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Bringing Carriage of Goods into the Twenty-First Century

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Bringing Carriage of Goods into the Twenty-First Century[†]

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International shipping has experienced revolutionary changes since Singapore became an independent country in 1965. However, the legal regimes governing international carriage of goods have not kept pace with developments in international trade, transport and logistics. The Rotterdam Rules provide a modern regime for twenty-first century shipping. Singapore has in the past shown its willingness to take the lead in maritime law conventions. It is ideally positioned once again to provide leadership in the efforts to ratify the Rotterdam Rules and bring the law governing the carriage of goods by sea into the twenty-first century.

Keywords: Carriage of goods; transport logistics; containerization; Rotterdam Rules; Singapore

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It was both a privilege and a pleasure for me to be the inaugural speaker at the Singapore Maritime Law Forum. During the first semester of the 2017-18 academic year, the Centre for Maritime Law was a most welcoming host and I am very grateful that I had the opportunity to participate in the intellectual life of the NUS Law Faculty as a visiting professor.

My appointment at NUS began on 7 August 2017, so as soon as I arrived in Singapore I was immediately caught up in all of the celebrations associated with the nation's 52nd birthday two days later. Birthdays, of course, are inevitably a time for reflecting on all that has happened over the years in question, so I naturally saw and read a great deal about the tremendous progress that Singapore has made in the 52 years since becoming an independent country. As I started my preparations for the Singapore Maritime Law Forum, therefore, it seemed entirely natural to be thinking about the progress that Singapore's maritime industry has made since 1965. And thus I decided that I should begin here by discussing that topic.

1 Singapore's Maritime Industry at Independence

Although the 'container revolution'[1] is traditionally said to have begun on 26 April 1956 — the day that the *Ideal-X* sailed from Newark, New Jersey, with fifty-eight 33-foot containers on board[2] — it was not the kind of revolution that changed the world overnight. Almost a decade later, when Singapore gained its independence, '[c]ontainer shipping ... was a niche business'.[3] Two US carriers carried on a significant but limited container trade in some domestic markets, but there was no international container traffic at all (and very little rail-sea container traffic, even in the United States). Fifty-two years ago, goods in international

1 See generally, eg, Marc Levinson, *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger* (Princeton University Press 2006); Brian J Cudahy, *Box Boats: How Container Ships Changed the World* (Fordham University Press 2006).

2 See, eg, Levinson (n 1) 1 (describing the voyage); Cudahy (n 1) 29 (*Ideal X*'s 'April 26 departure from Port Newark, New Jersey [is] universally regarded as the very first time a bona fide container ship made a scheduled trip on any waterway.').

3 Levinson (n 1) 161.

trade were still carried pretty much the way that they had been throughout the twentieth century until that time. By 9 August 1965, the container revolution had not yet had any discernible impact on Singapore (or much of an impact on anywhere else outside of the United States).

When contrasting Singapore's pre-container shipping industry of 1965 with the industry of today, the easiest place to start is with the ships themselves. In the decades after World War II, commercial shipping relied heavily on war-surplus ships. The best-known and most common were 'Liberty ships'.[4] US shipyards built 2,710 of them during the war, and commercial shipping lines paid bargain prices for many of those that survived the war. Liberty ships were about 135 meters long with a 17-meter beam and a capacity of just over 10,500 deadweight tons; they travelled at a top speed of about 11 knots. The new post-war ships were slightly faster but not much larger. The popular C-2 cargo ships were about 140 meters long with a 19-meter beam, but they had a smaller capacity — less than 9,000 deadweight tons.[5]

More significantly, the method of loading and unloading those vessels was very different in 1965 than it is today. With little standardization in cargo packaging in 1965, every piece had to be handled individually. Trucks could move the cargo within the port area, and cranes could lift it from the pier and lower it through the ship's hatches into the hold, but the system still relied very heavily on manual labor. Longshore workers needed to unload the cargo from the trucks into the slings that the cranes could lift, and their colleagues on board needed to unload the cargo from the slings and stow it safely in the holds. And when the vessel delivered the cargo at the port of destination, the entire process would be reversed. One carrier executive of that era 'claim[ed] that it typically cost his company more to move a quantity of cargo a few hundred feet from the street in front of a pier to the hold of a ship than it did to transport it across the sea from one port to another'.[6]

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4 See generally, eg, Leonard A Sawyer & William H Mitchell, *The Liberty Ships: The History of the 'Emergency' Type Cargo Ships Constructed in the United States during World War II* (Cornell Maritime Press 1970).

5 Even the C-3 cargo ships were only about 150 meters long with a 21-meter beam. See Cudahy (n 1) 8.

6 Cudahy (n 1) 8-9.

The simplified description in the previous paragraph assumes that the cargo was being loaded on the vessel directly from the pier (or unloaded from the vessel directly to the pier). That was true for much of Singapore's cargo traffic in 1965, including at the newly opened Jurong Port.[7] But some cargo still arrived at facilities along the Singapore River, the site of Singapore's earliest port. For cargo that had to be carried by lighter to or from the ocean-going vessel, the process was even more complicated. And of course transshipment — a common practice in Singapore — essentially doubled the amount of cargo handling that was necessary (compared to a simple port-to-port shipment).

Contracts of carriage typically followed the physical cargo handling procedures, with a separate contract for each step along the way. In 1965, it was still common to have three (or more) contracts of carriage governing the straight-forward transportation of cargo (without transshipment) from an inland point of origin in one country to an inland destination in another country. At least one trucker or railroad would first carry the cargo under an inland bill of lading from the point of origin to the port of loading. An ocean bill of lading would then govern the carriage by sea. Finally, another trucker or railroad would carry the cargo under another inland bill of lading from the port of discharge to the final destination. If the cargo needed to be stored at either port, separate contracts might have been required for that, too. And transshipment would further complicate the transaction.

Finally, the maritime geography looked very different when Singapore achieved its independence than it does today. The port in Singapore was important on a regional basis, but one author could describe it before the container revolution as 'more significant as a military base than as a shipping hub. ... The commercial port comprised a handful of wharves and Singapore Roads, the anchorage offshore where cargo was transferred from one small trading vessel to another.'[8] On the other side of the world, London and Liverpool were the largest ports in Britain, each of which handled about a quarter of British trade.[9] Dozens of other ports handled smaller shares of the business, but Felixstowe was insignificant. In 1965,

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[7] See generally, eg, Giulia Pedrielli, Lee Loo Hay, Chew Ek Peng and Tan Kok Choon, *Development of the Port of Singapore: A Historical Review*, in Fwa Tien Fang (ed) *50 Years of Transportation in Singapore: Achievements and Challenges* (World Scientific Publishing Co Pte Ltd 2016) 424.

[8] Levinson (n 1) 210.

[9] Levinson (n 1) 201.

it had only 'two docks owned by ... a private company controlled by an importer of grain and palm oil. The docks had been destroyed in the storms of 1953, and by 1959 the only activity involved ninety permanent workers who unloaded tropical commodities into a few storage tanks and warehouses. Felixstowe had no general-cargo business ... .'[10]

2 The Container Revolution

Although the seeds of change had been planted — and indeed were germinating — by 9 August 1965, the new growth had not yet taken root.[11] International container service finally began the following spring, shortly after Singaporean independence. Moore-McCormack Lines, which served the East Coast of the United States and Scandinavia, began its trans-Atlantic container service in March 1966 with combination ships that carried truck trailers and mixed freight in addition to containers.[12] United States Lines also began its trans-Atlantic service that month with a vessel carrying fifty 20-foot containers below deck along with conventional general cargo.[13] And on 23 April 1966 — just three days short of a decade after the traditional start of the container revolution[14] — Sea-Land's *Fairland* left Elizabeth, New Jersey, for Rotterdam, Bremen, and Grangemouth[15] with 226 containers on board.[16] A trans-Pacific container service began the following year, in September 1967, between Japan and the West Coast of the United States.[17]

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10 Levinson (n 1) 204.

11 See above nn 1-3 and accompanying text.

12 Levinson (n 1) 164.

13 Cudahy (n 1) 86; cf Levinson (n 1) 164 (reporting that US Lines carried *forty* 20-foot containers on each voyage).

14 See above n 2 and accompanying text.

15 At Grangemouth, the *Fairland* picked up Scotch whiskey for the westbound voyage. See Levinson (n 1) 165.

16 See Cudahy (n 1) 87; Levinson (n 1) 164-165. Even after an international container service had begun, not everyone saw the revolution as inevitable. At a Sea-Land reception in Rotterdam to introduce Dutch shippers to the new container service, a Holland America Line executive, doubting that the new service would succeed, told a Sea-Land executive, 'Your containers come here on one trip, and you come back with the next ship and take all the containers home.' Cudahy (n 1) 87-88; see also Levinson (n 1) 163. Sea-Land did indeed bring the containers home, loaded with cargo, and those containers and their successors have been going back and forth across the oceans ever since — long after Moore-McCormack Lines, United States Lines, and Sea-Land have passed into the annals of history.

17 See Levinson (n 1) 208-09.

Singapore (in sharp contrast with, for example, London) demonstrated remarkable leadership in the transition to containerization. The Port of Singapore Authority commissioned a Container Committee to study the issue in July 1966 — only a few months after the earliest trans-Atlantic container service began and over a year before the first containers arrived in Asia. Following the Committee's recommendations, the PSA took the far-sighted decision to invest in the necessary infrastructure for containerization.[18] Southeast Asia's first container facility, the Tanjong Pagar Container Terminal, opened in 1972 and the first containership called there on 23 June with 300 containers. Another twenty-four container vessels called there in the next six months,[19] and the container revolution in Singapore was well underway.

3 Singapore's Maritime Industry Today

Virtually anyone with even minimal powers of observation, and certainly everyone in the audience at the Singapore Maritime Law Forum on 26 October 2017, knows that international shipping looks very different today than it did in August of 1965. Custom-built container ships dominate liner trades, carrying about 95% of the world's manufactured goods. And it is no exaggeration to say that the world itself has changed immensely as a result.[20]

Once again, the easiest place to begin a comparison is with the ships themselves. In August 2017, Orient Overseas Container Line christened the *OOCL Germany*.[21] The statistical contrast with the ships of fifty-two years ago is striking. The *OOCL Germany* is 400 meters long, almost three times the length of the Liberty ships. Its 59-meter beam is about three and a half times that of a Liberty ship. Although its top speed is twice that of a Liberty ship, it carries half the crew. And at 197,500 deadweight tons, it has almost nineteen times the capacity of a Liberty

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18 See 'and now … The chronology', *The Straits Times*, 23 June 1982, 12 available at http://eresources.nlb.gov.sg/newspapers/Digitised/Article/straitstimes19820623-1.2.102.17 (summarizing the chronology in the construction of the Tanjong Pagar Container Terminal).

19 Pedrielli, Lee, Chew and Tan (n 7) 425-27.

20 See generally, eg, Levinson (n 1) 2-4.

21 More detailed information about the *OOCL Germany* is available at multiple sites online. See, eg, *Ship Reviews: OOCL Germany* (14 September 2017), available at http://www.shipsreviews.com/oocl-germany/.

ship. But the real capacity story is the *OOCL Germany*'s ability to carry 21,413 TEUs[22] — over 57 times the container capacity of Sea-Land's *Fairland* on that first international voyage of an all-container ship in 1966,[23] and over 223 times the capacity of the containers on the *Ideal-X*'s first container voyage.[24] The *OOCL Germany* now calls regularly at Singapore (and Felixstowe[25]) on its regular route between China and Northern Europe.[26]

Although today's container ships carry vastly more cargo than the break-bulk ships that operated in international trade when Singapore separated from Malaysia, they can load and unload that cargo far more quickly and safely with a small fraction of the 1965 workforce. Indeed, the efficiencies of container carriage were obvious very early in the container revolution. When trans-Atlantic service first began, 'U.S. Lines found that ... one longshore gang with one crane could load as much in a ten-hour container operation as ten gangs handling conventional breakbulk freight. Moore-McCormack pegged the cost of loading containerized cargo at Port Elizabeth as $2.00 to $2.50 per ton, versus $16.00 per ton for conventional freight.'[27] Cargo handling operations are even more efficient today.[28] A simple examination of the published schedules for any major container ship today reveals that it will rarely spend more than a day in port (unless it is waiting for a berth). Despite its capacity, it can load and unload its cargo with even fewer workers and continue its voyage a day later. And the industry is continuing to become more efficient. China opened Asia's first fully automated container terminal — Qingdao New Qianwan Container Terminal — in May 2017, and other ports are following that example.[29]

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22 A 'TEU' is a 'twenty-foot equivalent unit'. Thus a 21,413-TEU vessel could carry 21,413 20-foot containers, or 10,706 40-foot containers, or some equivalent combination of the two.

23 See above nn 14-16 and accompanying text.

24 See above n 2 and accompanying text.

25 Cf above n 10 and accompanying text.

26 Perhaps more remarkably, the *OOCL Germany* is only one of six sister ships of the same size.

27 Levinson (n 1) 165.

28 As might be expected, efficiency has improved throughout the history of containerization. When Singapore's Tanjong Pagar Terminal opened in 1972, '[t]he best handling was achieved with a workout of an average of 27 containers per hour.' Pedrielli, Lee, Chew and Tan (n 7) 426. Five years later, the record was up to 50 containers per hour: ibid.

29 More detailed information about Qingdao New Qianwan Container Terminal and automated container terminals is available at multiple sites online. See, eg, *Asia Enters Fully Automated Terminal Era, Port Technology* (Maritime Information Services, Ltd, 15 May 2017), available at https://www.porttechnology.org/news/asia_enters_fully_automated_terminal_era.

Because containerized cargo does not need to be handled each step of the way — only the container is loaded or unloaded — multimodal carriage has become the norm. Carriers can offer their customers a through service in which the carrier (or more likely its agent) takes control of the container at the shipper's loading dock and delivers it at the consignee's receiving dock. At least from the perspective of the original shipper,[30] a single, multimodal contract of carriage governs the entire journey 'from door to door', ie, from the inland point of origin to the inland destination. The commercial contracting process has evolved to match the physical handling of the goods.

Maritime geography has also changed significantly since 1965.[31] By the time Singapore opened its first container terminal in 1972, most of the London docks had already closed. The vessels calling at St Katherine Docks today will not be cargo ships at the docks but recreational craft at the marina; the commercial docks closed in 1968.[32] Rapid change continues, particularly in the Far East. Delegates attending the 2012 conference of the Comité Maritime International (CMI) in Beijing with the extension to Shanghai were given the opportunity to tour the new Yangshan Deep-Water Port, a remarkable facility built on land that had barely existed at the turn of the millennium.

4 The Governing Legal Regimes in 1965

The legal regimes governing the international carriage of goods have traditionally been tied to the contracts of carriage. In an era when separate contracts covered each leg of a journey,

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30 From the perspective of the truckers, railroads, and shipowners, there may still be a series of separate contracts. For example, a non-vessel-owning carrier (NVOC) may conclude a single, multimodal contract of carriage with the original shipper covering the door-to-door carriage, but the NVOC would then sub-contract with truckers, railroads, and shipowners for each leg of the journey. Or an ocean carrier may conclude the multimodal contract of carriage with the original shipper and sub-contract with truckers or railroads for the inland portions of the journey.

31 See above nn 8-9 and accompanying text.

32 Unlike London, Singapore has remained a major port. But like London's Docklands, the Singapore River and the land around it is filled today with businesspeople and tourists. Even before the Tanjong Pagar Terminal opened in 1972, '[t]he 1968 River Godown Survey highlighted that many of the establishments along the Singapore River no longer made use of their riverside locations for goods handling.' Centre for Liveable Cities, *Urban Systems Studies: Port and the City: Balancing Growth and Liveability* 24 (Ministry of National Development 2016) available at https://www.clc.gov.sg/documents/publications/urban-system-studies/rb162799_mnd_uss_bk4_seaports_final.pdf. Redevelopment of the area began in the 1980s: ibid.

it was unsurprising to have a separate legal regime governing each leg. In 1965, the Hague Rules,[33] the earliest international convention of its type, generally governed the international carriage of goods by sea. Most of the world's major maritime powers had either ratified the convention or enacted domestic legislation on substantially similar terms; Singapore had become a party in 1930. The Hague Rules had thus succeeded in achieving one major goal: international uniformity in the liability regime for lost or damaged cargo.

By 1965, it was already widely recognized that the Hague Rules were out-of-date.[34] A limitation of liability system based on the British pound sterling had not been as stable as the delegates at The Hague had hoped in 1921. The international community also recognized the need to respond to a number of very specific problems that had arisen in various countries under the Hague Rules. Thus the CMI had begun work on what ultimately became the Visby Protocol[35] in the late 1950s.[36] By 1965, the CMI had already completed its work two years before,[37] but the diplomatic process (where the one modest effort to respond to containerization was accomplished)[38] did not begin until another two years had passed.[39]

For the inland legs preceding and following the sea carriage, the governing regime depended on the circumstances. Within Europe, regional regimes governing the carriage of goods by

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33 International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading, 25 Aug 1924, 120 LNTS 155 (Hague Rules).

34 Indeed, many thought that the Hague Rules were already out-of-date when they were first negotiated in the early 1920s. They were very deliberately intended to implement on an international basis the principles of the US Harter Act of 1893, a late-nineteenth century response to problems that arose in the early days of steam. See Michael F Sturley, *The History of COGSA and the Hague Rules* (1991) 22 J Mar L & Com 1, 18-21. The Harter Act is currently codified at 46 USC §§ 30701-07.

35 See below n 44.

36 See, eg, Comité Maritime International, *Report of the 24th Conference* 134-40 (Rijeka Conference 1959).

37 The Visby Protocol acquired its name when the CMI's draft protocol was 'solemn[ly] sign[ed] … in that historic place of the old and beautiful Swedish city of Visby' in 1963. Comité Maritime International, *Report of the 26th Conference* 526 (Stockholm Conference 1963), reprinted (in French) in F Berlingieri (ed) Comité Maritime International, *The Travaux Préparatoires of the Hague Rules and of the Hague-Visby Rules* 69 (CMI 1997).

38 See Hague-Visby Rules, art 4(5)(c) (container clause).

39 See *Conférence Diplomatique de Droit Maritime: Douzième Session* (1e phase) Bruxelles 1967: *Procès-Verbaux* (1967); *Conférence Diplomatique de Droit Maritime: Douzième Session* (2e phase) Bruxelles 1968: *Procès-Verbaux* (1968).

road (CMR)[40] or rail (CIM-COTIF)[41] applied when there was an international road or rail movement. Otherwise national law would generally govern any inland leg preceding or following the sea carriage. Elsewhere in the world, national law was generally the only option.

Even when there was no inland carriage before or after the sea voyage, the Hague Rules were still limited to the so-called tackle-to-tackle period, ie, 'from the time when the goods are loaded on [the ship] to the time when they are discharged from the ship'.[42] Thus damage during handling in the port would be governed in one manner or another by national law, which might permit the parties to establish rules by contract.[43]

5 The Governing Legal Regimes Today

Although the industry and the contracting practices of the commercial parties have changed remarkably during the last fifty-two years, the legal regimes governing the international carriage of goods have not kept pace. Multimodal shipments are regularly completed today under a single through contract of carriage, but that single contract may well be governed by three different legal regimes — none of which was designed for the needs of modern multimodal transportation. The situation is also worse now than it was in 1965 because there is less uniformity today in the governing regimes.

For the carriage of goods by sea, a majority of world trade is now subject to the Hague-Visby Rules, which are simply the Hague Rules as amended by the Visby Protocol.[44] Singapore was

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40 See Convention on the Contract for the International Carriage of Goods by Road, 19 May 1956, 399 UNTS 189 (CMR).

41 See Uniform Rules Concerning the Contract for International Carriage of Goods by Rail, Appendix B to the Convention Concerning International Carriage by Rail (COTIF) of 9 May 1980, as amended by the Protocol of 3 June 1999. An earlier version governed rail movements in 1965.

42 Hague Rules, art 1(e).

43 See Hague Rules, art 7.

44 Protocol to Amend the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading (Hague Rules), 23 Feb 1968, 1412 UNTS 128 (the Visby Protocol). In many countries, the Hague Rules have been further amended by the Protocol Amending the International Convention for the

the first nation to become a party to the Hague-Visby Rules when it acceded to the Protocol in 1972.[45] A significant portion of world trade is still subject to the unamended Hague Rules.[46] The two regimes differ, and those differences can be significant on the facts of a particular case, but the regimes are still fundamentally the same. The Visby Protocol did not supersede the Hague Rules; it simply amended a handful of specific provisions. The most visible change was an increase in the package limitation and the introduction of a weight-based limitation, but that change is relevant in only a minority of shipments — those that are worth more than the limits under the Hague Rules.[47]

The Hamburg Rules[48] now govern a small proportion of world trade. Although they replace the Hague and Hague-Visby Rules in those countries that have ratified the new regime, the Hamburg Rules are also not that fundamentally different. The Hague, Hague-Visby, and Hamburg Rules are all primarily liability conventions in which a carrier is responsible for cargo loss or damage unless it can carry the burden of proving its lack of fault. The Hague and Hague-Visby Rules make that burden a little easier for the carrier[49] while the Hamburg Rules provide some additional safeguards to protect cargo interests.[50] The Hamburg Rules, for example, protect plaintiffs from being forced into unfavorable forums with jurisdiction or arbitration clauses.[51] This can be an important practical benefit, even if the results should be the same as a theoretical matter regardless of where a dispute is resolved. A higher profile change was the Hamburg Rules' elimination of the navigational fault defense,[52] but it is less clear how big

Unification of Certain Rules of Law Relating to Bills of Lading, 21 Dec 1979, 1984 Gr Brit TS No 28 (Cmnd 9197).

45 For almost two years, until Norway ratified the Protocol in 1974, Singapore was the only nation to have become a party to the Hague-Visby Rules.

46 In the United States, for example, import and export shipments are governed by the Carriage of Goods by Sea Act (COGSA), which is the US enactment of the Hague Rules.

47 See, eg, Michael F Sturley, 'Unit Limitation under the Rotterdam Rules and Prior Transport Law Conventions: The Tail That Wags the Dog', in *Current Issues in Hong Kong and International Maritime Law* 93 (Hong Kong Centre for Maritime and Transportation Law, City University of Hong Kong 2015); cf below n 50.

48 United Nations Convention on the Carriage of Goods by Sea, 31 Mar 1978, 1695 UNTS 3 (Hamburg Rules).

49 In art 4(2)(c)-(p), the Hague and Hague-Visby Rules each contain a 'catalogue of defenses,' which are situations in which a carrier is presumed not to be at fault.

50 In one high-profile change, the Hamburg Rules provide higher package and weight limitations of liability, but that is irrelevant for most shipments because the Hague-Visby limits are already high enough to provide full compensation. Cf above n 47 and accompanying text.

51 See Hamburg Rules, arts 21-22.

52 See Hague-Visby Rules, art 4(2)(a).

a change this was in practice.[53] Overall, results under the Hamburg Rules will rarely be much different than they would be under the earlier regimes. The Hamburg Rules have only a slightly broader geographic scope of application,[54] governing shipments on a port-to-port basis[55] rather than the narrower tackle-to-tackle coverage of the Hague and Hague-Visby Rules,[56] but none of the three conventions meet the needs of modern multimodal shipments.

Finally, in some countries unique national laws or regional regimes govern the international carriage of goods by sea. China, for example, adopted a Maritime Code, which came into force in 1993, that draws from both the Hague-Visby and Hamburg Rules, along with uniquely Chinese solutions to certain problems.[57] In a regional initiative at about the same time, the four Nordic countries — Denmark, Finland, Norway, and Sweden — revised their maritime codes to incorporate major elements from the Hamburg Rules into their pre-existing Hague-Visby systems.[58]

For the inland legs preceding and following the sea carriage, essentially nothing has changed. CMR still governs international road carriage in and around most of Europe while CIM-COTIF provides similar coverage for rail carriage. But this is more of a problem now than it was fifty-two years ago. When separate contracts governed each leg of a journey, it was less surprising to have a separate legal regime for each leg of a journey. But it is self-evidently less than ideal for the performance of a single contract to be governed by different legal regimes. As the US Supreme Court has noted in this context, '[c]onfusion and inefficiency will inevitably result if more than one body of law governs a given contract's meaning'.[59]

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53 In many jurisdictions, it is difficult in practice for a carrier to succeed with a navigational fault defense. See, eg, *In re Complaint of G&G Shipping Co of Anguilla*, 767 F Supp 398, 412 (DPR 1991).

54 Perhaps the most significant innovation of the Hamburg Rules was the expansion of coverage from bills of lading to all contracts of carriage by sea. See Hamburg Rules, art 2. But the 'contract of carriage by sea' definition explicitly excluded the inland portion of a multimodal contract. See Hamburg Rules, art 1(6).

55 See Hamburg Rules, art 4; see also ibid, art 1(6) (effectively excluding inland portion of multimodal contracts from coverage).

56 See Hague-Visby Rules, art 1(e). See above n 42 and accompanying text.

57 See generally L Li, 'The Maritime Code of the People's Republic of China' [1993] LMCLQ 204, 209-211. Although China is a particularly prominent example, it is not the only nation to have made significant modifications to the uniform international texts.

58 See generally, eg, Jan Ramberg, 'New Scandinavian Maritime Codes' [1994] Dir Mar 1222.

59 *Norfolk Southern Railway Co v James N Kirby, Pty Ltd*, 543 US 14, 29, 2004 AMC 2705, 2715 (2004).

6 A Path Forward

It should be an embarrassment to the legal community that the legal regime, which exists to serve the needs of commerce, has utterly failed to keep pace with the progress that the shipping industry has achieved in the last fifty-two years. Fortunately, a solution is readily at hand. The UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (popularly known as the 'Rotterdam Rules')[60] was formally adopted by the UN General Assembly on 11 December 2008,[61] and has been open for signature since 23 September 2009.[62]

Because the Rotterdam Rules, when they enter into force, will supersede the Hague, Hague-Visby, and Hamburg Rules, casual observers often think of them as nothing more than a new liability convention. There is a basis for that perception. The Convention addresses a carrier's liability for cargo loss or damage[63] (and a shipper's corresponding liability to the carrier).[64] But there is much more. Although chapters 5, 6, 7, and 12 of the Rotterdam Rules form the core of a liability convention, they are only part — and not even the most important part — of the Rotterdam Rules.

The Rotterdam Rules seek first and foremost to meet the needs of industry, particularly by updating and modernizing the governing legal regime. From the beginning, the United Nations Commission on International Trade Law (UNCITRAL) made a point of reaching out to

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60 The original final text of the Convention is annexed to General Assembly Resolution 63/122, UN Doc A/RES/63/122 (11 December 2008). Minor amendments were adopted in January 2013 to correct two editorial mistakes. See *Correction to the Original Text of the Convention*, UN Doc CN.105.2013.TREATIES-XI-D-8 (Depositary Notification) (Jan 25, 2013). For a more detailed discussion of the issue, see Michael F Sturley, 'Amending the Rotterdam Rules; Technical Corrections to the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea' (2012) 18 JIML 423.

61 See General Assembly Resolution 63/122, above n 60, ¶ 2.

62 Twenty-five countries have signed the Convention. Four of those have already ratified it.

63 See Rotterdam Rules, ch 5.

64 See Rotterdam Rules, ch 7.

commercial interests. When the Commission first considered the Transport Law project, it directed the Secretariat to consult with organizations that act on behalf of industry stakeholders, including the CMI, the International Chamber of Commerce (ICC), the International Union of Marine Insurance (IUMI), the International Federation of Freight Forwarders Associations (FIATA), the International Chamber of Shipping (ICS), and the International Association of Ports and Harbours (IAPH).[65] Thereafter, representatives from relevant international organizations attended every meeting of the CMI's International Sub-Committee, and commercial observers were active participants at every session of the UNCITRAL Working Group.

Commercial interests not only had a seat at the table so that their views could be heard, but the Working Group listened to those views and took them seriously. Most of the national delegations that were active in the negotiations either included expert industry representatives as members of the delegation or consulted regularly with industry representatives between sessions. When those experts with practical experience expressed strong views, therefore, the Working Group heard their message and responded accordingly.

As a result of the pragmatic process and the focus on pragmatic goals, the Rotterdam Rules are very much a pragmatic convention. Some academic observers have criticized them for being inelegant or complex,[66] and that may be a fair comment (although not a fair criticism). The goal was never to achieve elegance and simplicity. The guiding principle was to improve the law so that it can better do the job that it is supposed to do — facilitate maritime commerce (which some may find elegant but few would deny is complex).

A primary way in which the Rotterdam Rules will facilitate commerce is by updating and modernizing the governing legal regime. The Visby Protocol did not overhaul the Hague Rules but instead amended them in limited respects. The Hamburg Rules did very little to update the Hague-Visby Rules. On the two critical issues of facilitating electronic commerce and

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65 See *Report of the United Nations Commission on International Trade Law on the Work of Its Twenty-Ninth Session,* UN GAOR, 51st Sess, Supp No 17, ¶ 215, UN Doc A/51/17 (1996)*,* reprinted in *1996 CMI Yearbook* 355.

66 See, eg, William Tetley, 'Some General Criticisms of the Rotterdam Rules' (2008) 14 JIML 625, 626.

addressing the needs of multimodal transport, the Hamburg Rules did nothing and next to nothing.[67] And the Hamburg Rules' response to the container revolution was little different than Hague-Visby's minimal effort, which was adopted when the international container trade was still in its infancy.[68]

Updating and modernizing the law was not simply a guiding principle for UNCITRAL's Transport Law project. The entire project grew out of the perceived need to update and modernize. The initial seeds were planted in the context of UNCITRAL's Electronic Data Interchange (EDI) project. In June 1996, as part of the EDI project, the Commission discussed a proposal to

> review ... current practices and laws in the area of the international carriage of goods by sea, with a view to establishing the need for uniform rules in the areas where no such rules existed and with a view to achieving greater uniformity of laws than has so far been achieved.[69]

In conjunction with this discussion, the Commission noted:

> [E]xisting national laws and international conventions left significant gaps regarding issues such as the functioning of the bills of lading and seaway bills, the relation of those transport documents to the rights and obligations between the seller and the buyer of the goods and to the legal position of the entities that provided financing to a party to the contract of carriage.[70]

The Commission accordingly authorized the UNCITRAL Secretariat to start gathering information on these matters with a view to deciding 'on the nature and scope of any future work that might usefully be undertaken by [UNCITRAL]'.[71] With this mandate, the Secretariat

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67 See generally Michael F Sturley, 'Transport Law for the Twenty-First Century: An Introduction to the Preparation, Philosophy, and Potential Impact of the Rotterdam Rules' (2008) 14 JIML 461, 468-469 (discussing some of the limitations of the Hamburg Rules).

68 See above n 38 and accompanying text; below n 80 and accompanying text. See generally Sturley (n 67) 468 and n 80-82 (comparing the Hague-Visby and Hamburg Rules).

69 *UNCITRAL Twenty-Ninth Session Report*, above n 65, ¶ 210, reprinted in *1996 CMI Yearbook* 354.

70 Ibid.

71 Ibid ¶ 215, reprinted in *1996 CMI Yearbook* 355.

invited the CMI to begin the preparatory work for a new convention and the project was underway.

The Rotterdam Rules address the prior conventions' failure to keep pace with modern business practices in a number of specific ways. While none of the existing regimes facilitate electronic commerce, for example, the Rotterdam Rules address this modern trend not only with a separate chapter devoted to the subject[72] but throughout the text. Ultimately, it is chapters 9 (covering delivery of the goods), 10 (defining the rights of the controlling party),[73] and 11 (addressing the transfer of rights) that will enable electronic transport records. By uniformly describing the rights and responsibilities that flow from paper documents or electronic transport records, those chapters establish the legal framework that will give industry the ability to rely on electronic transport records.

Two further examples well illustrate how the Rotterdam Rules provide a modern regime for twenty-first century shipping. As already noted,[74] the Hague and Hague-Visby Rules, by their terms, apply only from tackle to tackle.[75] The Hamburg Rules extend coverage only from port to port.[76] Ideally, of course, a single 'body of law [should] govern [] a given contract's meaning.'[77] The Rotterdam Rules therefore match the governing regime to the parties' contract. If the parties conclude a contract of carriage on a tackle-to-tackle or port-to-port basis, then the Convention also applies on a tackle-to-tackle or port-to-port basis. But if — as is much more common in today's liner trades — the parties conclude a contract of carriage on a door-to-door basis, then the Convention applies on a door-to-door basis. Article 12 accommodates whatever contract the parties conclude. Moreover, detailed provisions throughout the convention address the issues that arise as a result of door-to-door coverage. In chapter 2, for example, the scope-of-application provisions[78] accommodate the possibility

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72 See Rotterdam Rules, arts 8-10 (ch 3).

73 See generally, eg, Gertjan van der Ziel, 'Chapter 10 of the Rotterdam Rules: Control of Goods in Transit' (2009) 44 Tex Int'l LJ 375 (discussing the Convention's treatment of the right of control and the controlling party).

74 See above n 42 and accompanying text.

75 See art 1(e).

76 Art 1(6).

77 *Norfolk Southern Railway Co v James N Kirby, Pty Ltd*, 543 US 14, 29, 2004 AMC 2705, 2715 (2004). See also above n 59 and accompanying text.

78 See art 5(1)(a), (c).

of inland receipt or delivery; a number of provisions[79] address the role of performing parties (most of whom will act outside the tackle-to-tackle period); and articles 26 and 82 address the new convention's interaction with other regimes governing other modes of transport. The potential for door-to-door coverage is essential for electronic transport records, but it also illustrates how the Rotterdam Rules more generally modernize the existing regimes.

The new convention's response to containerization offers another good example of the Rotterdam Rules' focus on modernization. As the comparison above demonstrates, the container revolution fundamentally changed modern shipping practices, but even the Hamburg Rules barely address containerization.[80] The Rotterdam Rules address those issues throughout. Article 1(26) begins the treatment with a definition of 'container'; chapter 8 (particularly articles 40-41) addresses the problems associated with describing containerized goods; and a number of specific provisions[81] deal with particular issues associated with containerization.

This is not the place for an exhaustive review of the Rotterdam Rules. Other sources are readily available for that purpose.[82] But the three aspects of the Convention that I discuss here illustrate how the Rotterdam Rules would better serve the needs of modern industry than any of the likely alternatives.

These three aspects also illustrate the proper way of looking at the Convention. Many commentators have discussed the new regime by focusing on what stakeholders have gained or lost. Shipowners and their representatives, for example, might complain about the

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79 See, eg, arts 4, 12(1), 15, 18-20, 23, 29(1)(a), 32(a), 34-35, 36(2)(a), 36(2)(c), 36(4), 39(2)(b), 39(3), 40(3)-(4), 44, 49, 55(1), 68, 71, 79(1), 81.

80 Article 6(2) is simply a new version of the Hague-Visby container clause. See above n 38 and accompanying text.

81 See, eg, arts 14(c), 25(1)(b), 27(3), 48(2)(b). Article 59(2) continues the container clause of the Hague-Visby and Hamburg Rules.

82 See, eg, Michael F Sturley, Tomotaka Fujita & Gertjan Van der Ziel, *The Rotterdam Rules: The UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (Sweet & Maxwell 2010); Alexander von Ziegler, Johan Schelin & Stefano Zunarelli (eds), *The Rotterdam Rules 2008: Commentary to the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (Wolters Kluwer 2010).

increased package limitation,[83] while cargo interests might complain about the duty to furnish accurate information about the cargo, which is stricter than in prior international conventions.[84] Although these criticisms are not irrelevant, they miss the larger picture. Updating the rules governing the carriage of goods by sea is not a zero-sum game. Everyone benefits from a more modern regime that addresses current problems with certainty and predictability, and no one in the industry will benefit over the long run unless everyone benefits.

7 The Path Not (Yet) Taken

The benefits of the Rotterdam Rules remain unrealized because — over eight years after their signing — they have not yet entered into force. No one expected the ratification process to be quick; diplomatic movements are often glacial.[85] It is nevertheless disappointing that we have not seen more progress.

Part of the explanation for the lack of progress is simply inertia. Many in the industry are content to live with an inadequate system with which they are already familiar because they cannot be troubled to learn something new. That is exactly the kind of attitude that many port officials exhibited when they first faced the prospect of containerization. Singapore demonstrated a much more far-sighted response in 1966 when it studied and embraced the new ideas, and prospered as a result. The difference is that ports in the 1960s that failed to embrace the modern technology quickly became irrelevant. Inertia today is a drag on the entire industry, including on those actors that are eager to see an up-to-date legal system in force.

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83 See Rotterdam Rules, art 59; cf above n 47 and accompanying text (discussing the increased package limitation in the Hague-Visby Rules).

84 See Rotterdam Rules, art 29. In many countries, shippers are already subject to similar strict requirements as a matter of domestic law.

85 It took nine years for the Hague-Visby Rules to enter into force, and fifteen years for the Hamburg Rules. Even the Hague Rules took six years to enter into force, and over a dozen years to achieve wide-spread acceptance, and that was in a much different era.

Some of the inertia can be explained by the natural tendency of everyone to wait to see what everyone else will do. Denmark and Norway, for example, have taken the decision to ratify the Rotterdam Rules, and have completed the necessary legislation to implement the new convention in their domestic legal systems, but have postponed final action until other countries ratify. To some extent, this is understandable. For the Rotterdam Rules to be fully effective, all (or at least most) of the world's major trading nations need to be parties, and no one wants to lead a charge if no one else will follow. If everyone is waiting for someone else to move first, however, nothing will happen.

Early in the process, there was some thought that the United States would be among the first to ratify,[86] and its ratification would have been a major step in ensuring the success of the convention. Unfortunately, a series of independent events (which are unrelated to the merits of the convention) have delayed the process in the United States,[87] and few predict that the current administration is likely to show any leadership in this field during the next three years. Under the circumstances, it is time for other countries to fill the void.

Singapore has in the past shown its willingness to take the lead in maritime law conventions, and most of the world recognized the wisdom of Singapore's decision to join the Hague-Visby regime (even though it took other nations longer to reach the same decision). Although Singapore is not a large country, it is well-respected and it has a particular interest in ensuring the efficiency of the shipping industry. It is ideally positioned once again to show the type of leadership that it has demonstrated in the past — to provide leadership in the efforts to ratify the Rotterdam Rules and bring the law governing the carriage of goods by sea into the twenty-first century.

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86 The United States was one of the first nations to sign the Rotterdam Rules.

87 See Michael F Sturley, 'What Has Become of the Rotterdam Rules?' (2016) 83 J Transp L Logist & Pol'y 275, reprinted in Maritime Law Association of the United States, MLA Report (fall 2016), MLA document no 825, 19367.

8 Conclusion

Adopting the Rotterdam Rules would not introduce the sort of revolutionary change that redefined the shipping industry in the last fifty-two years. The innovations of the new convention are much more evolutionary than revolutionary. But the Rotterdam Rules would at least respond to the changes that the industry has witnessed with the container revolution. It would allow the legal system to move into the twenty-first century and provide the legal framework for the commercial players to decide what innovations they will adopt as we move forward.

For the Rotterdam Rules to bring some much-needed order to maritime law, however, the new convention must first enter into force, and that cannot happen if almost every nation in the world is waiting for someone else to move first. When containerization was barely visible on the horizon (less than a year after its independence), Singapore demonstrated far-sighted leadership in the commercial transition to containerization. Six years later, while still a very young country, Singapore similarly led the way on the legal front as the first nation to become a party to the Hague-Visby Rules. Perhaps the time has again come for Singapore to demonstrate that same kind of leadership in the maritime law world, and to help bring carriage of goods by sea law into the twenty-first century.