

EDITORIAL

The Rotterdam Rules and vessel safety

For a dozen years, a primary focus of many discussions of cargo claims has been the UN Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (popularly known as the Rotterdam Rules). This is hardly surprising, for the existing international conventions addressing cargo liability are woefully out-of-date. The most popular regime now in force (the Hague-Visby Rules) is essentially an ad hoc patch-up – negotiated over half a century ago, when international container shipments had barely begun – of a multilateral convention that was drafted almost a century ago. That convention, in turn, was an attempt to give international effect to the principles established in the US Harter Act of 1893. The Rotterdam Rules would provide a much-needed update.

Although the Rotterdam Rules would indeed modernise the law governing cargo claims, the convention addresses much more than liability for cargo claims. I have elsewhere explained some of the ways in which the Rotterdam Rules would improve maritime law governing the carriage of goods but having very little to do with liability for cargo damage.¹ Here I will outline the role that the Rotterdam Rules could play in improving vessel safety, particularly in the context of cargo fires.

In the last few years, it has become distressingly common to see news reports of vessel casualties related to cargo fires. A few examples from last year well illustrate the point. As 2019 began, the *Sincerity Ace* was on fire in the mid-Pacific, and five crew members lost their lives as a result. Three days later, a container fire on the *Yantian Express* spread during a voyage to Canada, and it took more than three weeks to fully extinguish. Later that month, the *APL Vancouver* caught fire off the coast of Vietnam. In March, the *Grande America* sank in the Bay of Biscay after a fire started in one container and spread to others on deck. This is hardly a complete list, even for the first three months of 2019, and the list continued to grow during the rest of the year.

No single solution could be adequate to address the problem. Modern technology undoubtedly has a major role to play, but even the best equipped ships are not immune from disastrous fires. The ULCS *Maersk Honam* was less than a year old when a fire broke out while crossing the Arabian Sea en route from Singapore to Suez. The vessel was equipped with the latest fire-fighting equipment, but it still took five days to bring the fire under control and five crew members died in the process. Another seven weeks passed before the damaged vessel could be towed to a port of refuge.

The International Maritime Organization (IMO), the entity most directly concerned with issues of vessel safety, undoubtedly has a major role to play, and it is currently addressing the issue. The Maritime Safety Committee's Sub-Committee on the Carriage of Cargoes and Containers (CCC), at its sixth session, established the Correspondence Group on a Review of Maritime Special Provisions. That group will review maritime special provisions (SPs) in the IMDG Code and provide recommendations on how to proceed.² No doubt improvements in the IMDG Code could well be part of the solution, but a manufacturer will almost always know that a new product is potentially dangerous long before the IMDG Code could possibly be updated to include it.

¹ See eg Michael F Sturley 'Can Commercial Law Accommodate New Technologies in International Shipping?' in Barış Soyer, Andrew Tettenborn *New Technologies, Artificial Intelligence and Shipping Law in the 21st Century* (Informa Law from Routledge 2020) 22.

² See CCC 6/14, para.6.22 (21 September 2019).

As the proponents of the new correspondence group recognised, lack of information, frequently due to non-declaration or mis-declaration of cargo, is often a principal source of the underlying problem.³ Inadequate information can lead to improper handling and stowage, which can cause fires. Once fires start, inadequate manifest information often hampers both fire-fighting and salvage operations. Even if the ocean carrier has the information somewhere in its system, it does not necessarily reach those people who most need it in a timely fashion.

Inadequate information is an aspect of the problem that the Rotterdam Rules can help address. The Comité Maritime International (CMI), which prepared the initial draft of the Rotterdam Rules, recently submitted papers to the IMO to call attention to the benefits that ratification would provide. I summarise some of those benefits here.

The Rotterdam Rules recognise the importance of providing timely and accurate information, and the convention facilitates the most efficient method for doing so. Because on-board fires often result from a shipper's failure to provide information to the carrier, or even a carrier's failure to provide information to the shipper, having a regime that requires and facilitates the timely exchanging of information is an important factor in addressing that problem.

Multiple provisions in the Rotterdam Rules explicitly require the exchange of timely and accurate information. Article 29(1)(a) goes beyond the existing carriage conventions (particularly the Hague, Hague-Visby and Hamburg Rules) to require a shipper to 'provide to the carrier in a timely manner' the 'information, instructions and documents' needed for 'the proper handling and carriage of the goods, including precautions to be taken by the carrier or a performing party', whether or not the goods have been recognised as dangerous in the IMDG Code. In countries where local authorities have enacted safety measures in addition to the international requirements, Article 29(2) preserves their force and Article 29(1)(b) requires the shipper to timely provide the carrier with the 'information, instructions and documents' needed to comply with those local regulations.

More importantly, the Rotterdam Rules extend the traditional requirement to furnish information at the beginning of the process. Article 28 establishes a new procedure to enable either the carrier or the shipper to obtain information or instructions from the other whenever necessary during the shipment. If a problem arises in the middle of a voyage, for example, or if a carrier develops suspicions about an unusual shipment, Article 28 – unlike any of the existing carriage conventions – provides a mechanism that enables the carrier to obtain the information or instructions that it needs to avoid a serious incident.

Article 32 specifically addresses the shipper's obligation to provide information to the carrier about goods that 'by their nature or character are, or reasonably appear likely to become, a danger to persons, property or the environment'. That provision improves on existing carriage conventions in two significant ways. First, it avoids the ambiguity of the existing conventions' use of the term 'dangerous goods' without defining that term. Secondly, it recognises that goods can cause serious damage by harming the environment. Article 15 similarly gives a carrier flexibility in dealing with such goods.

Article 27(1) expands on current law to require the shipper to 'deliver the goods [to the carrier] in such condition that they will withstand the intended carriage'. That provision would help to avoid, for example, the liquefaction of goods that are normally solid (which is a serious risk in some solid goods with a high moisture content). Article 27(3) similarly requires a shipper that packs a container or loads a vehicle to be carried on a vessel to 'properly and carefully stow, lash and secure the contents ... in such a way that they will not cause harm to persons or property'. Improperly securing the goods in a container increases the risk of fire, and extending the rule to vehicles addresses an important safety concern in the freight ferry industry.

Other provisions of the Rotterdam Rules contribute to safety more generally. Article 14, for example, extends the carrier's obligation to exercise due diligence to provide a seaworthy ship beyond the

³ See CCC 6/6/17, para 7 (5 July 2019).

commencement of the voyage (as under today's most common carriage regimes) to the entire voyage. Under the Rotterdam Rules, therefore, the carrier owes a duty to cargo to maintain safety standards not only when the vessel is in the port of loading but for the entire time that the goods are on the ship.

In addition to its safety-specific provisions, the Rotterdam Rules would help solve the underlying problem that the IMO correspondence group is addressing in a second, less obvious, way. Everyone recognises that the non-declaration or mis-declaration of dangerous goods is a principal cause of the increasing number of casualties related to container fires. But even if a shipper properly declares the cargo, the information must still be conveyed to operational personnel in a timely manner if it is to be effective. In a system that relies heavily on paper documents, information may be conveyed inaccurately, or it may not be accessible to those who need it, or it may not be available in time. Inaccurate, inaccessible, or untimely information also causes serious incidents.

The obvious solution to the over-reliance on paper documents is instead to use electronic equivalents. If the ocean shipping industry used a system based on blockchain, for example, everyone who needed to know the information or instructions furnished by the shipper would almost immediately have access to that information in the form furnished by the shipper – even if the goods pass through multiple intermediate parties before reaching the ocean carrier.

Unfortunately, the industry has been slow to adopt electronic equivalents to traditional shipping documents. A principal reason is that the existing carriage conventions do not provide the necessary legal framework to support electronic commerce. The Rotterdam Rules, in contrast, were specifically designed not only to accommodate electronic commerce but to facilitate it. Indeed, the original proposal to undertake the project came from the United Nations Commission on International Trade Law (UNCITRAL) E-Commerce Working Group. Even the popular press has identified the failure to ratify the Rotterdam Rules as an obstacle to the growth of electronic commerce.⁴

When the Rotterdam Rules enter into force, not only will shippers and carriers have stronger legal obligations to share the information that can help prevent container fires and other serious incidents, but the legal basis will exist to permit industry to develop and rely on a more effective system to get that information to the operational personnel who need it in time for them to use it. The Rotterdam Rules facilitate electronic commerce among all the parties to a transaction on a door-to-door basis – thus covering the flow of information from the original shipper to the ocean carrier's operational personnel.

The Rotterdam Rules by themselves will not solve the problem of container fires and other serious incidents, but they would contribute to the solution. And without the Rotterdam Rules, the existing outdated legal regimes governing contracts for the carriage of goods by sea will continue to act as a barrier that prevents the industry from developing the most effective operational solutions to the problem.

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⁴ See 'Thinking outside the box' *The Economist* (28 April 2018) p 21.