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Hugh M. Kindred: A Tribute

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Will the Rotterdam Rules be Accepted? A Liner Cargo Interest Perspective

The paper begins with some background on modern liner shipping and cargo interest perspectives before considering the Rotterdam Rules 2008 (The Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea)*, which could ultimately replace Canada's existing carriage of goods legislation. The authors explore the key issues arising from the implementation of the Rules, and discuss why, from a manufactured goods perspective, there will likely be limited acceptance by cargo owners. They conclude that the gains made in the areas of electronic documentation and greater clarity on delay, as well as altered limits of liability, do not offset the fact that most manufactured goods now move under confidential service contracts that may or may not choose to incorporate the Rotterdam Rules. On balance, it is unlikely that there will be widespread acceptance of the rules by those purchasing liner shipping services.*

L'article explique d'abord brièvement les intérêts et les perspectives du transport des marchandises par navire avant d'examiner la Convention des Nations Unies sur le contrat de transport international de marchandises effectué entièrement ou partiellement par mer *(les Règles de Rotterdam 2008), qui pourrait éventuellement remplacer les lois du Canada sur le transport de marchandises. Les auteurs se penchent sur les principaux enjeux de la mise en œuvre des Règles et expliquent pourquoi, en ce qui a trait aux biens fabriqués, il est probable qu'elles ne bénéficient que d'une acceptation limitée par les propriétaires des cargaisons. Ils concluent que les gains réalisés aux chapitres de la documentation électronique et de la plus grande clarté quant aux retards, tout comme les limites de responsabilité modifiées, ne compenseront pas le fait que la plupart des biens fabriqués sont aujourd'hui transportés en vertu de contrats de services confidentiels qui pourront incorporer ou non les Règles de Rotterdam. Tout compte fait, l'acceptation généralisée des Règles sera peu probable pour les acheteurs de services de transport par navire.*

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Introduction

> Mattel's 'all-American' Barbie, to use one of Levinson's insightful illustrations, was anything but all-American; her plastic body, clothes and hair all came from various factories in Japan, Taiwan and China.[1] Barbie was conceived in 1959 and this inexpensive item, relatively speaking, could withstand the cost of transport, be made half-way around the globe and still be affordable for a generation of female baby boomers.[2]

It is now more than 50 years since Barbie (and her creator Mattel) demonstrated the power of global supply chains to transform international trade. Mattel took a value chain approach, later popularized by Michael Porter,[3] and realized the wealth creation possible from outsourcing production, although not design or marketing, that eventually was the beginning of a wave of globalization and a symbol of commerce in the latter part of the 20th century. Until ten years ago, the inter-organizational cooperation underpinning such a value chain approach was founded on the concept of maintaining domestic design, marketing and financing of trading activities while outsourcing production, assembly and distribution to lower cost countries, so that the wealthy might become wealthier in a global world. Even that world has changed. As Thomas Friedman noted recently, "every product and many services now are imagined, designed, marketed and built through global supply chains that seek to access the

1. Marc Levinson, *The Box: How The Shipping Container Made the World Smaller and the World Economy Bigger* (Princeton, NJ: Princeton University Press, 2006).
2. Mary R Brooks, "International Trade in Manufactured Goods" in Costas Th Grammenos, ed, *The Handbook of Maritime Economics and Business*, 2d ed (London: Informa Publishing, 2010) 99 at 100-101 [Brooks, "Manufactured Goods"].
3. Michael E Porter, *Competitive Advantage: Creating and Sustaining Superior Performance* (New York: Free Press, 1985).

best quality talent at the lowest cost, wherever it exists."[4] Today, even design and financing may be crowd-sourced[5] on the Internet.

The legal regimes governing liabilities in international trade and transport have not kept pace with the changing reality of global commerce, although they have seen many variations since the 1924 Hague Rules[6] governing bills of lading in the carriage of goods by sea were developed (see below). In early 2008, the United Nations Commission on International Trade Law (UNCITRAL) completed its work on the latest iteration, The *Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea* (Rotterdam Rules)[7]; and the 2008 Rotterdam Rules are not likely the last. This article examines the Rotterdam Rules and what they bring to the world of trade and transport from the perspective of those who own the cargo at the moment the rules apply; the authors adopt the perspective of a user of multimodal transport[8] in examining what the Rotterdam Rules offer cargo owners over what is already in use today.

Since its inception in 1956, containerization for the transport of goods by sea has grown exponentially. From 1990 to 2010, container trade was the fastest-growing cargo segment at an average annual rate of 8.2%.[9] After a recessionary retrenchment in 2009, global container trade volumes rebounded 12.9% in 2010, accounting for 140 million TEUs (20-foot equivalent units), more than 1.3 billion tons, and almost six times its 1990 volume.[10] Today, container transport for door-to-door moves has become the main form of transport for manufactured goods and component parts (although air cargo plays an ever-increasing role). This development was certainly not foreseen by those who drafted the rules governing contracts of carriage in the 1920s and later. Moreover, the conflict between carriage liability regimes for maritime transport and the need for multimodal regimes for container trades has needed reconciliation, and failed to find it.

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4. Thomas L Friedman, "Made in the World," *New York Times* (28 January 2012), online: New York Times <http://www.nytimes.com/2012/01/29/opinion/sunday/friedman-made-in-the-world.html>.
5. Crowd-sourcing is outsourcing the desired service by posting requirements on the Internet and seeking Expressions of Interest from undefined suppliers who may be located anywhere on the globe. Supply of the desired services may be for free or at a cost of less than found in a traditional marketplace, as it enables participants to collaborate creatively using the "wisdom of the crowd."
6. *International Convention for the Unificaton of certain Rules relating to Bills of Lading*, 25 August 1924, 120 UNTS 155 (entered into force 2 June 1931) [Hague Rules].
7. 11 December 2008, 63 UNTS 122.
8. Multimodal transport is used to indicate transportation that includes more than one mode of transport between origin and destination. A common example would be the transport from a seller's factory in Germany to the Port of Antwerp by truck, loaded onto a ship bound for New York and then delivered by train to Cleveland Ohio. Most multimodal transport uses containers.
9. United Nations Conference on Trade and Development, Secretariat, *Review of Maritime Transport* (New York: United Nations, 2011) at 21.
10. *Ibid* at 21-22.

In 1982, when containerized transport was becoming widely adopted and no longer considered a specialty service, Dalhousie University was fortunate to have been contracted by the Government of Canada to undertake an assessment of the *The Water Carriage of Goods Act, 1936*[11] in the context of the other conventions available for Canadian signature and ratification. The existing unimodal regimes were the Hague Rules,[12] the Hague/Visby Rules,[13] and the additional Protocol concluded at Brussels,[14] and the Hamburg Rules.[15] The 1936 Act implemented the Hague Rules.

As it had been only two short years since the development of the *UN Convention on International Multimodal Transport of Goods 1980*[16] (*Multimodal Convention*), and the Hamburg Rules were under consideration by the Government of Canada for adoption, the task the Dalhousie team addressed was to determine the best course of action for Canada in its choice of a future regime: adopting the Hamburg Rules, adopting the Hague/Visby Rules or retaining the current Hague Rules.

The six-member Dalhousie Ocean Studies Programme team was most ably led by Hugh Kindred. It concluded that "The Hamburg Rules offer major commercial advantages over the Hague Rules for the Canadian consignee and the Canadian owner of containerizable cargo."[17] That research work still informs Canadian government thinking, according to the latest report by the International Marine Policy branch of Transport Canada.[18] In the interim, in 1993 the Government of Canada updated its marine legislation and adopted the Hague/Visby Rules in the 1993 *Carriage of Goods by Water Act*,[19] which was ultimately incorporated into section 43 of the 2001 *Marine Liability Act*.[20] In addition, the *Marine Liability Act* included a transition plan to move to the Hamburg Rules should they gain

11. SC 1936, c 49.
12. Hague Rules, *supra* note 4.
13. *Protocol to amend the International Convention for the unification of certain rules of law relating to bills of lading*, 23 February 1968, 1412 UNTS 128.
14. *Protocol amending the International Convention for the unification of certain rules of law relating to bills of lading*, 25 August 1925, as amended by the Protocol of 23 February 1968, 21 December 1979, 1412 UNTS 146.
15. *United Nations Convention on the Carriage of Goods by Sea*, 1978, 31 March 1978, 1695 UNTS 3 (entered into force 1 November 1992).
16. *United Nations Convention on International Multimodal Transport of Goods, with annex*, 24 May 1980, 19 ILM 938.
17. Hugh M Kindred, et al, *The Future of Canadian Carriage of Goods by Water Law* (Halifax: Dalhousie Ocean Studies Programme, 1982) at 294.
18. Transport Canada, "Report to Parliament. Marine Liability Act, Part 5: Liability For the Carriage of Goods by Water (TP 14947E)" (2010), online: <http://www.tc.gc.ca/eng/policy/report-acf-hamburg-menu-1099.htm> [Transport Canada, "Marine Liability Act"].
19. *Carriage of Goods by Water Act 1993*, SC 1993, c 21.
20. *Marine Liability Act*, SC 2001, c 6.

the support needed for adoption by the global trading community. In the interim, several studies examined the impact of unimodal and multimodal conventions, as well as model contract terms available through the International Chamber of Commerce for trading and shipping interests. For example, Kindred and Brooks looked at the incidence and effects of delay on cargo owners in order to better appreciate its impacts on potential claimants.[21] A 1994 study of the multimodal rules developed the thinking further, and led to a book on the topic that remains a key reference work on the impact of multimodal carriage rules on the various parties using more than one mode for the transport of goods.[22] With the adoption of the Rotterdam Rules in 2008, the current question has become whether Canada should adopt them.

Over the 30 years since the 1982 investigation, no consensus has been reached on what the best mechanism is for managing the critical issues of dealing with the liability for loss, damage or delay of goods in the relationship between shippers and carriers in a single mode, let alone for a multimodal transport supply chain. Today, goods in the process of being manufactured may be conceived and designed anywhere, have their component parts come from multiple countries, be assembled in yet another or others, cross a border six to eight times during production, and use multiple transport modes in the process of being delivered to the nearest retail outlet for purchase by a consumer. It is extremely important to the economic interests of all trading nations that this complicated supply chain functions seamlessly and equitably for all involved. To achieve such a goal, there must be not only political will to sign and ratify improvements on existing carriage rules, but also widespread adoption of the contract terms without exemptions being negotiated at the firm contract negotiation level. It has taken eight years to negotiate the Rotterdam Rules, and it has been extremely difficult to reconcile carrier and cargo interests.

Given that Kindred et al recommended that trading interests be granted a priority over carrier interests,[23] this article examines the Rotterdam Rules in the context of that work and subsequent work by Kindred and Brooks.[24] It begins by noting the current status of the adoption by governments of

21. Hugh M Kindred & Mary R Brooks, "The Incidence and Effect of Marine Cargo Delays in Law and Commerce" (1990) 17:3 Maritime Policy and Management 189.
22. Hugh M Kindred & Mary R Brooks, "New and Improved? The UNCTAD/ICC Multimodal Rules Reviewed" (1994) 33:3 Transportation Journal 5 [Kindred & Brooks, "New and Improved"]; and Hugh M Kindred & Mary R Brooks, *Multimodal Transport Rules* (The Hague: Kluwer Law International, 1997) [Kindred & Brooks, *Multimodal Rules*].
23. Kindred et al, *supra* note 17.
24. Kindred & Brooks, "New and Improved," *supra* note 22.

the Rotterdam Rules as a replacement for earlier marine liability regimes. The next section addresses the coverage provided by the Rotterdam Rules in the context of the multimodal rules explored by Kindred and Brooks[25]; that is, the authors look at the basis of liability covered by the Rotterdam Rules when compared with other multimodal options before focusing on the limits of liability in a particular case of loss. To explore these circumstances, this article returns to one case used by Kindred and Brooks to explain how limitations on liability under the exclusively marine legal regimes and the Multimodal Convention, compare with the Rotterdam Rules. As the focus of this article is primarily on how the Rotterdam Rules will be seen by supply chain managers in the manufactured goods and parts transport sector, the penultimate section identifies the key "improvements" introduced by the rules from the perspective of liner shipping cargo interests that include their applicability to volume contracts and e-documentation. The article then concludes with a summation as to what considerations will play a role in adoption of the Rotterdam Rules by those cargo owners with influence on the choice of rules they negotiate.

I. *Current thinking of governments on the Rotterdam Rules*

In early 2008, UNCITRAL completed its work on the Rotterdam Rules, and they were adopted by the United Nations General Assembly in December 2008; as of January 2012, there were 24 signatories with Spain being the first and only country to ratify the convention (Appendix 1). The convention will not come into force until a year after 20 countries have ratified it. The Rules set out the basis and extent of liability for cargo damage occurring in transit so that beneficial cargo owners and marine carriers may contract for the carriage of goods with confidence or with insurance cover arranged—or both.

Due to the diverse views of stakeholders, the Canadian government remains a non-signatory to the Rotterdam Rules. In 2010, the International Marine Policy branch of Transport Canada reported on its review of the existing Hague/Visby regime under the 2001 *Marine Liability Act*[26] and reported on its assessment of the Hamburg and Rotterdam Rules and whether they should be adopted by Canada. This was not its first review of the Hague/Visby Rules, as the branch had completed one before under section 44 of the *Marine Liability Act, 2001*, which recommends five-year reviews to consider adoption of the Hamburg Rules. International Marine Policy noted there were various sticking points with the Rotterdam

25. Kindred & Brooks, *Multimodal Rules*, *supra* note 22.
26. Transport Canada, "Marine Liability Act," *supra* note 18.

Rules, provisions related to domestic carriage of goods by water being specifically highlighted.[27] It is the opinion of Transport Canada that the Hague/Visby Rules, as implemented in the *Marine Liability Act*, continue to meet Canada's needs and reflect that it is in Canada's best interests to align its water transport rules with those of major trading partners.[28] As the Hamburg Rules have not been well received by Canada's trading partners (Table 1), or even the global trading community at large (Table 2), and the Rotterdam Rules are not yet widely signed (let alone ratified), Transport Canada recommended that the situation be reviewed as mandated in the *Marine Liability Act* again in five years, with a report due 1 January 2015. Most important for understanding Canada's pro-trade position on the rules, the 2010 report identifies Canada's major waterborne trading partners and their current legal liability regimes, presented in Table 1 in a slightly different format than the original report.

27. Transport Canada, "Notice to Industry" (15 September 2009), online: McGill <https://secureweb.mcgill.ca/maritimelaw/sites/mcgill.ca.maritimelaw/files/Notice_to_industry_Rotterdam_Rules.pdf >.
28. Transport Canada, "Marine Liability Act," *supra* note 18.

Table 1: Canada's Trading Partners by Value and Regimes They Have Adopted

Hague/Visby Rules		**Hague Rules**		**Hamburg Rules**	
Countries	% of CDN Waterborne Trade	Countries	% of CDN Waterborne Trade	Countries	% of CDN Waterborne Trade
Australia	1.06%	Algeria	3.10%	Austria	0.55%
Belgium	1.63%	Argentina	0.17%	Barbados	0.02%
Denmark	0.67%	Cuba	0.81%	Cameroon	0.01%
Ecuador	0.11%	Iran	0.30%	Chile	0.77%
Finland	0.67%	Israel	0.28%	Czech Republic	0.13%
Ireland	0.21%	Jamaica	0.21%	Dominican Repub.	0.10%
France	2.03%	Malaysia	0.67%	Egypt	0.31%
Germany	4.62%	New Zealand	0.21%	Guinea	0.04%
Greece	0.09%	Peru	0.50%	Hungary	0.11%
Japan	9.51%	Portugal	0.23%	Kenya	0.03%
Italy	2.13%	Turkey	0.79%	Lebanon	0.04%
South Korea	2.19%	U.S.A.	17.51%	Morocco	0.16%
Latvia	0.03%			Nigeria	0.45%
Luxembourg	0.07%			Romania	0.13%
Mexico	0.84%			Senegal	0.01%
Netherlands	2.09%			Syria	0.05%
Norway	3.71%			Tanzania	0.02%
Poland	0.30%			Tunisia	0.05%
Singapore	0.31%			Sub-total	2.98%
Slovakia	0.09%				
Spain	0.84%			Other Regimes*	19.16%
Sri Lanka	0.22%			Brazil	1.60%
Sweden	0.62%			China	15.11%
Switzerland	0.34%			India	1.24%
United Kingdom	3.66%			Russia	1.21%
Total	38.04%	Total	24.78%	Total	22.14%

Note: *Other category is states that have developed their own particular maritime code and have not ratified any convention on carriage of goods.

Source: Transport Canada "Marine Liability Act," *supra* note 18.

Table 2: Adoption of the Hamburg Rules

State	Signature	Ratification, Accession(*)	Entry into Force
Albania		20/07/2006(*)	01/08/2007
Austria	30/04/1979	29/07/1993	01/08/1994
Barbados		02/02/1981(*)	01/11/1992
Botswana		16/02/1988(*)	01/11/1992
Brazil	31/03/1978		
Burkina Faso		14/08/1989(*)	01/11/1992
Burundi		04/09/1998(*)	01/10/1999
Cameroon		21/10/1993(*)	01/11/1994
Chile	31/03/1978	09/07/1982	01/11/1992
Czech Republic (a,b)	02/06/1993	23/06/1995	01/07/1996
Democratic Republic of the Congo	19/04/1979		
Denmark	18/04/1979		
Dominican Republic		28/09/2007(*)	01/10/2008
Ecuador	31/03/1978		
Egypt	31/03/1978	23/04/1979	01/11/1992
Finland	18/04/1979		
France	18/04/1979		
Gambia		07/02/1996(*)	01/03/1997
Georgia		21/03/1996(*)	01/04/1997
Germany	31/03/1978		
Ghana	31/03/1978		
Guinea		23/01/1991(*)	01/11/1992
Holy See	31/03/1978		
Hungary	23/04/1979	05/07/1984	01/11/1992
Jordan		10/05/2001(*)	01/06/2002
Kazakhstan		18/06/2008(*)	01/07/2009
Kenya		31/07/1989(*)	01/11/1992
Lebanon		04/04/1983(*)	01/11/1992
Lesotho		26/10/1989(*)	01/11/1992
Liberia		16/09/2005(*)	01/10/2006
Madagascar	31/03/1978		
Malawi		18/03/1991(*)	01/11/1992
Mexico	31/03/1978		
Morocco		12/06/1981(*)	01/11/192

State	Signature	Ratification, Accession(*)	Entry into Force
Nigeria		07/11/1988(*)	01/11/1992
Norway	18/04/1979		
Pakistan	08/03/1979		
Panama	31/03/1978		
Paraguay		19/07/2005(*)	01/08/2006
Philippines	15/06/1978		
Portugal	31/03/1978		
Romania		07/01/1982(*)	01/11/1992
Saint Vincent and the Grenadines		12/09/2000(*)	01/10/2001
Senegal	31/03/1798	17/03/1986	01/11/1992
Sierra Leone	15/08/1978	07/10/1988	01/11/1992
Singapore	31/03/1978		
Slovakia (a)	28/05/1993		
Sweden	18/04/1979		
Syrian Arab Republic		16/10/2002(*)	01/11/2003
Tunisia		15/09/1989(*)	01/11/1992
Uganda		06/07/1979(*)	01/11/1992
United Republic of Tanzania		24/07/1979(*)	01/11/1992
Venezuela (Bolivarian Republic of)	31/03/1978		
Zambia		07/10/1991(*)	01/11/1992

Notes: All dates: DD/MM/YYYY Total Parties: 34

(a) The Convention was signed by the former Czechoslovakia on 6 March 1979. On 28 May 1993, Slovakia and on 2 June 1993, the Czech Republic deposited its instruments of succession to the signature and the Czech Republic subsequently deposited its instrument of ratification on 23 June 1995. The Czech Republic, upon ratification, withdrew the delar-ation, referred to in footnote (b), that which had been made by the former Czechoslovakia, and lodged the declaration referred to in the second paragraph of that footnote.

(b) Upon signature, the former Czechoslovakia declared in accordance with article 26 the formula for converting the amounts of liability referred to in paragraph 2 of that article into the Czechoslovak currency and the amount of the limits of liability to be applied in the territory of Czechoslovakia as expressed in the Czechoslovak currency. The Czech Republic declared that limits of carrier's liability in the territory of the Czech republic adhered to the provision of article 6 of the Convention.

Source: United Nations Commission on International Trade Law, "Status. 1978 United Nations Convention on the Carriage of Goods by Sea—the 'Hamburg Rules,'" online: UNCITRAL <http://www.uncitral.org/uncitral/en/uncitral_texts/transport_goods/Hamburg_status.html> (as of 22 March 2012).

Outside Canada, the U.S. has been a vocal supporter of the convention and was an original signatory. The U.S. does have a better reason to be in support of the convention than many other countries. Unlike Canada, the U.S.'s current maritime transportation laws were adopted in 1936, based on the 1924 Hague Rules. Thus, though the Rotterdam Rules may not improve on the more modern maritime transportation laws in place in some countries, they are a clear improvement over current U.S. laws.[29] Signature, however, is not sufficient; the U.S. has yet to ratify the convention.[30]

The EU situation is somewhat more complex due to its supranational form of governance. The U.K. is still neutral on whether to adopt the convention, and the government is still assessing the potential impact of the rules in consultation with stakeholders. Its policy is to be based on not favouring one stakeholder group over another, but seeking to adopt new rules that are "broadly acceptable to all commercial parties,"[31] taking into account the U.K.'s interests in maintaining the country's strong position in maritime dispute resolution. Germany has not come out in support of the new rules yet and, in fact, has drafted legislation for consideration that would deviate from the Rotterdam Rules.[32] The European Commission initially came out against the new convention, thinking it might recommend an alternative legal regime for EU members[33]; many other European nations are likely to ratify, but are waiting on U.S. ratification before they do so.[34]

The EU would like to support, for environmental policy reasons, the development of short sea shipping through programs like the Motorways

29. William Tetley, "Transports de cargaison par mer, les Règles de Rotterdam, leur adoption par les États-Unis, le Canada, l'Union Européenne et les pays transporteurs du monde?" (Conference Proceedings of the Resonsibility, Fraternity, and Sustainability in Law, A Symposium in honour of Charles D Gouthier delivered at the Faculty of Law, McGill University, 20-21 May 2011), online: Center for International Sustainable Development Law<http://cisdl.org/gonthier/public/pdfs/papers/Conf%C3%A9rence%20Charles%20D%20Gonthier%20-%20William%20Tetley.pdf>.

30. RG Edmonson, "Rotterdam Rules, Still Alive," The Journal of Commerce (24 October 2011), online: JOC <http://www.joc.com/economy-watch/world-economy-news/rotterdam-rules-still-alive_20111024.html> [copy on file with author].

31. SITPRO, "The Rotterdam Rules: A Guide" (2010), online: National Archives UK <http://webarchive.nationalarchives.gov.uk/20100918113753/http://www.sitpro.org.uk//reports/rotterdamrulesguide.pdf>.

32. International Chamber of Shipping, "Draft German Maritime Law Reform Act: industry Letter" (27 September 2011), online: Korea Shipowners' Association <http://www.shipowners.or.kr/bbs/board.php?bo_table=s36&wr_id=559>.

33. RG Edmonson, "European Commission Weighs in Against Rotterdam Rules," The Journal of Commerce (24 June 2009), online: JOC <http://www.joc.com/economy-watch/european-commission-weighs-against-rotterdam-rules_20090624.html>.

34. RG Edmonson,"Spain Ratifies Rotterdam Rules," The Journal of Commerce (27 January 2011), online: JOC <http://www.joc.com/regulation-policy/spain-ratifies-rotterdam-rules_20110127.html>.

of the Sea,[35] thereby encouraging a modal shift from land-based transport to shipping. However, it must also be concerned about how the Rotterdam Rules will conflict with or otherwise impact these efforts. Eftestøl-Wilhelmsson has looked at the Rotterdam Rules and noted the European need for a new legal regime that clarifies liabilities stemming from multimodal transportation options in order to promote adoption of short sea shipping.[36] Multimodal options fit with the European Commission's promotion of sustainable transportation options, as they are seen as more environmentally friendly. She sees the Rotterdam Rules, though imperfect with regards to providing an ideal liability regime for multimodal transport, as a more workable solution for multimodal transport than the current network liability system in place. Additionally, if the Rotterdam Rules do end up finding international acceptance, she concludes that the convention's modified network liability system would make the most sense in the European context.

Outside of Western nations, India remains neutral and undecided as to whether to adopt the convention and China has not signed it. Issues raised in China include the increased liability exposure, the overall benefits to China's sea trade and the perception that some provisions are too academic.[37] Furthermore, China has concerns about electronic documents,[38] which will be addressed in a later section of this paper. In the Arab world, government and industry got together to make recommendations to the Arab League. In their *Alexandria Declaration*, it was recommended that all fifteen Arab League countries should jointly sign the Rotterdam Rules.[39] Many Arab countries are not parties to international conventions dealing with maritime transportation, and the Rotterdam Rules would move Arab country laws in

35. Mary R Brooks & James D Frost, "Short Sea Developments in Europe: Lessons For Canada" (Paper delivered at the Canadian Transportation Research Forum Annual Conference, Victoria, 24-27 May 2009), online: Canadian Transportation Research Forum <www.ctrf.ca/conferences/2009 Victoria/Conference Proceedings/18 Brooks Frost 2009.pdf>.

36. Ellen Eftestöl-Wilhelmsson, "The Rotterdam Rules in a European Multimodal Context" (2010) 16 Journal of International Maritime Law 274.

37. "India undecided on adopting Rotterdam Rules Convention" (23 February 2010), online: High Beam Research <http://www.highbeam.com/doc/1P3-2273837851.html> [copy on file with author]; and Wenhao Han, "China Reluctant to Sign the Rotterdam Rules" (14 April 2010), online: Mondaq <http://www.mondaq.com/article.asp?articleid=98072&login=true&nogo=1>.

38. Felix WH Chan, "In Search of a Global Theory of Maritime Electronic Commerce: China's Position on the Rotterdam Rules" (2009) 40:2 J Mar L & Comm 185.

39. Arab Academy for Science, Technology & Maritime Transportation, Press Release, "Alexandria Declaration 2010" (3 February 2010), online: UNCITRAL <http://www.uncitral.org/pdf/english/news/ArabPressReleaseRR.pdf>.

this area to be more modern and uniform.[40] The *Montevideo Declaration* presented to Latin American countries, on the other hand, recommended that the declaration not be adopted, seeing it as potentially harmful to Latin American trade. This declaration raised issues about the convention such as its complexity, the fact that it does not involve carriage without a sea leg, and the removal and alteration of various legal terms.[41] The lack of consensus is likely a pre-cursor to yet another failed set of rules.

II. *A comparison of the rules: Rotterdam Rules versus multimodal rules*

Because the existing liability regimes for the carriage of cargo were not particularly satisfactory for the carriage of containerized cargo, which might use more than one mode or might have hidden unattributable damage, the international trading community established, over the years, three sets of multimodal rules. The first, designed by the International Chamber of Commerce (ICC), were issued in 1975, and filled an important legal gap for trading interests[42] (ICC Rules 1975). These were not mandatory legal arrangements but model contract terms that would establish the rules for liability allocation in cases of loss or damage in a multimodal transport shipment. As many cargo owners and developing country governments were unenthusiastic about these industry-initiated rules,[43] they persuaded the United Nations Conference on Trade and Development (UNCTAD) to write a new convention, the *Multimodal Convention*. This convention also failed to gain traction with the trading community and so a third attempt was made jointly by the ICC and UNCTAD resulting in the 1992 *Rules for Multimodal Transport Documents*[44] (hereinafter referred to as the *UNCTAD/ICC Rules*). While the application of the Rotterdam Rules is broader than for just multimodal transport, it is important to understand that the Rules recognize, for the first time, that liner (scheduled) shipping services are very different in terms of needs than tramp shipping, and the Rules do distinguish between the two in its definitions. For the purposes

40. Ibrahim M Nader, "The 2008 Rotterdam Rules: An Arab World Perspective" (2010), online: Rotterdam Rules <http://www.rotterdamrules.com/sites/default/files/pdf/%7BB0F7EF10-6D9F-4712-9A17-F31A12A487AE%7D_The%202008%20Rotterdam%20Rules%20An%20Arab%20World%20Perspective.pdf>.

41. José Alcántara et al, "Declaration of Montevideo" (10 October 2010), online: Rotterdam Rules <http://www.rotterdamrules.com/sites/default/files/pdf/DECLARATION%20OF%20MONTEVIDEO%20FRINAL.pdf>.

42. ICC Rules 1975, International Chamber of Commerce, *Uniform rules for a combined transport document, ICC Publication No 298* (Paris: ICC, 1975).

43. Kindred & Brooks, *Multimodal Rules*, *supra* note 22.

44. United Nations Conference on Trade and Development & International Chamber of Commerce, *Rules for Multimodal Transport Documents*, *ICC Publication No 481* (Paris: ICC, 1992), online: UNCTAD <r0.unctad.org/tH/docs-legal/nm-rules/UNCTAD-ICC%20Rules.pdf>.

of this paper, we focus only on those differences relevant to liner shipping operations when assessing the likely adoption of these rules in comparison with other options.

Table 3: Basis of Multimodal Operator Liability for Damage and/or Delay

ICC Rules 1975	**Multimodal Convention 1980**	**UNCTAD/ICC Rules 1992**	**Rotterdam Rules 2009**
Lost or Damaged Goods Rule 5(b), (c) & (e)—Carrier assumes liability also for employees, agents and sub-contractors, subject to particular rules for unattributed damage and delayed goods, below.	Art. 15—Carrier assumes liability also for employees, agents and subcontractors.	Rule 4.2—Carrier assumes liability also for employees, agents and subcontractors.	Art. 18—Carrier assumes liability also for employees, agents and subcontractors.
Delayed Goods Rules 5(b), (c), (f) and 14—Carrier liable only for localized delay, according to compulsory modal rules or national law.	Art. 16—Above principle for unattributed damage also applies to delay.	Rule 5.1—Carrier liable for delay on above principle for unattributed damage but only when shipper demanded timely delivery.	Art. 17.1—Above principle for unattributed damage also applies to delay. Art. 21—Defines delay as failure to deliver goods within agreed timeframe. Art. 23—Claim of loss due to delay must be sent to carrier within 21 days from delivery.
Unattributed Damage Rule 12—Carrier presumed at fault unless it proves: (i) fault of shipper (ii) defective packing or marks (iii) inherent vice of goods (iv) unavoidable work stoppage (v) nuclear accident (vi) any other cause beyond its 'reasonable diligence' to prevent or avoid.	Art. 16—Carrier presumed at fault unless it proves it and its employees, agents and subcontractors 'took all measures that could reasonably be required' to avoid loss.	Rule 5.1—Carrier presumed at fault unless it proves "no fault or neglect" by itself, its employees, agents or subcontractors.	Art. 17.1—Carrier liable if claimant proves that the loss, or basis for the loss, occurred during the period of the carrier's responsibility.

ICC Rules 1975	Multimodal Convention 1980	UNCTAD/ICC Rules 1992	Rotterdam Rules 2009
Attributed Damage Rule 13—Carrier liable according to compulsory or incorporated modal rules or national law about basis of liability.	No special rule about basis of liability. Above principle of unattributed damage also applies to attributed damage.	No special rule about basis of liablity, except: Rule 5.4—Carrier is additionally excused on sea or waterways leg if loss caused by: (i) error in navigation or management of the ship, or (ii) fire, unless due to fault and privity of carrier, provided carrier proves due diligence was exercised to make ship seaworthy.	No special rule about basis of liability, except: Art. 17.3—Carrier excused, if fault is proven, if loss caused by: (i) Act of God, (ii) accidents at sea, (iii) war, terrorism, etc. (iv) imposed detention or seizure not attributable to the carrier, (v) labour stoppage, (vi) ship fire, (vii) defects not discoverable by due diligence, (viii) omission by shipper, (ix) for loading and unloading activities, unless carrier or performing party takes on activity on behalf of shipper, (x) wastage or defects of goods, (xi) insufficient or defective packing not performed on behalf of carrier, (xii) saving a life or property at sea, (xiii) attempts to avoid environmental damage, (xiv) when goods removed that may become danger, pursuant to articles 15 and 163.

Note: Based on Kindred & Brooks, *Multimodal Rules*, *supra* note 22 at 42, exhibit 3.2; the column containing the Rotterdam Rules has been added to this exhibit and the rows reordered.

Table 3 examines the basis of liability on the multimodal operator for damage and delay in the context of the three sets of multimodal rules, as compared with the Rotterdam Rules. Based on the work of Kindred and Brooks investigating the impact of the three sets of multimodal rules, it becomes quite clear that there are four distinct areas that need to be considered when a cargo owner looks at how these options might impact his business' bases for competitiveness and profitability.[45] First, Table 3

45. Kindred & Brooks, *Multimodal Rules*, *supra* note 22.

demonstrates that the basis of liability in multimodal moves is dependent on the cargo owner's ability to attribute damage to the period of time that the cargo is in the care of the carrier as specified in the contract of carriage. Given the predominant focus of modern supply chains on time-based competition, this is an improvement over earlier options. Second, this also mandates that attribution to a particular leg of the journey is critical for the cargo owner to be able to make a claim, particularly as the list of excuses available to the carrier is now much broader (specifically Article 17.3). Third, and most important, the concept of delay has greater clarity; a time frame is specified (which favours the cargo owner) and is balanced with the limits on the time allowed to make a claim (of importance to the carrier)—a better arrangement for both parties. Fourth and finally, Table 4 identifies that the Rotterdam Rules provide for higher limits by weight and lower limits by value than the *Multimodal Convention*, but higher in both cases than the *UNCTAD/ICC Rules*. While the weight limits are still below those found in other modes, whether these new limits of liability are seen as better for cargo interests is, of course a different matter and will be evaluated by each cargo owner based on his or her claims history and experience.

Table 4: Comparable Limits of Liability under Unimodal and Multimodal Regimes in Ascending Order of Magnitude

Regime	**Limit by Weight**	**Limit by Item**
Sea Carriage – Hague Rules (Arts. IV(5) and IX) – Hague/Visby Rules (Art. IV (5)) – Hamburg Rules (Art. 6)	 n/a 2.00 SDR/kg 2.50 SDR/kg	 U.S. $500/pkg (= 338 SDR/pkg) 666.67 SDR/pkg 835 SDR/pkg
ICC Rules 1975 (Rule 11(c))	30 Poincaré francs/kg (~2 SDR/kg)	n/a
UNCTAD/ICC Rules 1992 (Rules 6.1 and 6.3) – but if no sea leg	2.00 SDR/kg 8.33 SDR/kg	666.67 SDR/pkg
Multimodal Convention 1980 (Art. 18(1), (3).) – but if no sea leg	2.75 SDR/kg 8.33 SDR/kg	920 SDR/pkg
Rotterdam Rules 2009 (Art. 59)	3 SDR/kg	875 SDR/pkg
Road Carriage—CMR (Art. 23)	8.33 SDR/kg	n/a
Rail Carriage—CIM Uniform Rules (Arts. 7, 40 and 42)	17.00 SDR/kg	n/a
Air Carriage—Warsaw Convention (Art. 22(2))	17.00 SDR/kg	n/a

Note: Based on Kindred & Brooks, *Multimodal Rules*, *supra* note 22 at 42, Exhibit 5.4; the row containing the Rotterdam Rules has been added to Exhibit 5.4.

Much of what is being written about the Rotterdam Rules appears to be focused on the perceived imbalance between ship owner and cargo owner liability, the contentiousness of volume contract provisions, the potential for forum shopping if not widely adopted, and the complexity of the new rules, with disadvantages for both ship owners and cargo owners; these are well-detailed by Marine, Jones and Nader and worth additional reading.[46]

III. *A case of damage as illustration*

As identified by Kindred and Brooks, the choice of rules by cargo interests is dependent on the company's particular business requirements and its claims history.[47] Cargo owners will set their priorities by using risk assessment techniques in order to determine which set of rules would work best for their particular circumstances, assuming that they have some measure of market power in dealing with the carrier. Kindred and Brooks found that companies facing localized, simple physical loss or damage without the complications of just-in-time shipments or delay in delivery would have limited interest in the decision because the differences between the rules for simple cargo damage that could be localized and attributed were not particularly significant. On the other hand, the choice of rules would most likely be of interest when cargo owners faced unattributable losses or delay. However, in these cases, the Rotterdam Rules are not applicable as the Rotterdam Rules only apply when the damage can be attributed to the marine leg.

When damage may be attributed to the marine leg, the issues are clearer but the limits of liability are not necessarily higher. According to Article 26 of the Rotterdam Rules, when a loss occurs during a carrier's period of responsibility, but outside of the shipping process, the convention yields to other international instruments, and the relevant unimodal convention takes effect. However, in the case of attributable marine damage or delay, the Rotterdam Rules set a lower ceiling of liability at 875 SDR per package (compared to the 920 SDR per package for the Multimodal Convention), or a higher ceiling of 3 SDR per kilogram (versus the Multimodal Convention 1980's 2.75 SDR per kilogram), choosing whichever is higher (Article 59.1).

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46. Charles M Davis, "The Rotterdam Rules: Changes from COGSA" (2010), online: The Law Office of Charles M Davis <http://davismarine.com>; and Peter Jones, "The UNCITRAL Convention on Carriage of Goods by Sea: Harmonization or De-Harmonization?" (21 March 2010), online: Forwarderlaw <http://www.forwarderlaw.com/library/view.php?article_id=602>; and Nader, *supra* note 35.

47. Kindred & Brooks, *Multimodal Rules*, *supra* note 22.

To explain the situation facing the cargo owner and so appreciate the reality of likely outcomes, we have taken one of the cases (Case 2) presented by Kindred and Brooks and updated it to consider the effects of the Rotterdam Rules (Table 5).[48] In this case, a shipment of twenty-eight packages of machinery weighing 19,460 kg arrived minus two packages, and the cargo owner, as identified by the contract of sale, laid claim for theft against the marine carrier. The two missing packages each weighed 695 kg and so the limits of liability are calculated for both weight and package at the rate of 1 SDR approximately equal to US$1.55, as of January 2012.

Table 5: Liability for Partial Loss under the Marine Regimes and the Multimodal Convention 1980

Regime	Rate	SDR Limit for This Loss	US$ Limit for This Loss
Hague Rules	U.S. $500/pkg (= 338 SDR/ pkg)	-- 676.00	1,000.00
Hague/Visby Rules	666.67 SDR/ pkg 2.00 SDR/kg	1,333.34 2,780.00	2,066.68 4,309.00
Hamburg Rules 1978	835 SDR/pkg 2.50 SDR/kg	1,670.00 3,475.00	2,588.50 5,386.25
Multimodal Convention 1980	920 SDR/pkg 2.75 SDR/kg	1,840.00 3,822.50	2,852.00 5,924.10
Rotterdam Rules 2009	875 SDR/pkg 3 SDR/kg	1,750.00 4,170.00	2,712.50 6,463.50

Note: Based on Kindred & Brooks, *Multimodal Rules*, *supra* note 22 at 86, exhibit 5.5, but calculated for the specific example of case 2; the two missing packages each weigh 695 kg and so the limits of liability are calculated for both weight and package at the rate of 1 SDR approximately equal to US$1.55 (as of January 2012). Liability is based on whichever is higher and is, for this example, specifically calculated.

Article 59.2 of the Rotterdam Rules provides clarity in the definition of a package, in that goods that are palletized or otherwise grouped are deemed to be a single shipping unit. However, when the definition of a unit is provided in the contract, the smallest unit indicated on the bill of lading determines liability. As well, the Rotterdam Rules differ in the extent of liability; under the Rotterdam Rules liability is limited to about US$1,360 (875 SDRs) per package or around US$4.65 (3 SDRs) per kilogram. As seen in Table 5, for the loss of two packages each weighing 695 kilograms, the cargo owner stands to gain about US$6,460 in total from the kilogram coverage (as opposed to the lower amounts under other rules or by

48. *Ibid.*

claiming the package amount). This needs further context, however; most manufactured goods have a significantly higher value per kilogram, and that value has grown more rapidly than the growth in the absolute limit, and so the cargo owner will still need to purchase additional insurance coverage.

According to Pallares, the major aspect of the Rotterdam Rules that will be a deciding factor for their widespread adoption will be related to the issue of liability.[49] Article 59 allows for higher limits on liability than the Hamburg Rules at 875 SDR per package or 3 SDR per kilogram but volume contracts can encourage the parties to work around the higher limits. In fiercely competitive markets, this may provide carriers or cargo owners with sufficient incentive to alter coverage, playing loose with the rules on volume contracts, and this will ultimately work against widespread adoption.

IV. *Other issues for users of liner shipping: Volume contracts and e-documentation*

The position of the Canadian International Freight Forwarders Association (CIFFA) on the Rotterdam Rules provides a good summary of the key issues seen by many parties; that is, concerns about changes to the basis and extent of liabilities and to the reality of volume contracts in modern carriage. It is CIFFA's opinion that the convention should not be signed for these reasons. Under the Rotterdam Rules, potential liabilities are significantly increased and the time frame when a carrier would be held liable for goods lengthened. Previously, carriers were only liable for goods while in transit on the sea, but would now be responsible from the point of receiving goods to the point of delivery. Furthermore, CIFFA finds particular concern in the wording around liabilities arising from delays. From the Hamburg to the Rotterdam Rules, the wording has changed from a carrier being responsible for losses caused by a delay to simply being liable for delays in delivery if not included in the specified exemptions. That point underscores a critical flaw in the Rules; Tetley correctly notes that the large number of exemptions and exclusions in the convention deviate from the original purpose of obtaining uniformity in the legal regime and thereby provides grounds for non-adoption.[50]

Furthermore, volume contracts allow for carriers and shippers to deviate from the terms of the convention, allowing for freedom of contract. Through volume contract provisions, a carrier and shipper can come to an

49. Lorena Sales Pallares, "A Brief Approach to the Rotterdam Rules: Between Hope and Disappointment" (2011) 42:3 J Mar L & Comm 453.
50. Tetley, *supra* note 29.

alternative agreement on liability. This means that the Rotterdam Rules may not govern many contractual agreements at all. In such cases, smaller shippers may have insufficient market power and will be forced to accept unfair terms that deviate from the Rotterdam Rules. CIFFA believes that, in practice, this will lead to premium pricing for transport under full liability Rotterdam Rules, and lower freight rates for reduced liability under volume contracts.[51] When a number of parties and contracts are involved, the claims will ultimately go back to the shipper and defeat the purpose of the volume contracts.

Like CIFFA, the International Federation of Freight Forwarders Associations (FIATA) opposes the Rotterdam Rules, citing their complexity, an imbalance of responsibility and liability, and the increased burden placed by Article 82, which gives precedence to other conventions that deal with different transportation methods, in finding the point where damages or loss occurred.[52]

The European Shippers Council (ESC) also opposes the Rotterdam Rules, taking issue with the increased liability exposure, the legal complexity and ambiguity in provisions that could cause an increase in litigation, and problems with the interaction of the new rules with existing rules for unimodal transportation.[53]

In the U.S., on the other hand, the National Industrial Transportation League (NITL) disagrees with ESC criticisms, seeing the new rules as being consistent with modern realities of shipping and useful in bringing together the currently fragmented legal regimes for liability. NITL asserts that there will be no conflict with existing conventions because the Rotterdam Rules will override existing conventions and there is equality in liabilities between shippers and carriers, as both parties must agree upon any changes in liability. Furthermore, NITL dismisses ESC criticisms of volume contract provisions; rather than concluding that carriers will take advantage of smaller shippers, NITL concludes that volume contracts that

51. Tony Young, "CIFFA Submission to Transport Canada Commentary on the Rotterdam Rules" (21 March 2009), online: CIFFA <http://www.ciffa.com/downloads/2009/03/30/CIFFA%20Submission%20to%20Transport%20Canada%20on%20the%20Rotterdam%20Rules%20March%202009.pdf>.

52. FIATA, "Position on the UN Convention on Contracts for the International Carriage of Foods wholly or partly by sea (the 'Rotterdam Rules')" (2009), online: UNCITRAL <http://www.uncitral.org/pdf/english/texts/transport/rotterdam_rules/FIATApaper.pdf>

53. RG Edmonson, "European Shippers Adamant Against Rotterdam Rules," The Journal of Commerce (30 June 2009), online: JOC <http://www.joc.com/maritime-news/european-shippers-adamant-against-rotterdam-rules_20090630.htm>.

deviate from the convention must be explicitly stated and agreed upon by both parties, and thus any changes will be transparent and negotiated.[54]

The ability of the Rotterdam Rules to facilitate electronic transactions has also been a subject of considerable debate. In the last decade, the increasing use of e-commerce by companies large and small, coupled with increasing need for electronic filing for security purposes (like the U.S. advanced notification rules embodied in the U.S. *Maritime Transportation Security Act of 2002*[55] and their extra-territorial reach) have added another layer to the challenges facing users of maritime contracts of carriage. Articles 38 and 41 in Chapter 8 of the Rotterdam Rules contain provisions dealing with electronic bills of lading. On the one hand, Edmonson notes that the convention recognizes the legality of electronic transactions, and thus cargo booking along with the issuance of letters of credit and bills of lading may be executed completely electronically.[56] On the other hand, Chan sees the following issues as remaining outstanding[57]:

- determining what is considered an electronic signature;
- how to know whether the electronic record contains the electronic signature of the carrier;
- how the electronic signature can identify the signatory to the electronic record;
- how the electronic signature can indicate carrier authorization of the electronic record; and
- the extent to which the electronic record is considered evidence of the carrier's receipt of goods.

In his examination of the positions of the U.S., EU, and Hong Kong on the subject, Chan reports that the U.S. accepts e-signatures under the 2000 *Electronic Signatures in Global and National Commerce Act*,[58] but requires no minimum level of security, allowing parties to determine the level of technology required.[59] The EU similarly recognizes e-signatures, but also provides for the presumption of validity for specific technologies

54. NITL, "Response to the National Industrial Transportation League to the European Shippers' Council Position Paper on the Rotterdam Rules" (2009), online: UNCITRAL <http://www.uncitral.org/pdf/english/texts/transport/rotterdam_rules/NITL_ResponsePaper.pdf>.
55. *Maritime Transportation Security Act of 2002*, Pub L No 107-295, 116 Stat 2064.
56. RG Edmonson, "Rotterdam Rules Could Ease Electronic Transactions," The Journal of Commerce (14 April 2010), online: JOC <http://www.joc.com/regulation-policy/rotterdam-rules-could-ease-electronic-transactions_20100414.html>.
57. Chan, *supra* note 38.
58. *Electronic Signatures in Global and National Commerce Act*, Pub L No 106-229, 114 Stat 464 (2000).
59. Chan, *supra* note 38.

set out in the *EU Electronic Signature Directive*.[60] Hong Kong goes even further and will only recognize validity from recognized certification authorities under the 2004 *Electronic Transaction Ordinance*,[61] though parties can also agree to use methods supplied by another reliable and appropriate source. Chan concludes that the ability of the Rotterdam Rules to support completely electronic transactions has yet to be tested.

The World Customs Organization (WCO) also has an interest in the development of electronic documentation options in international carriage for the purposes of border security and control. The WCO's SAFE Framework of Standards puts forward standards for security in global trade. One of the core elements of the WCO standards is harmonization of electronic cargo information, which is accomplished through the WCO data model. This model is used to provide consistency in electronic exchanges and facilitate the exchange of information between businesses and customs, and to assist different customs bodies to identify high-risk cargo.[62] This framework fits in with the concept of a "Single Window" for the purposes of transportation regulatory requirements. From the viewpoint of the WCO, this concept envisions information being delivered through a single portal and information being disseminated to other bodies through this environment. Though this framework is not necessarily for the purposes for electronic data, it is useful in the application of electronic data–driven communications.[63] The provisions set out in Article 9 and Article 10 of the Rotterdam Rules for the use of electronic documents are largely consistent with the WCO Standards and the Single Window concept, as well as other frameworks on the exchange of electronic documents.[64]

The final, and perhaps most important, issue from a cargo perspective is the role of volume contracts in the carrier-cargo relationship. The role of volume contracting in a number of liner trades was well developed by the late 1990s. In the U.S., service contracts have been in place since the *Shipping Act of 1984*[65]; however, rates were made publicly available,

60. EC, *Directive 1999/93/EC of the European Parliament and of the Council of 13 December 1999 on a Community Framework For electronic signatures*, [2000] OJ, L 13/12 [*EU Electronic Signature Directive*].
61. *Electronic Transaction Ordinance*, (2004) Cap 553 (HK).
62. World Customs Organization, "WCO SAFE Framework of Standards" (June 2011), online: APL <http://www.apl.com/security/documents/safe_framework.pdf>.
63. World Customs Organization, "The Single Window Concept: The World Customs Organization's Perspective," online: World Customs Organization <http://www.wcoomd.org/en/topics/Facilitation/activities-and-programmes/~/~/media/FA35ECDE953D4CDDA32A58D6F620B1FE.ashx>.
64. James Giermanski, "What the Rotterdam Rules Should Do for Global Supply Chain Security," *The Maritime Executive* (31 March 2011), online: Maritime Executive <http://www.maritime-executive.com/article/what-the-rotterdam-rules-should-do-for-global-supply-chain-security>.
65. *Shipping Act of 1984*, Pub L No 98-237, 98 Stat 67.

which limited the use of such contracts.[66] With the passage of the *Ocean Shipping Reform Act of 1998*,[67] confidential service contracts became legal in U.S. liner trades.[68] Such contracts were already accepted by the European Union and by Canada. In the last decade, the volume of containerized trade using confidential service contracts has mushroomed, and such contracts are now the norm rather than the exception. According to Mukherjee and Bal, almost all U.S. shippers elect to use confidential service contracts and such agreements currently make up more than 95% of U.S. liner trade.[69] The Federal Maritime Commission (FMC) provides data on service contracts filed with them on a monthly basis through their SERVCON database. The data are both for filed service contracts between a shipper and carrier as well as between a shipper and non-vessel operating common carrier (NVOCC). The latter are referred to as NVOCC service arrangements (NSA) and have been in place since 2002.[70] The data show a steady increase in service contracts being filed with the FMC on an annual basis.[71] In fact, in March 2012 alone, 4,039 original service contracts and 42,624 amendments were filed by shipping lines! This did not include the 65 original service contracts and 135 NSAs filed that month, and March 2012 was not an unusual month; April 2011 had twice as many original filings. Clearly, the data support the Mukherjee and Bal assertion that service contracts have become the standard for transport arrangements in the manufactured goods trades. It has been more than 25 years since the U.S. *Shipping Act of 1984*[72] promoted the use of independent action by liner shipping companies and more than 10 years since their *Ocean Shipping Reform Act of 1998*[73] promoted confidential service contracts; given the use of similar agreements in the U.S., Europe and Canada, the development of volume contract provisions in the Rotterdam Rules should be seen as inevitable and necessary. However, as noted by Tetley, accompanying that flexibility to contract with more legal options than before adds to the probability of non-adoption of the Rotterdam Rules and

66. Proshanto K Mukherjee & Abhinayan Basu Bal, "A legal and economic analysis of the volume contract concept under the Rotterdam Rules: Selected issues in perspective" (2010) 77:1 Journal of Transportation Law, Logistics and Policy 27.
67. *Ocean Shipping Reform Act of 1998*, Pub L No 105-258, 112 Stat 1908.
68. Mary R Brooks, *Sea Change in Liner Shipping: Regulation and Managerial Decision-Making in a Global Industry* (Oxford: Pergamon Press, 2000).
69. Mukherjee & Bal, *supra* note 66.
70. Federal Maritime Commission Service Contract Filing System (SERVCON), "Statistics," online: FM SERVCON <https://servcon.fmc.gov/stat/>.
71. Federal Maritime Commission, "Questions," online: Federal Maritime Commission <http://www.fmc.gov/questions/default.aspx#378>.
72. *Shipping Act of 1984*, Pub L 98-237, 98 Stat 67.
73. *Ocean Shipping Reform Act of 1998*, Pub L 105-258, 112 Stat 1908.

greater likelihood of forum shopping and confusion for less astute buyers of transport services.[74]

The use of electronic seals and documentation from origin to destination in combination with advanced notification rules, which have focused on both identifying the true cargo owner and ensuring the manifest is clean of ambiguity for inspection targeting purposes, have reinforced the need for modernization of the rules to modern container shipping. However, that advance has been potentially offset by the adoption of volume contract provisions. Although many see these provisions as allowing for a fair and equitable distribution of liability being negotiated between parties, there are other voices that are concerned that this equity will not be seen due to a potential imbalance of power between larger carriers and smaller shippers. That said, volume contracts are a natural extension of existing service contract systems that have seen widespread use since being adopted.

Conclusions

When the Hague Rules were agreed in 1924, the port-to-port nature of shipping presented the legal community with the opportunity to get the rules of engagement right for marine transport contracts. However, at the time there was no way that carriers, beneficial cargo owners or governments could be expected to anticipate the modern trading realities of globalization, multimodal transport, cargo and ship security regimes, and e-commerce. Since the development of the Hague Rules, there have been several attempts to revisit the rules and bring contracts of carriage into alignment with commercial practices and expectations. The advent of containerization, the increasing complexity of modern supply chains, the development of electronic documentation and the enhanced importance of security have made carrier-shipper relations incredibly complex while at the same time driving governments more and more towards a desire to harmonize the way in which global financial and trading rules are implemented.

Today, this complexity sees transport for all but bulk commodities as predominantly door-to-door negotiated contracts involving multiple players with non-transparent, non-disclosed supply chain relationships and diverse carriage contractual arrangements between the parties. Instead of the simple interested or disinterested cargo owner presented by Kindred and Brooks in 1997, the modern trading environment has many players making choices based on negotiated global supply contracts not anticipated in the early 1990s. Today's liner shipping companies most frequently

74. Tetley, *supra* note 29.

conduct their work under global volume contracts, amended frequently to reflect the volatility of the post-global economic crisis period, and with an array of alliances and sub-deals that were never considered, or in fact were not possible, without electronic data transfer, Internet-enhanced co-ordination and global banking arrangements. Where the Rotterdam Rules run into difficulty and become less credible to cargo owners of influence is when volume contracts (now the de facto standard) choose to exclude the carriage from the application of the rules. What this implies is that introduction of the new rules, rather than providing clarity to all in the relationship, has created an additional possible combination of issues, thus increasing the level of complexity even further. There does not exist consensus between trading partners on applicable rules, nor is there consensus between carrier and cargo owner. Furthermore, the definition of a carrier has changed so that the Rotterdam Rules see freight forwarders as fulfilling the carrier role when the cargo owner often assumes forwarders are agents of the cargo owner. In summary, it seems that the now ever more confused cargo owner must rely on her marine insurance agent to cover as many risks as possible, recognizing that the carriage contract offered by the carrier will never be written in favour of the cargo owner. The transport world has come so far in reducing transport costs that they become negligible in influencing the consumer's choice of product at the store; as a result, another set of rules has created work for the maritime legal industry and confusion for insurers and cargo owners who will have to wait to see how the courts interpret the new language.

As Kindred and Brooks noted, when unattributed loss or damage occurs, the UNCTAD/ICC Rules grant no more compensation than is possible under the ICC Rules 1975.[75] However, the ICC Rules 1975 are completely unacceptable in a modern trading environment, where reliability is a major factor in the choice of carrier; as more and more supply chains have adopted just-in-time practices and level-of-service agreements are becoming the norm in transport contracting, delay as one element of reliability has become the focal point for cargo interests. The 1975 rules are, to quote Kindred and Brooks, "so complex that they are almost unworkable. ...Particularly galling to the cargo owner must be the provision in rule 11 of the ICC Rules 1975 that provides for compensation for delay only in instances when the delay can be attributed to a particular stage and carrier. This provision is clearly out of touch with the seamless nature of multimodal transport."[76] As the Rotterdam Rules only apply

75. Kindred & Brooks, *Multimodal Rules*, *supra* note 22.
76. *Ibid* at 156.

in cases where damage is attributable to the marine carrier, they are still not attractive from a cargo perspective even though they have been more explicit in defining delay and have raised the limits of liability.

In summary, it appears that the Rotterdam Rules face similar prospects to the Hamburg Rules—for unimodal container moves port-to-port, they bring just another permutation to the table. For multimodal transport, there remains considerable confusion as to what will work best in the door-to-door context and a trading environment focused on time-based competition where the consequences of cargo delay are a paramount consideration for a large portion of the moves. For all the legislative and political work over the last decade, it seems that trading interests are still inadequately served by the trading rules available. As noted by Kindred and Brooks, "given that shippers tend to defer to the rules imprinted by the multimodal operator on the back of its contractual documents, the shipper may have little choice in their use."[77] As most liner shipping has converted to volume contracts, at least the terms on the back of the contract are now subject to negotiation for those cargo owners with market power. For other cargo owners, the future is now even more uncertain.

77. Kindred & Brooks, "New and Improved," *supra* note 22 at 14.

Appendix 1: Signatories to the Rotterdam Rules

Nation	**Date of Signature (Date of Ratification)**
Armenia	29/09/2009
Cameroon	29/09/2009
Congo	23/09/2009
DR Congo	23/09/2010
Denmark	23/09/2009
France	23/09/2009
Gabon	23/09/2009
Ghana	23/09/2009
Greece	23/09/2009
Guinea	23/09/2009
Luxembourg	31/08/2010
Madagascar	25/09/2009
Mali	26/10/2009
Netherlands	23/09/2009
Niger	22/10/2009
Nigeria	23/09/2009
Norway	23/09/2009
Poland	23/09/2009
Senegal	23/09/2009
Spain	23/09/2009 (19/01/2011)
Sweden	20/07/2011
Switzerland	23/09/2009
Togo	23/09/2009
USA	23/09/2009

Source: United Nations Commission on International Trade Law, "Status. 2008 United Nations Convention on Contracts For the International Carriage of Goods Wholly or Partly by Sea—the 'Rotterdam Rules,'" online: UNCITRAL <http://www.uncitral.org/uncitral/en/uncitral_texts/transport_goods/rotterdam_status.html> (last accessed 11 April 2012).

Appendix 2: Signatory/Ratification Status
Multimodal Transport Convention 1980

Nation	**Signature**	**Ratification (Accession, a)**
Burundi		4 Sep 1998 a
Chile	9 Jul 1981	7 Apr 1982
Georgia		21 Mar 1996 a
Lebanon		1 Jun 2001 a
Liberia		16 Sep 2005 a
Malawi		2 Feb 1984 a
Mexico	10 Oct 1980	11 Feb 1982
Morocco	25 Nov 1980	21 Jan 1993
Norway	28 Aug 1981	
Rwanda		15 Sep 1987 a
Senegal	2 Jul 198	25 Oct 1984
Venezuela (Bolivarian Republic of)	31 Aug 1981	
Zambia		7 Oct 1991 a

Source: United Nations, "Status. United Nations Convention on International Multimodal Transport of Goods," online: United Nations Treaty Collection <http://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-E-1&chapter=11&lang=en>