of goods by sea under bills of lading remains highly problematic. This is largely because the applicable legal rules are inherently limited and outdated. As recently noted by Lord Hamblen JSC in *The Giant Ace*:

> The international carriage of goods by sea is almost invariably governed either by the Hague Rules, a 1924 International Convention for the Unification of Rules of Law

[27] Generally, see DJ House, *Cargo Work: For Maritime Operations* (9th edn, Routledge 2024) 258-261.

[28] ISO, *ISO 668:2020 Series 1 Freight Containers – Classification, Dimensions and Ratings* (7th edn, ISO 2020) <https://www.iso.org/standard/76912.html> accessed 2 January 2025.

[29] Jean-Paul Rodrigue, Theo Notteboom, and Athanasios Pallis, 'Value of Containerised Trade, 2020' (Port Economics, Management and Policy, 2024) <https://porteconomicsmanagement.org/pemp/contents/part1/maritime-shipping-and-international-trade/value-containerized-trade/> accessed 2 January 2025.

[30] ISO, 'Standards' (ISO, 2024) <https://www.iso.org/standards.html> accessed 2 January 2025.

[31] Sally Martin, Jeffrey Martin and Polin Lai, 'International Container Design Regulations and ISO Standards: Are They Fit for Purpose' (2019) 46 Maritime Pol'y & Mgmt 217, 229.

> Relating to Bills of Lading, or the Hague-Visby Rules, the Hague Rules as amended by the 1968 Brussels Protocol.[32]

These Rules have been ratified by over 95 states,[33] including the UK,[34] Singapore,[35] and the US.[36] Where not compulsorily applicable, they are often incorporated contractually into bills of lading. However, these Rules, when applied to containerisation, face systemic limitations. The Hague Rules, which recently marked their centenary,[37] were devised in an era without considering containerisation.[38] The slightly revised Hague-Visby Rules made no significant advancements in the liability framework to address this fundamental change. Despite this, today, most cargo loss or damage in containerised transport arises not from the primary transport means – such as ships, trucks, or railcars – but from issues related to the containers themselves.[39] Consequently, containerisation has introduced challenges and operational realities that have not been addressed by the Hague or Hague-Visby Rules. These challenges underpin the research problem of this paper and can be categorised into two main considerations.

---

[32] *FIMBank Plc v KCH Shipping Co Ltd (The Giant Ace)* [2024] UKSC 38, [2024] Bus LR 1845, [1].

[33] Ibid.

[34] The UK implemented the Hague Rules through the Carriage of Goods by Sea Act 1924 14 & 15 Geo 5, c 22, and later adopted the Hague-Visby Rules via the Carriage of Goods by Sea Act 1971, c 19, which repealed the earlier Act (s 6(3)(a)).

[35] Singapore incorporated the Hague-Visby Rules into its domestic law through the Carriage of Goods by Sea Act 1972 (rev ed 2020).

[36] The US enacted the Hague Rules, not verbatim, under the Carriage of Goods by Sea Act 1936, ch 229, 49 Stat 1207 (as amended) (see now 46 USC §30701) but has not ratified the Visby amendments.

[37] Michael F Sturley, 'The Centenary of the Hague Rules: Celebrating a Century of International Conventions Governing the Carriage of Goods by Sea' [2024] LMCLQ 565.

[38] Generally, see Angus (n 3); James Wong Kong Kee, 'Containerisation – Its Legal Implications' (1970) 12 Malaya LR 364; Edward Schmeltzer and Robert A Peavy, 'Prospects and Problems of the Container Revolution' (1970) 2 Tulane LJ 263; James R Woods, 'The Container Revolution' (1972) 6 J of World Trade 661; S Mankabady, 'Some Legal Aspects of the Carriage of Goods by Container' (1974) 23 ICLQ 317; Seymour Simon, 'The Law of Shipping Containers' (1974) 5 JMLC 507; Stephen Zamora, 'Liability for Damage or Loss to Cargo in International Transport' (1975) 23(3) AJCL 391; Pierre-Jean Bordahandy, 'Containers: A Conundrum or A Concept' (2005) 11 JIML 342; Nicholas J Margetson, 'Liability of the Carrier Under the Hague (Visby) Rules for Cargo Damage Caused by Unseaworthiness of its Containers' (2008) 14 JIML 2008; Talal Aladwani, 'The Supply of Containers and "Seaworthiness" – The Rotterdam Rules Perspective' (2011) 42 JMLC 185; Frank Stevens, 'Liability for Defective Containers: Charting a Course Between Seaworthiness, Care for the Cargo and Liabilities of Shippers' in Barış Soyer and Andrew Tettenborn (eds), *Carriage of Goods by Sea, Land and Air* (Informa Law from Routledge 2013) 25.

[39] See below, text to n 60 to n 81.

First, containerisation has redefined the boundaries of sea carriage. It is the container that has truly actualised the concept of multimodal transport,[40] or more aptly, door-to-door transport. It was estimated that around 50 per cent of containerised cargo was transported door-to-door by 2000.[41] Although precise recent figures are unavailable, this proportion has likely grown since then, as major shipping lines increasingly offer door-to-door services by investing in or acquiring logistics companies, trucking operations, and digital platforms.[42] Port-to-port transport still remains significant. This distinction is, however, not sharply delineated in container shipping. Bills of lading often serve dual purposes, operating as either port-to-port or multimodal bills.[43] These documents include fields for the port of loading, port of discharge, place of receipt, and place of delivery. If the port of loading and port of discharge are filled in, the bill operates as a port-to-port bill. When the place of receipt and/or place of delivery is specified, the bill of lading functions as a multimodal bill. Regardless of the type of transport, the primary challenge lies in defining the carrier's period of responsibility. Under the Hague and Hague-Visby Rules, this period is traditionally defined as tackle-to-tackle pursuant to art I(e), which has given rise to the 'before and after carriage problem' in containerised transport.

Second, containerisation has fundamentally transformed cargo handling dynamics. At its core, it has introduced two critical notions: the supply of containers – either by the carrier or the shipper – and the allocation of responsibility for stuffing and devanning the container. These factors, in turn, raise questions about the legal conceptualisation of the container and, as such, have become determinative elements in establishing carrier liability. Specifically, the shipping line often supplies containers, though shippers may also provide them. There are two types of shipment: Full Container Load (FCL) and Less than Container Load (LCL). FCL means

---

[40] See also Ralph de Wit, *Multimodal Transport: Carrier Liability and Documentation* (Lloyd's of London Press 1995) 1.3-1.4; Marian Hoeks, *Multimodal Transport Law: The Law Applicable to the Multimodal Contract for the Carriage of Goods* (Kluwer Law International 2010) 3; David Glass, *Freight Forwarding and Multi Modal Transport Contracts* (2nd edn, Informa Law from Routledge 2012); Barış Soyer and Andrew Tettenborn (eds), *Carriage of Goods by Sea, Land and Air: Uni-modal and Multi-modal Transport in the 21st Century* (Informa Law from Routledge 2013) ix; Michiel Spanjaart, *Multimodal Transport Law* (Routledge 2017) 12.

[41] UNCITRAL, 'General Remarks on the Sphere of Application of the Draft Instrument, Note by the Secretariat' (A/CN9/WGIII/WP29, 31 January 2003) para [25] <https://documents.un.org/doc/undoc/ltd/v03/808/18/pdf/v0380818.pdf> accessed 2 January 2025.

[42] See, eg, Maersk, 'Maersk Completes Acquisition of LF Logistics' (31 August 2022) <https://www.maersk.com/news/articles/2022/08/31/maersk-completes-acquisition-of-lf-logistics> accessed 2 January 2025; 'CMA CGM Brings Bolloré Under Ceva Logistics Brand' *Lloyd's List* (London, 3 July 2024).

[43] See below, n 50 to n 59.

the shipper is responsible for stuffing and sealing the container. LCL generally involves the carrier consolidating goods from multiple consignors into a single container when individual shipments are too small to fill or when it is more cost-effective. Nonetheless, LCL may also mean the carrier is responsible for stuffing, even when the container is used for a single shipper's goods.[44] The nature of the shipment is often influenced by the provision of the container. When the shipper provides the container, shipments are generally FCL. When the carrier supplies the container, shipments can be either FCL or LCL. The most commonly encountered practice is the carrier providing the container, while the shipper is responsible for stuffing it (FCL). Container stuffing and devanning may occur at various locations, including Container Freight Stations (CFS)[45] near the port, Inland Container Depots (ICDs)[46] located further inland, or the shipper's or consignee's premises. Containers are also frequently stored at Container Yards (CY) within the port or terminal,[47] where they may remain stationary for days or weeks before loading onto or after discharge from the vessel.

The combined effects of these considerations – type of carriage contract (port-to-port or door-to-door), container ownership, and the shipment nature (FCL or LCL) – demand a renewed perspective on understanding carrier liability in container shipping.

The legal framework governing containerisation has gradually evolved – and continues to do so – through case law and contractual remedies. English law initially lagged behind certain other common law jurisdictions, particularly the US, due to fewer containerisation disputes reaching the courts.[48] However, English courts have addressed a growing number of containerisation-related disputes, especially over the past decade, and its legal framework in this area is now beginning to flourish. Furthermore, absent statutory rules, shipping lines have devised bills of lading that address key aspects of carrier liability for containers, including the

---

[44] See, eg, *Volcafe Ltd v Compania Sud Americana De Vapores SA* [2015] EWHC 516 (Comm), [2015] 1 Lloyd's Rep 639.

[45] Maersk, 'Understanding CFS and CY terms in logistics' (2 July 2024) <https://www.maersk.com/logistics-explained/transportation-and-freight/2024/07/02/cfs-cy-logistics> accessed 2 January 2025.

[46] Maersk, 'Inland Container Depot (ICD): Definition, Services, and Costs Involved' (5 September 2024) <https://www.maersk.com/logistics-explained/transportation-and-freight/2024/09/05/inland-container-depot> accessed 2 January 2025.

[47] Maersk, 'Understanding CFS and CY Terms in Logistics' (2 July 2024) <https://www.maersk.com/logistics-explained/transportation-and-freight/2024/07/02/cfs-cy-logistics> accessed 2 January 2025.

[48] For the reasons underlying this limited judicial exploration in English courts, see below (text to n 175 and n 176).

carrier's period of responsibility, allocation of liability, and rights and immunities. These bills of lading notably include provisions regarding the supply of containers and the allocation of responsibility for stuffing and devanning – whether FCL or LCL – often with immunities extending to issues, such as defective containers supplied by either party and improper container stuffing by shippers. As previously mentioned, containerisation is dominated by a few major shipping lines, with the top ten jointly accounting for approximately 85 per cent of the global container shipping market.[49] These carriers, ranked by market share – MSC,[50] Maersk,[51] CMA CGM,[52] COSCO,[53] Hapag-Lloyd,[54] ONE,[55] Evergreen Line,[56] HMM,[57] ZIM,[58] and Yang Ming[59] – commonly use standardised and strikingly similar bills of lading across almost all container shipments.

2 Container-related cargo loss or damage

In containerised transport, the majority of cargo loss or damage arises not from faults in the primary means of transport but rather from container-related issues, as noted earlier. This paper broadly categorises these problems into two groups: those associated with the physical soundness of the container and those concerning container handling and integrity.

[49] Alphaliner (n 25).
[50] MSC, 'Bill of Lading' <https://www.msc.com/en/carrier-terms> accessed 2 January 2025.
[51] Maersk, 'Terms for Carriage' <https://terms.maersk.com/carriage> accessed 2 January 2025.
[52] CMA CGM, 'Bill of Lading Terms and Conditions' <https://www.cma-cgm.com/products-services/shipping-guide/bl-clauses> accessed 2 January 2025.
[53] COSCO, 'Terms and Conditions' <https://lines.coscoshipping.com/home/HelpCenter/business/Downloads> accessed 2 January 2025.
[54] Hapag-Lloyd, 'Bill of Lading Terms and Conditions' <https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/Hapag-Lloyd_Bill_of_Lading_Terms_and_Conditions.pdf> accessed 2 January 2025.
[55] ONE, 'Bill of Lading Terms' <https://www.one-line.com/en/standard-page/b/l-terms> accessed 2 January 2025.
[56] Evergreen Line, 'Bill of Lading Clauses' <https://www.evergreen-line.com/blclauses/jsp/BillOfLadingClauses.jsp> accessed 2 January 2025.
[57] HMM, 'Container Bill of Lading' <https://www.hmm21.com/data_files/ebiz/bill_of_lading/bill_of_lading.pdf> accessed 2 January 2025.
[58] ZIM, 'Bill of Lading Terms & Condition' <https://www.zim.com/help/bl-terms-and-conditions> accessed 2 January 2025.
[59] Yang Ming, '2022 Original Bill of Lading' <https://www.yangming.com/service/Useful_Info/BL_Clause.aspx> accessed 2 January 2025.

The physical soundness of a container often pertains to what are commonly referred to as defective containers. These include rust, holes,[60] misaligned doors,[61] weakened door seals and gaskets,[62] and inadequate tarpaulins.[63] Structural issues with the floor may involve broken hinges,[64] inadequate welds,[65] damaged floorboards,[66] or a torn roof panel.[67] Reefer containers face additional risks, such as compromised insulation, malfunctioning cables,[68] refrigeration unit failures, temperature fluctuations, off-power events,[69] or software malfunctions like a controller stuck in defrost mode.[70]

Handling and integrity issues arise from improper preparation, use, and stowage. Examples include poor stuffing or stacking, such as uneven weight distribution causing collapses,[71] restricted airflow spoiling goods,[72] or unstable items improperly packed.[73] Unsuitable containers, like unventilated ones for wine exposed to extreme heat[74] or olive oil affected by rust,[75] compromise cargo. Failures in protective measures, such as missing linings for moisture-sensitive goods[76] or booking errors for reefer settings,[77] exacerbate risks. Insufficient maintenance, including uncleaned or fumigated containers, can lead to contamination, such as naphthalene residue tainting nuts[78] or phenolic odours damaging cocoa beans.[79] Improper

---

60 *Houlden & Co v SS Red Jacket* 1977 AMC 1382 (SD NY 1977); *Insurance Co of North America v Dart Containerline Co* 629 F Supp 781 (ED Va 1985); *International Cargo & Surety Insurance Co v M/V Hreljin* 1993 US Dist LEXIS 14604 (SD NY 1993); *Comalco Aluminium Ltd v Mogal Freight Services Pty Ltd* [1993] FCA 96, 113 ALR 677; *El Greco (Australia) Pty Ltd v Mediterranean Shipping Co SA* [2003] FCAFC 588, [2004] 2 Lloyd's Rep 537.

61 TSCA, 11th Civil Chamber, E:2016/10471, K:2018/4700, 31 May 2018. For fatal accident claims, see *Harrington & Co v United States Lines Inc* 587 F Supp 239 (MD Fla 1984).

62 *Marbig Rexel PTY v ABC Container Line NV (The TNT Express)* [1992] 2 Lloyd's Rep 636 (NSW); TSCA, 11th Civil Chamber, E:2013/14743, K:2014/12151, 25 June 2014.

63 *Brunet v MV Nedlloyd Rosario* 929 F Supp 694 (SD NY 1996).

64 For personal injury claims, see *Condoleo v Guangzhou Jindo Container Co* 427 F Supp 3d 316 (ED NY 2019).

65 *Kawasaki Kisen Kaisha Ltd v Plano Molding Co* 782 F3d 353 (7th Cir 2015).

66 TSCA, 11th Civil Chamber, E:2021/591 K:2022/4805, 13 June 2022.

67 *El Greco* (n 60).

68 For personal injury claims, see *Maldonado v Hapag-Lloyd Ships Ltd* 2015 AMC 1455 (ED NY 2015).

69 *Mayhew Foods Ltd v Overseas Containers Ltd* [1984] 1 Lloyd's Rep 317; *Circus Fruits Wholesale Corp v Seaboard Marine Ltd* 437 F Supp 3d 1173 (SD Fla 2019).

70 *Seafood Imports Pty Ltd v ANL Singapore Pte Ltd* [2010] FCA 702, (2010) 272 ALR 149.

71 TSCA, 11th Civil Chamber, E:2020/1501 K:2021/395, 25 January 2021.

72 *JP Klausen & Co A/S v Mediterranean Shipping Co SA (The Sky Jupiter)* [2013] EWHC 3254 (Comm).

73 *Comalco Aluminium* (n 60).

74 *Empire Distributors Inc v United States Lines* 1988 AMC 455 (SD Ga 1986).

75 *Cigna Ins Co v The MV Skanderborg* 897 F Supp 659 (D PR 1995).

76 *Volcafe* (n 44); *TM Noten BV v Paul Charles Harding* [1990] 2 Lloyd's Rep 283.

77 *Sea King Corp v Eimskip Logistics Inc* 367 F Supp 3d 529 (ED Va 2019).

78 TSCA, 11th Civil Chamber, E:2011/4225 K:2013/4977, 14 March 2013.

79 *The Ruben Martinez Villena* [1987] 2 Lloyd's Rep 621.

ship stowage, like uneven weight distribution, unsecured hazardous materials,[80] or defective twistlocks and connectors,[81] or insufficient lashing and other securing methods, causes instability, stack collapses, and containers falling overboard.

It should be noted that the legal framework and judicial treatment of these issues can vary widely, even for those categorised under the same group. This often hinges on additional considerations, such as the type of carriage contract – whether port-to-port or door-to-door, the nature of the shipment, FCL or LCL, and the ownership of the container, that is, whether the carrier or the shipper provides it. Although these matters are often captured within the scope of the Hague or Hague-Visby Rules or specific terms of bills of lading, they may also fall under other international transport conventions, such as those for road or rail or national laws, primarily general principles of bailment or tort law. The following considers these issues to the extent relevant within the context of the Hague or Hague-Visby Rules and the terms of bills of lading.

3 Period of responsibility

The carrier's period of responsibility under the Hague and Hague-Visby Rules is defined in art I(e) as 'from the time when the goods are loaded onto the ship to the time they are discharged from the ship'. This is commonly referred to as the 'tackle-to-tackle'.[82] This traditional demarcation may work well for break-bulk or bulk cargo but presents challenges in the context of containerisation. Under a literal reading of the 'tackle-to-tackle' rule, the carrier's responsibility for containerised cargo could technically begin the moment a crane lifts the container from the quay and places it onto the ship's deck and end the moment another crane lifts it off the ship at the destination port. In other words, any events or losses occurring outside that literal 'lifting on/lifting off' window could be seen as falling outside the carrier's responsibility. However, applying the strict tackle-to-tackle interpretation to containerised

[80] *Compania Sud American Vapores v MS ER Hamburg Schiffahrtsgesellschaft GmbH & Co KG* [2006] EWHC 483 (Comm), [2006] 2 Lloyd's Rep 66.

[81] For personal injury or fatal accident claims, see *Horton v Maersk Line Ltd* 2015 AMC 852 (SD Ga 2014); *Estate of Ross v MV Stuttgart Express* (2011) US Dist LEXIS 1699 (ND Cal 2011).

[82] In the earlier draft of art I(e) during the 1921 Hague Conference, the word 'tackle' was explicitly used. CMI, *The Travaux Préparatoires of the Hague Rules and of the Hague-Visby Rules* (Comité Maritime International Headquarters 1997, p 136), available at <https://comitemaritime.org/publications-documents/travaux-preparatoires/> accessed 2 January 2025.

shipments can be problematic, given that much of the handling – such as stuffing, stripping, storage times, and even inland transit – can be integral to the container's overall journey. Fortunately, two notable English cases in recent years have shed light on the benchmarks for defining the carrier's responsibilities in containerised shipping – the concepts of 'loading' and 'discharging', respectively: *Volcafe*[83] and *The MV Maersk Chennai*.[84]

3.1 Loading: container stuffing, pre-loading storage, and transport

This part examines whether container stuffing at terminals or depots constitutes part of the loading operation and whether waiting periods for preloading, storage, or transport to/from ports fall within the scope of the Hague and Hague-Visby Rules. These issues were partly addressed in the *Volcafe* case, which provided clarification on the interpretation of 'loading' in LCL shipments under port-to-port contracts. Thus, the case dealt with relatively straightforward facts compared to the more complex operational and contractual issues often arising in container disputes.

The dispute concerned condensation damage to coffee beans – a common type of container claim – transported in dry, unventilated 20 ft containers. The transport was conducted on a port-to-port basis under LCL/FCL terms, meaning the carrier provided and stuffed the containers at the container terminal while the consignee stripped them at its inland premises upon arrival.[85] The damage was caused by inadequate lining of the containers with kraft paper by stevedores acting on behalf of the carrier, which failed to protect the cargo from condensation.[86] The key legal issue was whether the Hague Rules applied to the container stuffing performed by the carrier's stevedores at the container yard.[87] The defendant carrier argued that the stuffing occurred before 'loading' as defined in art I(e) of the Hague Rules, and therefore the Rules did not apply.[88] This would allow the carrier to rely on bill of lading clauses reducing its liability below the standard required by art III, r 2, which mandates 'proper

[83] See above, n 44.
[84] *JB Cocoa Sdn Bhd v Maersk Line AS (The MV Maersk Chennai)* [2023] EWHC 2203 (Comm), [2024] 2 Lloyd's 235.
[85] *Volcafe* (n 44) [1]-[3].
[86] Ibid, [5].
[87] Ibid, [8].
[88] Ibid, [8]; [11]-[12].

and careful' loading. Donaldson QC, in the London Mercantile Court, rejected this argument.[89] He ruled that 'where cargo is loaded into a carrier's containers which are subsequently loaded onto the vessel, it is unrealistic to treat this as anything other than a single loading process, even if there is inevitably some interval between the two'.[90] He further noted that even if this interpretation was not accepted, the parties were free to agree on what constituted 'loading' for the purposes of art I(e).[91] This later interpretation originates from the well-known precedent regarding the carrier's period of responsibility established by Devlin J in *Pyrene Co Ltd v Scindia Navigation Co Ltd*.[92] As a result, reliance on clauses limiting the carrier's liability for pre-loading activities was deemed misplaced, and the Hague Rules were held to apply.

This ruling was affirmed in the Court of Appeal,[93] where Flaux J similarly emphasised that the parties are free to define what acts or services constitute 'loading' for which the carrier assumes responsibility.[94] He noted that the effect of the 'LCL/FCL term' is to assign responsibility for dressing and stuffing containers to the carrier, treating these activities as part of the 'loading' operation to which the Hague Rules apply.[95] On appeal, the defendant argued that the trial judge had failed to give adequate consideration to the fact that, after the containers were stuffed at the terminal, they were stored for up to eleven days before being transported to the port's export area for loading onto the vessel.[96] The defendant contended that this storage and subsequent road carriage raised issues about the parallel application of the 'Convention on the Contract for the International Carriage of Goods by Road' (CMR) and the Hague Rules. The Court dismissed this argument, stating that the CMR could not apply during the dressing and stuffing of the containers, as they were not, at that stage, on board a vehicle.[97] Although the case ultimately proceeded to the Supreme Court[98] on other matters, these particular issues were not before that court.

---

89 Ibid, [8].
90 Ibid, [9].
91 Ibid, [9].
92 [1954] 2 QB 402, 329.
93 *Volcafe Ltd v Compania Sud Americana De Vapores SA (Trading as CSAV)* [2016] EWCA Civ 1103, [2017] 1 Lloyd's Rep 32.
94 Ibid, [108].
95 Ibid, [108].
96 Ibid, [105].
97 Ibid, [110].
98 [2018] UKSC 61, [2019] AC 358.

All in all, the *Volcafe* case reveals that when a carrier dresses and stuffs its own container at the loading port – whether in the container terminal or in its immediate vicinity – and then stores it until loading onto the vessel, those activities fall under the scope of 'carriage of goods by sea' and are governed by the Hague and Hague-Visby Rules. Although this ruling is valuable, it is not transformative. It simply extends the 'tackle-to-tackle' period to a 'port-to-port' framework for LCL shipments. Several significant questions remain unaddressed in the context of modern containerised shipping. A central issue concerns cases where stuffing is conducted at inland premises – such as CFSs or ICDs. It is unclear whether those inland activities constitute 'loading' under the Rules or whether the inland storage and subsequent transport of containers to the port are covered. In *Volcafe*, David Donaldson QC treated the stuffing and later loading onto the vessel as a single, continuous loading process, but only if two conditions are met: (1) The container is provided and packed by the carrier, and (2) it is 'subsequently' loaded onto the vessel.[99] Under this interpretation, if the carrier stuffs the container at an inland depot, those activities occur before the port-to-vessel phase and thus fall outside the Hague and Hague-Visby Rules. Consequently, any damage resulting from poor stuffing, inadequate container preparation, or container defects at the inland location would not be covered by the Rules since these steps occur before the actual sea carriage begins and could involve other modes of transport, breaking the continuity of the marine journey. Alternatively, as recognised by the London Mercantile Court[100] and the Court of Appeal[101] in *Volcafe*, the contracting parties retain the freedom to define contractually what constitutes 'loading' for which the carrier bears responsibility. In LCL shipments, such terms typically require the carrier to undertake dressing and stuffing, subjecting these activities to the 'proper and careful' loading requirement under art III, r 2 of the Hague and Hague-Visby Rules. The precise contours of this duty are shaped by operational customs and practices, as established in *Pyrene*.[102] Accordingly, one might argue that container handling, specifically stuffing, if required to occur at a carrier's inland facility along with any necessary storage, as dictated by practice, remains sufficiently related to the sea carriage governed by the Hague and Hague-Visby Rules. More precisely, it aligns with the wording of s 1(3) of the COGSA 1971, which

[99] *Volcafe* (n 44) [9].
[100] Ibid.
[101] *Volcafe* (n 93) [108].
[102] *Pyrene* (n 92) 322.

includes activities 'in relation to and in connection with' the sea carriage. Such an interpretation is essential to ensuring the adaptability of the Rules to modern container operations. Even so, inland transport from the carrier's premises to the port still remains outside the Rules' coverage, falling under applicable road or rail regulations, particularly if any loss or damage is shown to have occurred during that segment of the journey.

A more complex case arises with FCL shipments, where the carrier provides a container that the shipper packs at an inland facility. Determining the precise moment of 'loading' is more challenging in these circumstances, as the container is handed over to the shipper for packing away from the port. In such cases, the carrier's scope of responsibility largely depends on the terms of the bill of lading. Under a port-to-port bill of lading, the carrier often seeks to exclude liability for pre- or post-shipment activities – such as port or inland storage or transport – by relying on the contractual freedom allowed under art VII of the Hague and Hague-Visby Rules.[103] English courts have frequently upheld such exclusion clauses.[104] By contrast, a multimodal bill of lading generally provides a clearer framework for the carrier's liability across all transport modes, reducing the gaps seen under port-to-port arrangements.[105] Be that as it may, the practicality of containerisation – arising from the combination of the sealed nature of containers and their multimodal use – leads to significant evidentiary challenges. It can be difficult, if not impossible, to determine precisely when and where damage or loss occurred, whether during the sea or land segments of transport. In many cases, such damage or loss is only discovered after the consignee unseals the container (or deactivates an electronic seal) and unpacks it at their premises. Consequently, in multimodal contexts, this could often result

[103] See, eg, Conlinebill 2016 (BIMCO) available at <https://www.bimco.org/contracts-and-clauses/bimco-contracts/conlinebill-2016> accessed 2 January 2025 cl 8; MSC (n 50) cl 5.2.3; Maersk (n 51) cl 5.4; CMA CGM (n 52) cl 6.1; Hapag-Lloyd (n 54) cl 5.1.e.

[104] Particularly, see *The MV Maersk Chennai* (n 84) [93]; *Trafigura Beheer and Another v Mediterranean Shipping Co (The MSC Amsterdam)* [2007] EWCA Civ 794, [2007] 2 Lloyd's Rep 622, [24], [29]. See also *Motis Exports Ltd v Dampskibsselskabet af 1912 Aktieselskab and Aktieselskabet Dampskibsselskabet Svendborg* [2000] 1 Lloyd's Rep 211, 217, and the Canadian cases *Shtutman v Ocean Marine Shipping Inc* 2005 FC 1471, (2005) 283 FTR 47; *Captain v Far Eastern Steamship Co* [1979] 1 Lloyd's Rep 595.

[105] See, eg, Combiconbill 2016 (BIMCO) available at <https://www.bimco.org/contracts-and-clauses/bimco-contracts/combiconbill-2016> accessed 2 January 2025 cl 9; Multidoc 2016 (BIMCO) available at <https://www.bimco.org/contracts-and-clauses/bimco-contracts/multidoc-2016> accessed 2 January 2025 cl 10; MSC (n 50) cl 5.2, Maersk (n 51) cl 6; CMA CGM (n 52) cl 6.2; Hapag-Lloyd (n 54) cl 5.2.

in the default application of the Hague or Hague-Visby Rules, whether by courts[106] or as already specified in bills of lading.[107]

3.2 Discharge: container storage, devanning, and final delivery

The counterpart to loading during the carrier's period of responsibility is discharging. This process is equally complex and has become more so in the context of containerisation. The notion of discharging, as traditionally defined, does not always align with container-handling practices: once containers are lifted off the vessel, further steps, such as storage, devanning, onward transport, and final delivery, may follow, with the timing and nature of these operations varying according to shipment type and contractual terms. This concept of discharge in containerised shipping was recently considered for the first time by an English court in *The MV Maersk Chennai*. Here, the dispute – akin to *Volcafe* but focused on discharge rather than loading – concerned damage to cocoa beans caused by mould and damp conditions during their carriage in eleven unventilated containers from Lagos, Nigeria, to Tanjung Pelepas, Malaysia.[108] The shipment proceeded on a port-to-port basis under the Hague Rules but was conducted on an FCL/FCL basis (unlike *Volcafe*, which involved LCL/FCL). Maersk, the carrier, provided the containers; the shipper packed and sealed them at an inland facility, and the consignee stripped them at another inland location. The key issue was whether the carrier's responsibility under the Hague Rules extended beyond the containers' discharge from the vessel to encompass the waiting/storage period at the terminal, continuing up to their delivery or devanning. In this instance, the containers were discharged on 30 September,[109] but the consignee did not present the bill of lading until 17 November,[110] and the cargo was ultimately delivered around 27–28 November due to administrative complications[111] – nearly two months after discharge. Throughout this interval, the containers remained stored at Tanjung Pelepas, likely in the Free Zone container facility's marshalling yard.[112] This extended storage gave rise to the dispute.

---

[106] See, eg, *Mayhew* (n 69).
[107] See, eg, MSC (n 50) cl 5.2.2.d; ONE (n 55) cl 3.3.
[108] *The MV Maersk Chennai* (n 84) [1].
[109] Ibid, [23].
[110] Ibid, [34].
[111] Ibid, [34]-[41].
[112] Ibid, [23].

The cargo damage was discovered on 29 November during devanning at the consignee's facility and reported to the carrier that same day.[113] The claimants argued that the carrier had breached its duty to take reasonable care of the cargo by failing to ventilate the containers during their extended storage at the port – for instance, opening the container doors – and maintained that this responsibility continued until delivery.[114] Consequently, they asserted that the carrier could not rely on any exemptions from liability.[115] In contrast, the carrier argued that under the Hague Rules, its responsibility ended with discharge from the vessel, and it could not be liable for any damage arising thereafter.[116] The carrier also contended that the delay in devanning was attributable to the claimants' late presentation of the bill of lading.[117] The carrier further invoked several contractual and statutory defences, including cl 5.2 and cl 22.2 of the bill of lading and the inherent vice exception under art IV, r 2(m) of the Rules.[118] The relevant clauses are noteworthy:[119] Clause 5.1 restricted the carrier's liability to loss or damage occurring between accepting the goods into its custody and 'tendering the goods for delivery' at the port of discharge, subject to the Hague Rules. Clause 5.2 expressly excluded liability outside this period unless mandatory law applied, while preserving the Hague Rules' defences. Clause 22 addressed notification, discharge, and delivery. Under cl 22.2, if the consignee failed to collect the goods within the tariff-stipulated timeframe, storage would be deemed 'due delivery', terminating the carrier's liability.

In the High Court, Keyser J found that the cocoa bean damage resulted from the prolonged containerisation period between discharge and devanning.[120] He, however, held that the carrier was not liable since the Hague Rules cease to apply once the container is discharged from the vessel.[121] Citing *The Giant Ace*,[122] he noted that the references to 'custody' and 'care' under art II of the Hague Rules referred solely to the period from loading to discharge, without extending to post-discharge obligations.[123] Keyser J further stated that the carrier's liability

[113] Ibid, [43], [44].
[114] Ibid, [55].
[115] Ibid, [55].
[116] Ibid, [56].
[117] Ibid, [56].
[118] Ibid, [56].
[119] Ibid, [53].
[120] Ibid, [87].
[121] Ibid, [103]-[104].
[122] [2023] EWCA Civ 569, [2023] 2 Lloyd's Rep 457, [45]
[123] *The MV Maersk Chennai* (n 84) [96].

before loading and after discharge depended on the terms of the contract. Referring to Lord Sumption in *Volcafe*,[124] he explained that although the basic relationship in sea carriage is 'one of bailment', the contract modifies these bailment incidents.[125] Therefore, once the goods remained in the carrier's custody post-discharge, the bill of lading provisions superseded general bailment principles.[126] Accordingly, cl 5.2 of the bill of lading explicitly limited the carrier's liability for post-discharge activities, thus exempting it from liability.[127] Keyser J also examined the phrase 'tendering the goods for delivery' in cl 5.1 and concluded that it equated to 'discharge' and did not include any subsequent activities.[128] It was further held that even if the phrase were interpreted to cover post-discharge actions, any liability would be governed by the bill of lading's express exclusion clause, rather than by the Hague Rules.[129]

In *The MV Maersk Chennai*, the Court adopted a strict interpretation of 'discharge' under art I(e) of the Hague Rules, giving limited consideration to the practicalities of containerisation. This approach may seem inconsistent with the more expansive understanding of 'loading' in *Volcafe*, where the concept was extended to accommodate container-based operations better. The different outcomes largely stem from the shipment types in question: *Volcafe* involved an LCL shipment – thus requiring the carrier's responsibility for pre-loading storage and container stuffing at the port – while *The MV Maersk Chennai* concerned an FCL shipment, where the intact container became the consignee's responsibility right after discharge. One might speculate that, had *The MV Maersk Chennai* involved an LCL arrangement requiring the container to be stored, devanned, and delivered to multiple or a single consignee, the period of carrier liability could have remained under the Hague Rules.

Another key issue is whether the 'reasonable time' granted to the consignee for taking delivery – often the period during which the cargo sits in a container yard – falls within the scope of 'discharge' under the Hague and Hague-Visby Rules. This reasonable time is often defined by the 'applicable tariff' in the carriage contract. In *The MV Maersk Chennai*, the 15-day free container usage period noted on the face of the bill of lading was deemed to override

[124] *Volcafe* (n 98) [8]ff.
[125] *The MV Maersk Chennai* (n 84) [93].
[126] Ibid, [93].
[127] Ibid, [93].
[128] Ibid, [96].
[129] Ibid, [96].

the seven-day tariff mentioned in the carrier's 'Demurrage and Detention Guidelines'.[130] Although the judge did not analyse this question in detail, his overall reasoning indicates that the Hague Rules do not apply during the free period. From the moment the containers were discharged, a bailment relationship arose, governed by exculpatory contractual terms, particularly cl 5.2. In reaching this conclusion, the judge examined the coherence of the terms of the bill of lading, particularly cl 5 and cl 22.2.[131] He did not consider cl 22.2 relevant to the delimitation of carrier responsibility[132] but concluded that, even if it were, its treatment of storage beyond the free period as 'due delivery' did not conflict with cl 5 and instead affirmed that 'tendering the goods for delivery' in cl 5 was distinct from actual delivery.[133] Furthermore, the judge briefly entertained the opposite view – that discharge might be deemed complete at the end of a 'reasonable period' under cl 22, subject to the Hague Rules. However, he ultimately found that since the consignee delayed beyond that timeframe, the question was moot in this case.[134]

It is true that holding the carrier liable during the 15-day period might be speculative, given the practical difficulty of determining if or how that delay caused the damage. Still, although immaterial in this case, the timeframe could be determinative in other instances, where loss or damage arises during this free period – due to improper storage, temperature failures for perishables, theft, or other security breaches at the terminal. The automatic exemption of the carrier's liability through contractual terms should, therefore, be reconsidered. It is submitted that the Hague and Hague-Visby Rules should, as a general principle, apply to losses or damage arising within this timeframe – irrespective of any special agreement to the contrary,[135] which might be invalidated by art III, r 8 of the Rules. This position can be supported in two ways:

---

[130] Ibid, [53], [105.4].

[131] Ibid, [95].

[132] Ibid, [105].

[133] Ibid, [100].

[134] Ibid, [105.5].

[135] When there is no specific agreement to the contrary in the contract, there is already a strong view that the Hague and Hague Visby Rules should extend to periods before loading and after discharge, while the goods remain in the carrier's custody, as an implied term of bailment: see *Carver* (n 1) [9-135]. In *The MSC Amsterdam* (n 104) [23], Tuckey LJ also appeared to resonate with this view. See also Richard Aikens, *Bills of Lading* (3rd edn, Routledge 2021) [11.98]; Paul Todd, 'Limiting Liability for Misdelivery – *The MSC Amsterdam*' [2008] LMCLQ 214, 219-220.

(1) Interpretation of Terms of Bill of Lading: Taking the bill of lading in *The MV Maersk Chennai* as an example – particularly since it is a standard form also used for other shipments[136] – key phrases, such as 'tendering the goods for delivery' and cl 22.2 can be read as extending the Rules to cover the entire reasonable timeframe. As is widely accepted, contractual provisions must be interpreted in light of their natural and ordinary meaning, the contract's purpose, the commercial context, and the agreement as a whole.[137] Regarding exclusion clauses, if a carrier intended to limit its liability to the point of vessel discharge, it could have used that precise wording in cl 5 – 'discharge from the vessel' – which standard bills of lading of other shipping lines do.[138] Likewise, cl 22.2 could have declared that discharge upon immediate arrival (with or without notice) onto a quay, warehouse, or depot constitutes 'due delivery', as seen in other container-related cases.[139] Instead, in this contract, cl 22.2 states that 'due delivery' only arises once a reasonable storage period has ended, shifting storage costs and liabilities to the consignee only thereafter. As a result, if 'tendering the goods for delivery' is treated as equivalent to 'discharge', cl 22.2 becomes difficult to reconcile with the remainder of the contract.

(2) Operational Necessity and Extended 'Discharge': Containerisation has blurred the boundaries of sea carriage such that a reasonable post-discharge period may arguably fall in relation to sea carriage under art I(e) of the Hague or Hague-Visby Rules, ensuring the carrier performs discharging 'properly and carefully' in accordance with art III, r 2. This is because post-discharge storage and handling in container shipping have become essential and routine components of the transport services provided by carriers, often carried out at terminals or facilities they own or operate.[140] This development questions the strict, non-container-based definitions of discharge in art I(e) and the freedom under art VII to define pre-loading and post-discharge responsibilities. Simply removing the container from the ship and relying on

[136] See Maersk (n 51).

[137] See, eg, *Rainy Sky SA v Kookmin Bank* [2011] UKSC 50, [2011] 1 WLR 2900; *Arnold v Britton* [2015] UKSC 36, [2015] AC 1619; *Wood v Capita Insurance Services Ltd* [2017] UKSC 24, [2017] AC 1173.

[138] See, eg, MSC (n 50) cl 5.1.a.

[139] See, eg, Clause 7 of the bill of lading in *The MSC Amsterdam* [2007] EWHC 944 (Comm), [2007] 2 All ER (Comm) 149, [90].

[140] In traditional break-bulk shipping, 'consignees rarely take delivery of goods at the ship's rail but will normally collect them after some period of storage on or near the wharf' as well. See *Port Jackson Stevedoring Pty Ltd v Salmond and Spraggon (Australia) Pty Ltd (The New York Star)* [1981] 1 WLR 138 (PC), 324. However, such practices are not integral to the shipping method itself.

exclusionary clauses in bills of lading seems to be a stark reminder of, or a potential regression to, the pre-Hague Rules era, where carriers enjoyed near-total contractual immunity. The corollary is that courts should adopt a more forward-looking approach to align the Rules with container shipping. For this particular subject, even if they do not, *Pyrene* offers a historical precedent for adaptability: just as 'loading' was expanded there,[141] so could 'discharging' be similarly extended. This would oblige carriers under art III, r 2 to discharge cargo 'properly and carefully', with the exact scope hinging on port customs and the nature of the cargo – in this case, the container itself. Notably, this approach was adopted in the Australian Federal Court case, *Seafood Imports.* Here, under a port-to-port contract governed by the Hague-Visby Rules, the carrier provided the container, which the shipper then packed. Ryan J expanded on *Pyrene*, holding that the extent of the carrier's discharge obligations depends on port customs, cargo type, and referring to the carrier-provided containers, 'the equipment in which [the cargo] is carried and discharged' (emphasis added).[142] As such, it was held that in the context of containerisation, the tackle-to-tackle period should extend to include the carrier's liability to ensure the refrigerated container is in proper working order at the port terminal until the goods can 'reasonably' be devanned by the consignee.[143]

While the facts of *The MV Maersk Chennai* and *Seafood Imports* differ (particularly regarding the use of special containers in the latter), the conclusion remains the same: the tackle-to-tackle period can be extended to encompass a tariff-defined or free container-usage window, whichever is longer, ensuring that the Hague and Hague-Visby Rules remain relevant in container shipping.

4 Basis of liability

The Hague and Hague-Visby Rules do not offer a specific provision related to the basis of carrier liability. Instead, carrier liability is premised on two fundamental duties:[144] (1) exercising due diligence to ensure the seaworthiness of the ship before and at the beginning of the voyage (art III, r 1) and (2) providing proper care for the cargo throughout the voyage

[141] *Pyrene* (n 92) 328.
[142] *Seafood Imports* (n 70) [76].
[143] Ibid.
[144] For further information, see Stephen Girvin, 'The Carrier's Fundamental Duties to Cargo under the Hague and Hague-Visby Rules' (2019) 25 JIML 443.

(art III, r 2). These main obligations are safeguarded by art III, r 8, which nullifies any contractual clause that relieves or reduces a carrier's liability for cargo loss or damage caused by negligence, fault, or breach of these duties or that otherwise conflicts with the Rules. Article IV, r 2 then lists seventeen exonerating exceptions (a) through (q), under which the carrier can avoid liability. In addition, art IV, r 5 sets the upper limit for carrier liability. This framework is commonly seen as a compromise between the interests of carriers and shippers:[145] the carrier assumes an irreducible minimum of responsibilities and liabilities[146] in exchange for specific rights and immunities.[147]

The following explores how this liability framework applies to container shipping, namely, how a carrier's liability is established, the specific obligations under which the carrier can be held liable, how the burden of proof operates, and how containerisation shapes these parameters, including evidentiary challenges and the role of certain bill of lading clauses in practice. This discussion is divided into two parts. The first examines the most common container-related issue – defective containers – and how the law treats them. The second considers how the carrier's duty of care for cargo might be reinterpreted in container shipping.

4.1 Liability for defective containers

The most common container-related loss or damage arises from defects in the physical condition of the container itself. Where those defects occur in containers provided by the shipper, the carrier often could escape liability under either contractual exemption clauses[148] or the statutory exculpatory provisions of art IV, r 2 of the Hague and Hague-Visby Rules, such as art IV, r 2(e) (shipper's act or omission), art IV, r 2(n) (insufficient packing), or art IV, r 2(q) (lack of carrier's fault or privity). The most problematic scenario, however, involves defective containers supplied by the carrier, which then leads to cargo loss or damage. In these instances, the primary question is whether liability is assessed as a breach of the duty of

[145] See particularly CMI (n 82) 46.

[146] *Riverstone Meat Company Pty Ltd v Lancashire Shipping Company Ltd (The Muncaster Castle)* [1961] AC 807 (HL), 836.

[147] *The Giant Ace* (n 32) [20]. See also *Effort Shipping Co Ltd v Linden Management SA and Another (The Giannis NK)* [1998] AC 605 (HL), 621.

[148] See, eg, Conlinebill 2016 (n 103) cl 17.c; Multidoc 2016 (n 105) cl 21.c; Combiconbill 2016 (n 105) cl 18.3; Linewaybill 2016 (BIMCO) 2025 cl 17.c available at <https://www.bimco.org/contracts-and-clauses/bimco-contracts/linewaybill> accessed 2 January 2025.

seaworthiness (art III, r 1) or the duty of care for the cargo (art III, r 2). While shippers often allege breaches of both obligations,[149] distinguishing between them is critical due to their differing legal effects.

Before proceeding further, it is vital to stress these differences, which can be grouped into four main subjects: overriding nature, timing, transferability of responsibility, and burden of proof. First, unlike the duty of care for the cargo, the seaworthiness obligation is an overriding one under the Hague and Hague-Visby Rules in English Law.[150] If the carrier fails to meet this obligation – resulting in loss or damage – it cannot rely on the defences and immunities in art IV, r 2. By contrast, breaching the duty of cargo care does not strip the carrier of its right to invoke those defences. Second, the seaworthiness obligation applies only before and at the commencement of the voyage. The duty to care for the cargo, however, extends throughout the voyage. Third, certain carrier obligations related to cargo care under art III, r 2 – namely loading, stowing, and discharging – can be transferred to shippers, charterers, or consignees,[151] since these operations are regarded as less fundamental.[152] By contrast, the seaworthiness obligation is non-transferable, as it is deemed an 'inescapable personal obligation'.[153] The carrier cannot evade this responsibility by delegating it to servants or agents acting as navigators, managers, engineers, or ship repairers.[154] If the carrier delegates the task of ensuring seaworthiness to these parties, they act on its behalf, and the carrier remains

[149] See, eg, *The Sky Jupiter* (n 72) [3], [13], [14]. This has long been the interplay of these duties in practice: see Stephen Girvin, *Carriage of Goods by Sea* (3rd edn, Oxford University Press 2022) [27.37].

[150] *Maxine Footwear Co Ltd v Canadian Government Merchant Marine Ltd* [1959] UKPC 13, [1959] AC 589 (PC), [5]. See also *Mediterranean Freight Services Ltd v BP Oil International Ltd (The Fiona)* [1993] 1 Lloyd's Rep 257; *Great China Metal Industries Co Ltd v Malaysian International Shipping Corp Bhd (The Bunga Seroja)* [1998] HCA 65, [1991] 1 Lloyd's Rep 512.

[151] See *Pyrene* (n 92); *GH Renton & Co Ltd v Palmyra Trading Corporation of Panama (The Caspiana)* [1957] AC 149 (HL); *Ismail v Polish Ocean Lines (The Ciechocinek)* [1976] QB 893 (CA); *The Arawa* [1977] 2 Lloyd's Rep 416; *Filikos Shipping Corp of Monrovia v Shipmair BV (The Filikos)* [1981] 2 Lloyd's Rep 555; *D/S A/S Idaho v Peninsular and Oriental Steam Navigation Co (The Strathnewton)* [1983] 1 Lloyd's Rep 219 (CA); *CHZ 'Rolimpex' v Eftavrysses Compania Naviera SA (The Panaghia Tinnou)* [1986] 2 Lloyd's Rep 586; *A/S Iverans Rederei v KG MS Holstencruiser Seeschiffahrtsgesellschaft mbH & Co (The Holstencruiser)* [1992] 2 Lloyd's Rep 378; *Balli Trading Ltd v Afalona Shipping Co Ltd (The Coral)* [1993] 1 Lloyd's Rep 1 (CA); *Jindal Iron and Steel Ltd v Islamic Solidarity Shipping Inc (The Jordan II)* [2004] UKHL 49, [2005] 1 WLR 1363; *Société de Distribution de Toutes Marchandises en Côte d'Ivoire t/a SDTM-CI and others v Continental Lines NV (The Sea Miror)* [2015] EWHC 1747 (Comm), [2015] 2 Lloyd's Rep 395.

[152] *The Jordan II*, ibid, [19].

[153] Sir David Foxton et al, *Scrutton on Charterparties and Bills of Lading* (25th edn, Sweet & Maxwell 2024) [14-046].

[154] *The Muncaster Castle* (n 146). More recently see *Alize 1954 v Allianz Elementar Versicherungs AG (The CMA CGM Libra)* [2021] UKSC 51, [2021] 2 Lloyd's Rep 613, [144].

liable under art III, r 1 of the Hague Rules for any causative failure to exercise due diligence. Lastly, the burden of proof for seaworthiness and cargo care claims differs. Although the Hague and Hague-Visby Rules do not explicitly set out the burden of proof, case law has clarified its allocation. In seaworthiness claims, the prevailing view[155] is that the shipper must first demonstrate (a) that the ship was unseaworthy, and (b) that such unseaworthiness caused the damage. The onus then shifts to the carrier to prove it exercised due diligence under art III, r 1, thus negating negligence.[156] For art III, r 2 claims, the approach has evolved considerably in the wake of the *Volcafe* decision in the Supreme Court, where Lord Sumption reconfigured the established principles[157] by aligning them with the English law of bailment.[158] This ruling provided much-needed clarification at the highest level. It is particularly notable that such clarification arose in a case involving containers, where it was especially needed due to the evidentiary challenges characteristic of containerised shipping. As such, once the shipper shows a prima facie case – namely that the goods were delivered in sound condition and re-delivered in a damaged state or not delivered at all – the burden shifts to the carrier to prove either that it was not at fault under art III, r 2 or that one of the art IV, r 2 defences applies.[159] Notably, if the carrier invokes the inherent vice exception under art IV, r 2(m) – a common claim in container shipping – it must also disprove its own negligence to succeed.[160] In any event, after this point, the burden does not revert to the shipper; it remains a legal (rather than merely evidentiary) burden on the carrier.[161]

The question whether seaworthiness or care for the cargo applies to a carrier's liability for defective containers primarily depends on how the container is conceptualised. If the container is regarded as part of the ship – more precisely, assimilated to the ship either as 'ship's equipment' under art III, r 1(b) or as 'other parts of the ship in which goods are carried' under art III, r 1(c) – this invokes the seaworthiness obligation.[162] In this context, there is no

[155] See particularly *Papera Trades Co Ltd v Hyundai Merchant Marine Co Ltd (The Eurasian Dream)* [2002] EWHC 118 (Comm), [2002] 1 Lloyd's Rep 719, [123].
[156] See The Hague and Hague-Visby Rules, art IV, r 1.
[157] In *Volcafe*, the Court of Appeal's interpretation of the burden of proof under the Hague Rules reflects the established principles: *Volcafe* (n 93) [31]-[52].
[158] *Volcafe* (n 98) [14]-[16].
[159] Ibid, [25]. See also paras [18]-[20].
[160] Ibid, [37].
[161] Ibid, [38]-[39].
[162] For support of this conceptualisation, see particularly Aladwani (n 38); Simon Baughen, *Shipping Law* (8th edn, Routledge 2023) 126. See also William Tetley, *Marine Cargo Claims*, vol 1 (4th edn, Thomson Carswell

meaningful distinction between conceptualising the container as the ship's equipment or as other parts of the ship. Both are encompassed within the broader concept of seaworthiness, with the former generally regarded as a subcategory of vessel-worthiness and the latter often referred to as cargoworthiness.[163] On the other hand, if the container is considered a 'means of handling cargo',[164] or perhaps more appropriately, as assimilated to the goods it contains, the duty of care for the cargo under art III, r 2 could be invoked.

The conceptualisation of the container as part of the ship is particularly common in civil law jurisdictions. For instance, the Shanghai Maritime Court held that carrier-owned containers constitute 'other parts of the ship' under art III, r 1(c) of the Hague and Hague-Visby Rules, holding the carrier liable for spoilage caused by defective containers.[165] Similarly, the Turkish Supreme Court of Appeal (TSCA) has repeatedly referred to containers as an 'extension of the ship' under art 1141 of the Turkish Commercial Code 2011, derived from art III, r 1 of the Rules, in cases involving defective seals and doors leading to cargo damage.[166] Denmark applies the same reasoning under s 262(2) of the Danish Merchant Shipping Act 2018, treating containers as part of the ship when damage results from defects, such as holes or faulty doors.[167] Similar interpretations can also be found in French and Belgian jurisprudence.[168] Despite this, French courts have traditionally been hesitant to regard containers as part of the ship or to apply the seaworthiness obligation to defective containers. This primarily stems

2008) 921-922, discussing defective carrier-provided containers as constituting a breach of the due diligence obligation of seaworthiness – considering the container as part of the ship – and citing several cases from the US in support. Thomas J Schoenbaum, *Admiralty and Maritime Law*, vol 1 (6th edn, Thomson Reuters 2018) 569, indicates that the doctrine of unseaworthiness extends beyond the ship and, inter alia, includes containers.

[163] *The Eurasian Dream* (n 155) [128]; *Ben Line Steamers Ltd v Pacific Steam Navigation Co (The 'Benlawers')* [1989] 2 Lloyd's Rep 51, 59. For further information, see particularly Stephen Girvin, 'The Obligation of Seaworthiness: Shipowner and Charterer', CML Working Paper Series, No 17/11, 2017, downloadable from <https://law.nus.edu.sg/cml/publications/> accessed 2 January 2025.

[164] See Stevens (n 38) 34.

[165] *Zhejiang Branch of the People's Insurance Company of China v Guangzhou Ocean Shipping Company and Shanghai Branch of China National Foreign Trade Transportation Corporation* (Shanghai Maritime Court, 1994) Supreme Court Law Report, cited in Guo Yu, 'Responsibility for Unsuitable Container in China' [1995] LMCLQ 15.

[166] TSCA (n 61); TSCA (n 62); TSCA, 11th Civil Chamber, E:2019/5081 K:2020/3060, 22 June 2020.

[167] Danish Maritime and Commercial High Court, S-24-11 and S-9-12, 30 August 2013, discussed in Kasper Hedegaard Jepsen, 'Clarification of Sea Carrier's Liability for Container-caused Damages: Visible and Hidden Defects on Containers' (Lexology, 11 January 2023) <https://www.lexology.com/library/detail.aspx?g=0118952a-c367-406d-876a-4ff7f0bf8432> accessed 2 January 2025.

[168] See Ralph de Wit, *Multimodal Transport* (Lloyd's of London Press 1995) [11.2]-[11.3], citing several French and Belgian cases.

from the view that the supply of the container is an autonomous service, separate from the transport service and the carriage contract.[169] Recently, however, they have accepted applying maritime rules to defective containers when it is proven that loss or damage occurred during the carrier's period of responsibility.[170]

A particularly notable case is *NDS Provider*, decided by the Dutch Supreme Court (Hoge Raad).[171] The case concerned tobacco bales packed by the shipper inside the carrier's containers, which were damaged due to rust holes in the containers. The court interrogated whether carrier-provided containers should be classified as mere packaging or as part of the ship. Ultimately, the court ruled that carrier-provided containers are, from a legal standpoint, part of the ship under art III, r 1(c) of the Hague-Visby Rules. This established carrier liability for breach of the seaworthiness obligation and rendered unenforceable the exclusion clause in bills of lading that exempted the carrier from liability for defective containers – a clause that is also commonly used in practice.[172] The Court's reasoning was further supported by the then-draft United Nations Convention for the International Carriage of Goods Wholly or Partly by Sea, 2008 (the Rotterdam Rules), where art 16 (later art 14(c) in the finalised Convention) explicitly included containers within the scope of cargoworthiness.[173] However, citing the Rotterdam Rules in this context may seem misplaced, as cargoworthiness under the Rotterdam Rules is not an overriding obligation,[174] unlike the Hague and Hague-Visby Rules. Ultimately, the relevance of this case lies in its emphasis on the 'legal' when conceptualising the container as part of the ship. This emphasis exposes the broader rationale for such

[169] For further discussion, see Bordahandy, 'Containers: A Conundrum or A Concept' (n 38) 364-365. See also Pierre-Jean Bordahandy, 'The Legal Implications of the Concept of Shipping Container' (PhD thesis, University Paul Cezanne – Aix-Marseille III & the University of Queensland 2006) 248ff.

[170] For further analysis, see Pierre-Jean Bordahandy, 'The Liability Attached to the Supply of Containers by a Maritime Carrier: Comparative Analysis of the French Decision M/V Matisse Cour D'appel D'aix-En-Provence 2eme Chambre – 15 Fevrier 2007' (2007) 21 ANZMLJ 178.

[171] *Nile Dutch Africa Line BV v Delta Lloyd Schadeverzekering NV (NDS Provider)* ECLI:NL:HR:2008:BA5799.

[172] MSC (n 50) cl 11.2.c; Maersk (n 51) cl 11.2.c; CMA CGM (n 52) cl 23.1.c; COSCO (n 53) cl 11.1.c; Hapag-Lloyd (n 54) cl 8.1.c; ONE (n 55) cl 9.1.b; Evergreen Line (n 56) cl 10.c; HMM (n 57) cl 11.b.c; ZIM (n 58) cl 12.7; Yang Ming (n 59) cl 9.2.

[173] Michael F Sturley et al, *The Rotterdam Rules: The UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (2nd edn, Sweet & Maxwell 2020) 91.

[174] See also NJ Margetson, 'Some Remarks on the Allocation of the Burden of Proof under the Rotterdam Rules as Compared to the Hague (Visby) Rules' in D Rhidian Thomas (ed), *The Carriage of Goods by Sea under the Rotterdam Rules* (Routledge 2010) [10.62].

conceptualisation by other courts as well: while aware of its limitations, the purpose is to adapt containerisation to fit within the existing legal framework.

In the common law world, the question whether seaworthiness or care for the cargo applies to defective containers remains largely unsettled. This is mainly due to the limited judicial examination of the issue, notably in the UK, as the high costs of litigation often outweigh the value of claims,[175] encouraging settlement through arbitration or other mechanisms.[176] A notable exception is, nevertheless, a US case, *Red Jacket*, involving containerised cargo lost or damaged during a North Pacific storm that caused 50 containers to collapse, 43 of which were lost overboard.[177] Eight containers, loaded with tin ingots, belonged to the plaintiff Metal Traders Inc (MT).[178] The shipment was conducted under a door-to-door arrangement, with the carrier providing the containers and the shipper responsible for stuffing them.[179] The central dispute concerned the cause of the collapse. The carrier argued it resulted from improper loading by MT, which caused the ingots to come loose during the voyage and triggered a domino-like effect when the container failed.[180] Conversely, MT claimed the carrier-provided container was structurally defective, breaching the seaworthiness obligation under s 3(1) of COGSA 1936 (based on art III, r 1 of the Hague Rules).[181] The court rejected the carrier's defence, holding that the structurally damaged container constituted a breach of the carrier's seaworthiness obligation. The court stated that 'the standard of reasonable fitness, *the due diligence obligation* [emphasis added] applies to all of the ship's equipment, including containers supplied to shippers for the purpose of house-to-house shipments'.[182] By conceptualising the container as part of the ship's equipment under s 3(1)(b) of COGSA 1936,

[175] Litigation costs are generally higher in common law countries – particularly in the UK, the most expensive in Europe – making individual container cases less likely to proceed to courts compared to their frequency in civil law countries. See David L McKnight and Paul J Hinton, 'International Comparisons of Litigation Costs: Canada, Europe, Japan, and the United States' (US Chamber Institute for Legal Reform, June 2013) <https://instituteforlegalreform.com/research/international-comparisons-of-litigation-costs-canada-europe-japan-and-the-united-states/> accessed 2 January 2025.

[176] See Mackie J's remark on the disproportionate nature of litigation costs in cases involving individual container defects causing loss or damage in *The Sky Jupiter* (n 72) [1]. See also Andrew Nicholas, 'The Duties of Carriers under the Conventions: Care and Seaworthiness' in Rhidian Thomas (ed), *The Carriage of Goods by Sea under the Rotterdam Rules* (Routledge 2010) [6.5].

[177] *Red Jacket* (n 60), [2].

[178] Ibid.

[179] Ibid, [4].

[180] Ibid, [3], [27]-[28].

[181] Ibid, [40]-[41].

[182] Ibid, [41].

the court determined that the carrier failed to prove that it exercised due diligence at the commencement of the voyage to make the ship's containers seaworthy.[183] Despite *Red Jacket*, it is hardly accurate to say that this approach is broadly accepted in US jurisprudence. In *The MV Skanderborg*, for instance, the Court explicitly rejected the shipper's argument that containers are part of the ship for the purpose of the carrier's seaworthiness duty.[184] However, *Red Jacket* was neither referenced by the shipper nor considered by the court in this case.

It is observed that, in the US, the container is often accepted as functionally part of the ship authoritatively only for the purpose of package limitation under s 4(5) of COGSA 1936 (the same as art IV, r 5 of the Hague Rules).[185] However, this characterisation is applied selectively, mainly to prevent the container from being deemed a 'package' for liability limitation. A similar approach is seen in Australia, where, despite not being treated as part of the ship for seaworthiness purposes, the container has been recognised as such for liability limitation.[186]

To date, English courts have not definitively addressed the issue of defective containers. However, the matter was perhaps most closely examined in *The Sky Jupiter*. This case concerned an FCL shipment of hoki fish fillets in a reefer container provided by the carrier, MSC, and stuffed by the shipper.[187] Upon delivery, the cargo was found substantially spoiled due to ice buildup in the container, which obstructed airflow critical for maintaining the required temperature.[188] The shipper and the carrier blamed each other for the damage[189] – a common situation in FCL shipments involving carrier-provided containers, where causation between the two parties often competes.[190] The shipper alleged that the ice buildup resulted from a defect in the container's evaporator drainage system, which failed to remove defrost water, causing it to accumulate and freeze near the cooling unit, thus breaching the carrier's

[183] Ibid, [44].
[184] *The MV Skanderborg* (n 75) [6]-[7].
[185] See particularly *Noble v Lehigh Valley R Co* 388 F2d 532 (USCA 2nd Cir 1968); *Leather's Best Inc v SS Mormaclynx et al* 451 F2d 800 (USCA 2nd Cir 1971); *Matsushita Electric Corp v SS Aegis Spirit* 414 FSupp 894 (WD Wash 1976); *Northeast Marine Terminal Co Inc v Caputo et al* 432 US 249 (US Sup Ct 1977). See also Schoenbaum (n 162) 933.
[186] See *PS Chellaram & Co Ltd v China Ocean Shipping Co* (*The Zhi Jiang Kou*) [1989] 1 Lloyd's Rep 413 (NSW).
[187] *The Sky Jupiter* (n 72) [2].
[188] Ibid, [6].
[189] Ibid, [3].
[190] See, eg, from the US: *Empire Distributors* (n 74); *The MV Skanderborg* (n 75). From Australia, see eg, *The TNT Express* (n 62); *Comalco Aluminium* (n 60).

duty of seaworthiness.[191] Conversely, the carrier argued that the ice formation was caused by the shipper's improper stowage, which allowed warm air from poorly packed cargo near the container doors to disrupt the refrigeration system.[192] Faced with conflicting expert opinions, Mackie J relied on circumstantial factors, including the operational history of the container,[193] that is, its successful use in at least six subsequent voyages,[194] and pre-trip inspection (PTI) records.[195] He concluded that poor stowage was the likely cause of the damage.[196] Despite finding the shipper at fault, the court adopted an unconventional resolution by apportioning liability equally between the shipper and the carrier, awarding the claimants 50 per cent of the claimed damages.[197] Mackie J appropriately characterised this decision as 'imperfect', citing the significant evidentiary challenges inherent in containerised shipping.[198] Notably, Mackie J consciously left open the question of whether a defective container breaches the seaworthiness obligation.[199] However, he remarked that the duty to care for the cargo under art III, r 2 of the Hague and Hague-Visby Rules would be informed by past events.[200] This echoes the cautious approach of English courts, which have avoided treating containers as part of the ship in contexts like maritime liens on leased containers.[201]

It is submitted that, given the inherent limitations of conceptualising the container as part of the ship – a prerequisite for invoking seaworthiness under the Rules – the temporal limitation of the seaworthiness obligation, and *The Sky Jupiter*'s interpretation that the duty of care for cargo is influenced by past events, such as the carrier's provision of the container prior to loading, art III, r 2 offers a more practical basis for addressing liability for defective containers leading to cargo loss or damage. This interpretation may even align with cases like *Volcafe*, where insufficient container preparation was evaluated under art III, r 2 rather than art III, r 1,

---

[191] *The Sky Jupiter* (n 72) [17].
[192] Ibid, [18].
[193] Ibid, [21].
[194] Ibid, [11].
[195] PTI records refers to mandatory inspections carried out on empty reefer containers by independent technicians before the containers are handed over to the shipper: ibid, [21].
[196] Ibid, [22].
[197] Ibid, [39].
[198] Ibid, [40].
[199] Ibid, [14].
[200] Ibid, [14].
[201] See *The River Rima* [1988] 1 WLR 758 (HL), 763, where the House of Lords held that containers are not goods or materials required for the operation of the ship, that is, they are not an integral part of the ship under s 20(2)(m) of the Supreme Court Act 1981 (now the Senior Courts Act 1981). This decision overturned the earlier precedent set in *The Sonia S* [1983] 2 Lloyd's Rep 63, 65 by Sheen J.

as elaborated below. Here, container dressing or preparation could arguably align more closely with the language of art III, r 1(c), if it were indeed intended that the container be considered part of the ship – requiring its interior to be 'fit and safe for their reception, carriage, and preservation'. However, the application of art III, r 2 in this case reflects a deliberate decoupling of the container from the concept of the ship. This, in turn, suggests that, under English law, container-related issues are addressed by prioritising the carrier's duty of care over the seaworthiness obligation.

This submission can be further supported by the differing standards of proof under these obligations and the evidentiary challenges in containerisation. As noted previously, in relation to seaworthiness, the burden lies with the shipper to establish unseaworthiness, whereas under art III, r 2, the carrier must demonstrate compliance with their duty of care. It is often ominously more challenging for the shipper to prove unseaworthiness of the container than to establish a breach of the carrier's duty of care under art III, r 2. Yet, in practice, carriers often attempt to contractually mimic the burden of proof under the seaworthiness obligation by shifting it onto shippers, requiring them to prove that a container was defective at the time it was provided by the carrier. This is often done through clauses stating that the shipper's use of the carrier-provided container is prima facie evidence of its good condition,[202] and placing an obligation on the shipper to inspect the container's soundness before stuffing it.[203] The enforceability of such clauses is questionable.[204] However, as highlighted in the Australian case *The TNT Express*, the more rational approach is to place the onus on the carrier to prove that any defective condition of the container would have been apparent upon reasonable inspection by the shipper at the time of stuffing when the container is supplied by the carrier.[205]

[202] MSC (n 50) cl 11.1; Maersk (n 51) cl 11.4; COSCO (n 53) cl 11.3; ONE (n 55) cl 9.1.c; ZIM (n 58) 12.2; Yang Ming (n 59) cl 10.1.

[203] MSC (n 50) cl 11.1; Maersk (n 51) cl 11.4; COSCO (n 53) cl 11.3; ONE (n 55) cl 9.1.c; HMM (n 57) cl 11.c; ZIM (n 58) cl 10.2, 12.2; Yang Ming (n 59) cl 10.1.

[204] See particularly *Kawasaki Kisen* (n 65); *The TNT Express* (n 62). See also *The MV Maersk Chennai* (n 84) [53], [125].

[205] *The TNT Express* (n 62) 642.

4.2 Care for containerised cargo

The obligation of care for the cargo under art III, r 2 of the Hague and Hague-Visby Rules has gained much significance with the advent of containerisation. This duty even partly extends into areas that would otherwise have been covered under seaworthiness if not for the use of containers, such as defective containers, as noted above. Notably, this duty applies to both containers supplied by the carrier and those provided by the shipper. As an ongoing obligation, this duty encompasses not only the 'care' element – often described as the namesake of the obligation – but also operational activities, such as loading, handling, stowage, and discharge of goods. While these activities may be viewed as secondary aspects of cargo care,[206] they must still be performed 'properly and carefully' when undertaken by the carrier.[207]

However, in the context of containerisation, the application of the duty of cargo care often becomes abstract, serving more as a mechanism for establishing liability due to the practical intricacies of containerised shipping. For instance, in FCL shipments, carriers typically lack knowledge of the container's contents, which are packed and sealed by the shipper before handover. Additionally, the operational realities of containerisation – such as containers being stacked up to 12 layers high on board – further limit the carrier's ability to exercise control over the goods during transit. Consequently, the carrier often cannot intervene proactively to address issues arising from container defects that develop or worsen during the voyage. These defects, such as stress-induced corrosion or structural tears, can lead to seawater ingress,[208] similar to how broken seals allow rainwater and other elements to enter and damage the cargo.[209] Despite these uncontrollable factors, the carrier may still be held liable.

The supply of the container by the carrier itself comes with additional requirements that may trigger the carrier's liability. This includes ensuring that the container is clean, fumigated, and free from any residue from previous shipments.[210] In the case of special containers, such as reefer containers, the carrier assumes further obligations. The carrier must continuously monitor, recalibrate, and maintain temperatures to preserve the cargo throughout the

[206] *The Jordan II* (n 151) [19].
[207] *Pyrene* (n 92) 328; *Seafood Imports* (n 70) [76]; *Volcafe* (n 44) [11].
[208] *El Greco* (n 60).
[209] *The TNT Express* (n 62).
[210] See, eg, *The Ruben Martinez Villena* (n 79).

voyage.[211] However, the carrier is under no obligation to provide a special container. It is solely the shipper's responsibility to request, if desired, a suitable container that meets the requirements of their cargo. The carrier would not be liable if an unsuitable container leads to damage or loss of cargo, such as using an unventilated container for perishable goods or other special cargo.[212] Furthermore, while the carrier may not be aware of the contents or have limited control over them, it is still responsible for stowing the container properly and carefully. If improper stowage results in loss or damage to the goods inside, art III, r 2 would likely be invoked. If such stowage affects the ship's stability, the seaworthiness obligation may also come into play.[213]

Although the overall condition of the container is often believed to reflect its contents, especially in relation to potential theft or damage, it is not uncommon to find signs of tampering with the goods inside the container. In such cases, the carrier may resort to the structural soundness of the container as prima facie evidence of non-liability, arguing that if the container seals are intact at outturn, no tampering or damage could have occurred during the carrier's period of responsibility.[214] This argument is often based on the intact seal non-liability clause, commonly seen in bills of lading.[215] However, this assumption can be misleading. Even if the seal remains unbroken, internal damage or loss can still occur due to defects in the container itself, or issues arising from its unsuitability for the goods it contains,[216] or improper stuffing.[217] Furthermore, theft can occur without breaking the seal, using methods like cutting through the container walls or other parts of the structure, and then covering the entry point. The contents might also be tampered with before the container is sealed, or the seal number might be misrepresented in the documentation.[218] It is also important to note that not all seals provide the same level of security; some can be easily

[211] *Mayhew* (n 69); *Seafood Imports* (n 70); *Circus* (n 69); *Sea King* (n 77).
[212] See, eg, *Empire Distributors* (n 74).
[213] See, eg, *Compania Sud American* (n 80), where the vessel was considered unseaworthy due to the improper stowage of a container of calcium hypochlorite next to a heated bunker tank, compromising the vessel's safety.
[214] *Roco Carriers Ltd v MV Nurnberg Express* 1989 AMC 2527 (SD NY 1989); *Leather's Best Int'l Inc v MV Lloyd Sergipe* 760 F Supp 301 (SD NY 1991); *Bally Inc v MV Zim Am* 22 F3d 65 (2d Cir 1994); *Phoenix Assurance Co v MV Eagle Tide* 2001 AMC 1019 (SD NY 1999).
[215] See, eg, MSC (n 50) cl 15; Maersk (n 51) cl 12.2; CMA CGM (n 52) cl 23.3; COSCO (n 53) cl 11.2; ONE (n 55) cl 9.1.d; HMM (n 57) cl 11.d; Yang Ming (n 59) cl 9.4.
[216] *Empire Distributors* (n 74).
[217] *Comalco Aluminium* (n 60); *The Sky Jupiter* (n 72); *Volcafe* (n 44); *TM Noten BV* (n 76).
[218] *Affiliated FM Ins Co v M/V Maersk Visby* 2016 AMC 2236 (SD NY 2016).

tampered with and replicated without leaving any obvious signs of interference.[219] These raise questions about the enforceability of clauses relying solely on container seals as evidence of non-liability. In any event, if the shipper can demonstrate that the goods were handed over in good condition but were delivered damaged or missing,[220] a presumption arises that the carrier breached their duty of care. Although it may seem counterintuitive to hold carriers liable for issues beyond their direct control or knowledge, the carrier's custody of the container imposes a burden on them to prove they exercised due care. This is related to the carrier's duty of care under art III, r 2 of the Hague and Hague-Visby Rules, which is derived from the carrier's status as a bailee.[221]

The evolution of containerisation has introduced additional responsibilities for carriers, particularly in relation to container stuffing. Although the carrier is often exempt from liability arising from improper stuffing of the container by the shipper in FCL shipments,[222] the situation is more complicated in LCL shipments, where the carrier both supplies and stuffs the container. This includes processes known as container dressing, which involves preparing the container interior with protective materials, such as corrugated sheets or kraft paper, to prevent transit damage, including scratches, moisture, mould, or corrosion. The *Volcafe* case established that container dressing and stuffing in LCL shipments fall within the meaning of 'loading' under art I(e) of the Hague and Hague-Visby Rules and are, therefore, subject to the duty of cargo care under art III, r 2. This, in turn, raises questions about the standard of care required under art III, r 2 for the dressing and stuffing of the container.

Traditionally, the standard expected from the carrier under art III, r 2 is whether the carrier has established a 'sound system' for the goods to be carried.[223] In the landmark case *Albacora S R L v Westcott and Laurance Line Ltd*,[224] a 'sound system' was defined as one that does not account for the 'weaknesses and idiosyncrasies of a particular cargo' but is suitable for the

[219] See, eg, *Westway Coffee Corp v MV Netuno* 528 F Supp 113 (SD NY 1981).
[220] However, in container shipping, this is often challenging for the shipper to establish. See, eg, *The American Astronaut* [1979] SGHC 1, [1979-1980] SLR(R) 1, revd [1979] SGCA 15, [1979-1980] SLR(R) 243; *The Axel Maersk* [1980] SGHC 37, [1979-1980] SLR(R) 822.
[221] *Volcafe* (n 98), [8] ff; *The MV Maersk Chennai* (n 84) [93].
[222] See, eg, *Comalco Aluminium* (n 60); *The MV Skanderborg* (n 75). See also *Northern Shipping Co v Deutsche Seereederei GmbH (The Kapitan Sakharov)* [2000] EWCA Civ 400; [2000] 2 Lloyd's Rep 255.
[223] *Renton* (n 151) 166 (Lord Kilmuir LC).
[224] [1966] 2 Lloyd's Rep 53 (HL).

circumstances in line with general practices in the carriage of goods by sea.[225] This interpretation was further developed in *Volcafe* to consider the specifics of containers. In *Volcafe*, the coffee beans were loaded into unventilated containers provided by the carrier, and condensation damage occurred in 18 out of 20 containers.[226] The claimants argued that the moisture-absorbing nature of the coffee beans made them particularly susceptible to condensation, which could have been mitigated by using adequately thick or double-layered Kraft paper to line the containers by the carrier.[227] The carrier contended that the damage was inevitable due to the hygroscopic nature of the beans and the transport conditions.[228] It asserted that using kraft paper, a common industry practice, was sufficient to meet the standard of care under art III, r 2 of the Hague Rules.[229] David Donaldson QC, in the London Mercantile Court, rejected the carrier's arguments that condensation damage was inevitable[230] or caused by inherent vice.[231] He held that the carrier had failed to demonstrate that its protective measures were in line with a sound system.[232] While the 'sound system' standard does not require consideration of the peculiarities of individual cargo, the transportation of coffee in unventilated containers is a common and typical practice.[233] The propensity of coffee beans to generate moisture during transit to colder climates is also well-known in the industry.[234] The judge noted that the carrier's container lining must address this risk and that the adequacy of a carrier's system depends on a rational, adequate, and reliable foundation.[235] In this case, the carrier failed to provide any identification of the weight of the paper used in the containers (whether or not in a double layer, as contended) or an explanation for why that specific weight and type were chosen. The judge stressed that this could have been established through theoretical calculation, such as determining the expected amount of condensate during the voyage and the time before saturation of paper or card of varying weights or types.[236] If a theoretical calculation was not feasible, a suitable

[225] Ibid, 62.
[226] *Volcafe* (n 44) [3].
[227] Ibid, [23].
[228] Ibid, [30].
[229] Ibid, [40].
[230] Ibid, [44].
[231] Ibid, [16]-[17].
[232] Ibid, [50].
[233] Ibid, [47].
[234] Ibid.
[235] Ibid.
[236] Ibid, [48].

empirical study could have demonstrated that a particular weight or type of paper or card was sufficient to prevent damage throughout the carriage.[237] The absence of a theoretical or empirical basis left the carrier unable to substantiate its claim that its measures constituted a sound system.

The Court of Appeal held that the deputy judge erred in interpreting a 'sound system' under the Hague Rules.[238] By requiring the sound system to be based on theoretical calculations or empirical studies, the deputy judge had improperly imposed an obligation on the carrier to prove that its system for loading and carrying goods could entirely prevent damage.[239] Instead, the Court of Appeal found that a 'sound system' was not a guarantor of damage prevention but required the carrier to employ methods that were appropriate and reasonable according to general industry practices at the time of shipment.[240] In the subsequent appeal to the Supreme Court, although this issue was not directly addressed, the Supreme Court accepted that David Donaldson QC had not equated a 'sound system' under art III, r 2 of the Hague Rules to one that would completely eliminate damage.[241] Ultimately, the Supreme Court reversed the Court of Appeal's decision and reinstated the judgment of the trial court.[242]

David Donaldson QC's introduction of theoretical calculations or empirical studies to demonstrate a sound system is thoughtful. It primarily responds to the substantial evidentiary challenges posed by containerisation, where specific facts are often difficult to ascertain. Although such calculations or studies may entail 'real practical difficulties', as the Court of Appeal notes,[243] they ultimately offer a more reliable framework for establishing a sound system and meeting the carrier's burden of proof than simply referencing general industry practice.

[237] Ibid.
[238] *Volcafe* (n 93) [68], [72].
[239] Ibid, [68]-[69].
[240] Ibid, [72].
[241] *Volcafe* (n 98) [40].
[242] Ibid, [41].
[243] *Volcafe* (n 93) [69].

5 Conclusion

This paper has demonstrated that containerisation poses considerable challenges to carrier liability under the existing frameworks of the Hague and Hague-Visby Rules. These challenges arise from containerisation's transformative impact on maritime transport. This includes redefining the network of responsibilities, introducing concepts like the supply of containers, stuffing and devanning, and extending the boundaries of sea carriage. The inefficiency of the Rules in addressing these realities has compelled courts to adopt more purposive interpretations or, sometimes, rely on unconventional methods. Paradoxically, the relevance of this framework has only grown as sea transport has expanded its reach through containerisation. Bills of lading have become increasingly significant, incorporating container-specific clauses to address gaps in the Rules. This is particularly notably in container shipping, which, unlike other shipping methods, is vastly consolidated, with the top ten shipping lines, together, controlling approximately 85 per cent of the global market and relying on standardised, largely uniform bills of lading. However, the broad immunities granted to carriers under these documents raise concerns that containerisation operates under a system of minimal liability, ironically reminiscent of the conditions that prompted the creation of the Hague Rules in the early twentieth century.

English courts have made some progress in clarifying issues, such as extending the liability period from tackle-to-tackle to port-to-port in LCL shipments and establishing a new framework for the operation of the burden of proof for the duty of care for cargo, which is particularly helpful for container shipping. This interpretation is mainly rooted in national principles, notably the bailment principle, integrated into the international framework of the Hague and Hague-Visby Rules. While this is not traditionally welcomed, it still provides positive outcomes in terms of adapting the Rules to modern containerisation. There still appears to be some orthodox interpretation for FCL shipments, where the discharge under the Rules is accepted as the point at which the container is removed from the ship. Many issues also remain unresolved, such as whether defective carrier-provided containers breach the obligation to ensure a seaworthy vessel despite opportunities to address it. Nonetheless, it may be better left open for further conceptual examination rather than being prematurely defined, as seen in other jurisdictions – both common and civil law – where the container is

regarded as part of the ship. In any event, this paper has proposed that the duty of care has become more central in addressing many container-related issues, including defective containers, without necessarily relying on questionable concepts to maintain the existing legal framework.