THE CONCERNS OF THE SHIPPING INDUSTRY REGARDING THE APPLICATION OF ELECTRONIC BILLS OF LADING IN PRACTICE AMID TECHNOLOGICAL CHANGE

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ABSTRACT

In the sea trade, the traditional paper-based bill of lading has played an important role across the globe for centuries, but with the advent of advanced commercial modes of transportation and communication, the central position of this document is under threat. The importance of the bill of lading still prevails as does the need of the functions that this document served in the past, although in a changed format. In the recent past, the world has witnessed a lot of debate about replacing this traditional paper-based document with an electronic equivalent that exhibits all of its functions and characteristics, both commercial and legal. More specifically, unlike many rival travel documents, such as the Sea Waybill, a bill of lading has two prominent features, that is to say, its negotiability and its acceptability as a document of title in certain legal jurisdictions that are required to be retained in an electronic bill of lading so as to also retain the prominence of this document in the future landscape.

This thesis is, however, more concerned about the legal aspects of adopting the electronic bill of lading as a traditional paper-based legal document as well as an effective legal document in the present age. However, the scope of this debate remains primarily focused on the USA and UK jurisdictions. In the course of this thesis, it is observed that, in the past, the bill of lading has been subject to a variety of international regimes, such as The Hague Rules and The Hague-Visby Rules, and presently efforts are being made to arrive at a universal agreement under the umbrella of The Rotterdam Rules, but such an agreement is yet to arrive among the comity of nations. On the other hand, efforts made by the business community to introduce an electronic bill of lading are much louder and more evident. The private efforts, such as the SeaDocs System, CMI Rules, and the BOLERO Project, etc., were, however, received by the fellow business community with both applause as well as suspicion. At the
same time, there are a number of concerns voiced by the international business community on the legislative adoptability in national and international jurisdictions and the courts’ approach in adjudicating cases involving electronic transactions and these are making the task of adoption of electronic bill of lading in the sea-based transactions a difficult task. Therefore, in the absence of any formal legal backing from national and international legislations, these attempts could not achieve the desired results. In this thesis, the present situation of the acceptability of electronic transactions in general, and of the electronic bill of lading specifically, has also been discussed with reference to certain national jurisdictions, such as Australia, India, South Korea and China, in order to present comparative perspectives on the preparedness of these nations. On the regional level, the efforts made by the European Union have also been discussed to promote electronic transactions within its jurisdiction. All the discussion, however, leads to the situation where the level of acceptability of electronic bill of lading in the near future is found to be dependent upon the official efforts from the national governments and putting these efforts towards arriving at an agreement on Rotterdam Rules as early as possible. The other area of importance revealed in this thesis is the need for change in juristic approach by the courts while interpreting and adjudicating upon cases involving electronic transactions. On the whole, this thesis has provided a cohesive and systematic review, synthesis and analysis of the history of the bill of lading, its importance as a document of title, and attempts to incorporate its important functions within the fast-paced electronic shipping commerce of today. In such a way it has provided a valuable contribution to the literature by providing a comprehensive resource for jurists, policy-makers and the business community alike, as they work towards adapting the bill of lading so that it might be successfully applied in electronic form.
DECLARATION

I, Farhang Jafari, hereby declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or institute of learning.
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First and foremost, I would like to express my gratitude to God for giving me the strength to stay committed to my research throughout the highs and lows of my PhD programme.

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INTRODUCTION TO THE RESEARCH WORK

A. Introduction to and Justification of the Topic of the Research:

With the virtual contraction of the world in terms of distances aided by new and swift communication methods, the means and modes of trade, both within and beyond borders, is being transformed accordingly. Communication across the globe takes place in a matter of seconds and the exchange of information, sharing of ideas and communication of directions from one entity to another is instant. This advancement has afforded great deal of opportunities to global businesses to accelerate their pace and boost their stakes within this dynamic domain, but, unfortunately, the legal process in most instances is slower than the response of business to advances in technology. Access to the whole spectrum of benefits is not possible without acceptability of these changes in the legal spheres where the businesses must turn in order to exercise the determination of their rights and the duties of other parties in case of any dispute over these.

A contract is an agreement between the two parties and, in the case of an international trade transaction, there are usually a number of contracts involved and hence there is a multiplicity of the parties participating in the completion of a full international trade transaction. These individual contracts, as well as the interlinked phases, create and define the rights and liabilities of the parties and are required to be recorded to the full for future reference and potential settlement of dispute.\(^1\) One element of these international trade transactions is the transportation of goods and services across borders and seas. The modes of transportation are many, and on many occasions, may require multimodal transportation models, depending

\(^1\) HB Thomsen and BS Wheble, ‘Trade Facilitation and Legal Problems of Trade Data Interchange’ (1985) 13 International Business Law 313.
upon the nature of the route and the goods to be transported. However, despite this fact, transportation by sea is still the prime mode of transportation from one place to another, especially in the case of bulk transportation. In order to record the transactions as required under the prevailing national and international laws, over a period of time, a number of different trade documents relating to the transportation of goods by sea, such as sea waybills and negotiable bill of lading, etc., have evolved, depending upon the nature of the transaction.

The bill of lading, however, has occupied a central position in these transactions over the last two centuries, due to its unique characteristic of incorporating the negotiation and transfer of title during the transit of goods. There are other documents in addition to the bill of lading in relation to multimodal transportation, but these are beyond the discussion of this research work, hence they are not discussed here. The evolution of the traditional bill of lading has been subject to historical development over a period of centuries and, within the new transportation paradigms, at least one of these prime documents, that is, the traditional bill of lading, is under threat due to the introduction of containerisation on the one hand, and new electronic means of the communication of information with conclusion of contracts in place of the paper documentation on the other. Therefore, the central position of the bill of lading is under threat due to the absence of non-functional equality between the paper transaction and its representative electronic transaction for the endorsement of title and negotiability.

Traditionally, a bill of lading is considered as a document issued by, or on behalf of a carrier or master to a sender known as shipper or consigner, which covers the carriage of goods

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destined to an ultimate receiver known as consignee\textsuperscript{5} and it provides certain information in relation to the parties to the contract, details of the goods shipped and the party to whom it is due to be delivered, and the change of parties, if any.\textsuperscript{6} It further provides evidence to the contract of shipment by sea between the parties,\textsuperscript{7} acts as evidence of the receipt of the goods on the ship by the carrier and receipt by the final receiving party at the port of destination, etc.\textsuperscript{8}

In the court of law, a bill of lading is the primary document on which the court relies in its adjudication for rights and duties between the parties.\textsuperscript{9}

As observed earlier, with the advances in transportation methods, modes of communication and the introduction of electronic communication and record-keeping, there has been an upsurge in change over the last half-century. The business community has been quick to respond to all of these changes to promote their business, and hence there have also been advancements in business communication technology, shipping methods, intermodal shipments and manifold shipping volume over the last few decades and these have resulted in a completely new set of needs and requirements for stakeholders, which has demanded a revolution in the bill of lading, too.\textsuperscript{10} However, the body of law is still lagging behind in accepting these new realities and adapting itself accordingly. The business community has made some efforts, for example, the The Comité Maritime International (CMI), the Bolero Project, and others, to provide domestic answers to the queries raised within juristic circles on

\textsuperscript{5} Atlantic Mutual Insurance Co v CSX Lines, LLC, 432 F3d 428, 433 (2d Cir 2005).


\textsuperscript{8} Silver v Ocean Steamship Co Ltd [1930].


\textsuperscript{10} US Congress Office of Technology Assessment (n 2) 113.
the adoptability of electronic forms of bills of lading and Electronic Data Interchange (EDI) technology as a means of communicating information in most of the contracts and especially in the case of the negotiable electronic bill of lading.\textsuperscript{11}

Conversely, efforts have been made by international organisations and nongovernmental organisations to bring EDI into the legal framework, including the electronic bill of lading in which the Draft Convention on Carriage of Goods partially or wholly by the Sea, known as Rotterdam Rules, discuss besides many other national efforts in this regard. However, consensus and uniformity on this aspect is a dream yet to be realised. Some research has been conducted on the legal and business aspects of the transfer of the bill of lading to the new paradigm, and, despite different attempts from the business side, as aforementioned, there is no consensus among the business concerns from different parts of the world. Efforts made by numerous business concerns were seen by others as being unsatisfactory or were perceived as an attempt to control the business from one quarter by exerting control over the information.

Here is a situation where, on the one hand, the role of the glorious bill of lading as a paper document is cherished among the sea traders due to its versatility and acceptance in all quarters, including the financing sector, and on the other hand, where there are difficulties in devising a single legal framework for the use of an electronic bill of lading as the successor to its paper form. This research paper is an attempt to review the most valuable literature available in a historical perspective on the glory of the traditional bill of lading, its importance in the sea transportation business, the legal status of the electronic bill of lading, impediments in accepting the electronic bill of lading as a legal document in place of the paper bill of lading,

international and national legislative efforts to provide electronic bill of lading with legal status, business efforts to achieve the same, and, as a result of this whole discussion, to explore the concerns of the shipping industry itself in accepting and enforcing the electronic bill of lading in practice amid the technological changes occurring around the world. This paper furthers tries to cover the topic from both the historical and the future perspectives in areas that are relevant to commercial use of the bill of lading in the present age. Hence, there is a legal as well as an economic need to ascertain and take into consideration the perspectives of the real stakeholders of the legal regime. This research, therefore, focuses on the gap in the literature to fill the same. In this research work, the existing body of literature will be explored to identify these gaps and to establish that there is a need for a new legal framework to revitalise the bill of lading in electronic form.

B. Research Objectives:

This initial discussion leads towards the indication that there is a selective tendency to accept the electronic bill of lading by the business community and that efforts have been made to achieve a uniform legal regime for the same. These efforts have been applauded in most instances, but there remain differences in the approaches adopted in each case. These concerns have further led some nations to abstain from signing the Rotterdam Rules since 2008, the time this convention was made open for endorsement. Nevertheless, no effort, initiated by business or supported by international organisations, has so far been able to gather equivocal support from all quarters, nor has any single legal document been put forward as a solution to all the legal queries on the equality of the traditional bill of lading with the electronic bill of
lading. This indicates the scope for further research. Accordingly, in order to identify gaps and possible solutions to fill these gaps with the help of stakeholders, the following research objectives of this research work are:

1. To review if there is any need for the bill of lading in the present international trade system in the views of the stakeholders within sea transportation/trade or otherwise;

2. To present and evaluate the perspectives of the jurists and business community on the acceptability of the electronic bill of lading in place of the traditional bill of lading;

3. To review all the national and international legal regimes governing e-commerce and electronic bill of lading and to identify gaps in the present laws despite the evolutionary process from the perspective of marine transporters and shippers;

4. To investigate and evaluate business efforts to introduce and implement the electronic bill of lading and to identify gaps that have resulted in the failure of these business initiatives; and

5. To recommend future improvements and legislation.

C. Research Questions:

Based upon the research objectives and the initial identification of the researchable area, this research attempts to identify clear answers to the following academic queries:

a. What are the features of a traditional bill of lading and what are the legal and practical difficulties in replicating these functions in an electronic bill of lading?

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b. Have different business and legal efforts to find some agreed legal framework contributed positively in this aspect or not? If these efforts have remained as failures, completely or partially, what factors are responsible for their failures?

c. What are the concerns of the shipping industry about the introduction of the electronic bill of lading and have the concerns of business community been addressed in these efforts or not?

At the end of this research work, it is hoped that all these questions will be answered in a comprehensive and elaborative way.

D. Research Methodology:

In order to achieve comprehensive knowledge about the topic and to obtain the most robust answers to the research questions framed above, it is imperative to explore all possible databases covering the topic of the traditional bill of lading as well as the exact needs of the stakeholders of a bill of lading, both in the past and into the future, in the form of the electronic bill of lading. Furthermore, this quest is further focused on the areas related to the glory of this legal document in history, its present status in global sea trade, and the need for an electronic alternative that encompasses all possible courses of action. In order to do so, the selected research philosophy in this research is interpretive, as, contrary to positivistic philosophy, this research is inquisitive, based on the needs of stakeholder in sea trades, that is to say, merchants and shippers. In addition, this research examines the commercial regimes as well as the legal regimes governing the bill of lading, their national variations, concerns about different regimes, and efforts to address these issues. An investigation is made into the efforts already made and the possibilities of accelerating the acceptance of the electronic bill of lading in commercial and legal circles. The area of influence is both the civil and common law
countries, especially with the help of adjudicated cases in the UK and USA. In a nutshell, it may be said that the research methodology for this research work is predominately qualitative in nature. Conclusions drawn from this research work are based on the interpretations and inferences gleaned from this literature review.

E. Limitations:

The research methodology has already been defined as a qualitative review of the research material, however, it may be noted that a review of all the material available on the topic is not humanly possible within the given period of time and there is a limit to the material available for review. Focus is placed mainly on the recent developments more than on the older version of the research work to incorporate the most relevant and latest work on the topic, especially on the recently adjudicated cases in different courts of law. It is, however, not possible to cover all the legal adjudications, therefore, major jurisdictions are restricted to the UK and US whereas Scandinavian countries as representing advance business efforts and China, India and others representing developing nations. Scandinavian countries are used and discussed in view the practical utility of business models as discussed in chapter four unlike other parts of the world.

Similarly, the bill of lading is primarily a sea document and, therefore, the relevant mode of transport is by sea, covering all aspects of the bill of lading in sea transport as a limiting factor as opposed to air, road and multimodal modes of transportation. Another limitation on the discussion of the electronic bill of lading in the present age is the lack of scientific discussion in relation to the research topic. This aspect is touched on very briefly in this thesis, and only to the extent to which is required to advance the case for the electronic bill of lading. Because this discussion is limited to only those areas where it is completely necessary, the effect of this
limitation has been reduced by omitting unnecessary technical details and keeping the focus of the investigation on the relevant legal aspects of the issue. Most significantly, it is widely accepted that issues within any given legal system to highlight best practice and reveal valid insights about the effect of changes in legislation can only be examined using in-depth, qualitative methods.\textsuperscript{13} Therefore, the methods adopted here are the most appropriate in relation to the research questions. The perspectives of the shippers and carriers, that is to say, the stakeholders, in considering an agreement in a bill of lading in sea transportation, are again obtained from the earlier research works and inference is drawn while relying on the earlier findings. No method of primary data collection was chosen for this purpose, either qualitative or quantitative, and this might be considered a limitation, however, this has been overcome by conducting a robust and thorough exploration of existing sources. Moreover, different kinds of data from numerous were compared and corroborated in a form of triangulation to increase the validity of the findings and reduce the limitation of researcher bias.\textsuperscript{14}

\section*{F. Chapter Breakdown:}

This research work is primarily based on a review of the existing legal and business efforts to replace the traditional bill of lading with a technologically advanced and paperless bill of lading to keep pace with developments in the communication world. In order to address all the objectives and to answer all the research questions given above, the thesis is divided into the following functional units.

In chapter one of this thesis, a historical perspective of the bill of lading is discussed, emphasising on the role of the bill of lading in maritime trade over the last two centuries, its

\textsuperscript{13} P Cane and H Kritzer (eds) \textit{The Oxford Handbook of Empirical Legal Research} (Oxford University Press 2010).

\textsuperscript{14} G Shaffer and T Ginsburg, ‘The Empirical Turn in International Legal Scholarship’ (2012) 106 AJIL 1, 1.
evolution over this period of time, and its nature as a principal sea trade document. Various forms of traditional bills of lading are discussed in order to develop an understanding of this business document.

Chapter two is dedicated to explaining the prime features that have made this document the jewel in the crown of maritime documents. This discussion is made from a legal as well as a business perspective where all its functions are discussed in contrast to sea waybills and other sea trade documents. This analysis is aimed at helping the further investigation into the replication of these functions in electronic format. Furthermore, this comparison will help the reader to understand the importance of this document. This chapter also redefines the need for an electronic regime in the present age and its relationship with the electronic bill of lading. This chapter also discusses the aspect of whether the bill of lading is dispensable at this point in time or if there is a genuine need to keep this legal document alive for the good of maritime business.

Chapter three leads on to the functional area where problems related to the electronic bill of lading are discussed. These problem areas include definitional issues and aspects of recognition. In the same chapter, the various international and national regimes are discussed; those which govern the bill of lading and which have identified their specific support for the use of the electronic bill of lading in future. This discussion covers all the three regimes of the Hague-Visby, Hamburg Rules, and the Draft Convention on Carriage of Goods through Sea, wholly or partially. On the national side, this chapter covers national legislation of the USA, UK, Australia, and India, among others.
Chapter four is about the perceptions of shippers about the electronic bill of lading and efforts made by business groups on their own to establish systems in this regard. The main features and reasons for the failure of these efforts are discussed in full. These efforts are also analysed from a juristic point of view wherever possible. In this chapter most of the attempts made by the business community and the international organisations to introduce and promote the electronic bill of lading that have been of significant importance will be covered, as well as most of the technical and legal aspects relating to this topic.

Chapter five of this thesis compares and contrasts the features of the traditional bill of lading with the prevailing concept of an electronic bill of lading in order to identify bottom-line issues and hurdles in the acceptance of the electronic format within judicial circles. This chapter also tries to present an overview of electronic communication rules to reconcile the above-mentioned problems and to identify gaps in the debate.

The final chapter provides a conclusion to the whole effort made in this thesis and sums up the findings of this research. Furthermore, in order to explore the possibilities to resolve legal hurdles and to facilitate discussion among trade partners in the UK and around the globe, suggestions and recommendations have also been made.
Development of the bill of lading in the ocean trade has a history going back centuries, but its adoption has solely depended upon the convenience of this document.\textsuperscript{15} Commercial traders have upheld confidence in this document for the last three centuries and this confidence certainly has many historical perspectives to trace. Traders and shippers initially started to use this document as proof of receipt, but its convenience, efficiency of time and ease of use are the factors which elevated this document to the level of a document of title.\textsuperscript{16} Legal development followed these mercantile practices and, in order to give legal effect to these practices, the Bill of Lading Act, 1855 was introduced, which established legal basis for the rights of the endorsee in case of negotiation on the bill of lading.\textsuperscript{17} This Act was, however, repealed and presently the Carriage of Goods by Sea Act (UK), 1992 holds ground in addressing most of the issues pertaining to sea trade and the bill of lading in the UK.\textsuperscript{18} Similarly, the evolution of legal wisdom in the USA has also been observed. The USA remains a Hague country and has its own legal rules to deal with matters pertaining to the bill of lading, including COGSA (USA), 1999.\textsuperscript{19} In this part of this work, before moving to the functional element of the ocean bill of lading or its electronic form, a review of its importance through a historical perspective is made. The questions as to why there is a need for change in its existing format are also raised at the same time to form the base and structure of ensuing chapters.

\textsuperscript{15} WP Bennett, \textit{The History and Present Position of the Bill of Lading as a Document of Title to Goods} (Cambridge University Press 1914) 1–276.
\textsuperscript{16} Sanders \textit{v Mclean & Co} (1883) 11QBD 327.
\textsuperscript{17} GH Treitel, ‘Bill of lading and third parties’ [1982] LMCLQ 294.
\textsuperscript{18} Carriage of Goods Act, 1992 (UK).
\textsuperscript{19} Carriage of Goods Act, 1999 (USA).
1.1 Bill of lading—Definitions:

In the commercial world, the bill of lading is known by different names within the various national jurisdictions. It may be described in Spanish as \textit{conocimiento de embarque}, in Italian as \textit{polizza di carico}, and \textit{connaissement} in French, but the features and functions of this traditional document are the same for the commercial world and convey the same legal meanings to the jurists, that is to say, \textit{a document evidencing loading of goods at ship}.\footnote{AW Knauth, \textit{The American Law of Ocean Bills of Lading} (4\textsuperscript{th} edn American Maritime Cases 1953) 115–116.}

However, the proper definition of a bill of lading has a much broader picture than that. The bill of lading may be defined as \textit{a receipt signed by or on behalf of the carrier and issued to the shipper acknowledging that goods, as described in it, have been shipped in a particular vessel to a specified destination or have been received in the ship-owner’s custody for shipment}.\footnote{UNCTAD, \textit{Bill of Lading: Report by Secretariat of UNCTAD} (United Nations Publications 1971) 5.} It may also be described as a document in triplicate,\footnote{Rose Buhlig, \textit{Business English: A Practice Book} (Library of Alexandra, Business and Economics, 2009) 270.} issued by or on behalf of the carrier or master to the shipper or consignee with the identification of goods and the receiver at the destination.\footnote{Atlantic Mutual Insurance Co v CSX Lines (n 5).} These definitions reproduced above are merely indicative, as this research shows, as much broader or more moderate definitions that prevail in other parts of the trade world may also be considered in relevant situations.

1.2 Historical Perspective of the Bill of Lading:

The bill of lading is an important document in the sea trade, both from the commercial as well as the legal aspect of the term. As a commercial document, its importance is evident from the level of reliance on this document during last two centuries as a document containing the details of the goods shipped and the information about the shipper and carrier as well as the
receiver of the goods so shipped. In the earliest societies there was no concept of documentation of goods shipped on the vessel; rather, it has been found that merchants either owned the vessels themselves or they accompanied the goods until sold at the destination.\textsuperscript{24} Ships were bound with the goods and the unsold goods were brought back on the same vessel. Close control of vessels by merchants did not necessitate the need for documentation, but once their routes were extended, it was not practically possible for the merchant to remain physically present on each voyage. This brought about the separation of mercantile from carrier services.\textsuperscript{25}

It is also well founded that, in the period prior to the introduction of documented trade until the fourteenth century, business was carried out on the basis of trust and was verbal in nature, but the growth of business practice itself became the impetus for the documentation of transactions to avoid complication in legal terms. In this era, the customary base of transaction was based on the principle of \textit{Lex Mercatoria}, a body of customs and trading principles used by merchants and traders from time immemorial on the European and neighbouring routes.\textsuperscript{26} It is for the same reason that the record of trials on sea trade for this period is not available.\textsuperscript{27} \textit{Lex Mercatoria} was applicable to all merchants by virtue of their status as merchants, although it was not recognised by any forum at the start. However, with the passage of time, the practice obtained the approval of the trade community and these rules were recognised and compiled into a body of law and the disputes with reference to this body of law had been referred to in special merchant courts. This has further led to the development of another source of law in

\begin{flushright}
\textsuperscript{25} ibid.
\textsuperscript{27} Bennett (n 15) 22–34.
\end{flushright}
the form of case law that was more formal and recognised more fully than the mere customs of the trade.  

This body of the law was considered as the proper law by Sir John Davies and Sir William Blackstone in their respective eras.

There are precisely three more major sources to trace the origin and historical importance of the bill of lading besides mercantile customs. Although the era credited with having the earliest bill of lading was devoid of firm legislative bodies in Europe, the earliest statute that has evidence of the suggestion of being a bill of lading can be traced back to the eleventh century, the *Ordonnance Maritime of Trani* from Italy in 1063, and this legal document necessitated the maintenance of a register of records by a clerk working under the master of the ship to record the goods loaded on the ship with all entries in that register of records to be made in the presence of the master and witnesses. This register of record or, as somewhere coined, *book* of lading, resulted in the evolution of the bill of lading. In the case of this book of lading, the shipper was entitled to have a copy of the register. This legal document helped the researcher to establish the extent of a mercantile practice that may have resulted in the evolution of the traditional bill over a period of time. Some other contracts of a later era required a formal act as the acknowledgment of the contract of carriage rather than simply obtaining it in writing, such as the Swedish Statute of 1254, which required the presence of councillors as witnesses of a contract of carriage. Some other statutes demanded that the parties shared a drink together as a token of faith and friendship at the time of conclusion of

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29 Davies (1656) *The Question Concerning Impositions*, 10, quoted in Trakman (n 28); and BI Comm (1765) Vol I 273.  
30 Mitchell (n 4) 1; see also CB McLaughlin, ‘The Evolution of the Ocean Bill of Lading’ (1925) 35 Yale LJ 550.  
31 Bennett (n 15) 66–100.
the contract at the port. Freight issues were also discussed in these statutes.\textsuperscript{32} Strangely, the Hanseatic Law of 1369 did not recognise the need for a written receipt prior to the shipment of goods, but it did require that a carrier should bring back a written delivery letter from the consignee to confirm that all the goods had been received with fitness. Mention of the bill of lading is not found in either the Rolls of *Oleron* or the *Lubeck* statutes.\textsuperscript{33} Some of the researchers have considered the Hanseatic Law of 1591 as the first proper law mentioning the term ‘bill of lading’ and this might be an indication that this document has its original origin in the southern part of Europe.\textsuperscript{34} Major legislations that have mentioned the bill of lading are from the 19\textsuperscript{th} and 20\textsuperscript{th} centuries, after the rise of certain nation states, such as the Factors Act 1889, and the Carriage of Goods by Sea Acts 1971 and 1992, in the case of the UK.\textsuperscript{35}

The other source is the case law that developed the bill of lading in the sea trade. There were special mercantile courts established in England to decide the disputes of merchants both local and from other parts of the world by the 12\textsuperscript{th} century. However, due to the absence of any written record from that era, practices prior to the mid-15\textsuperscript{th} century are out of focus. The records of the English Admiralty Court date back to 1538 when there is mention of a bill of lading and this shows that this legal document was in use much prior to that time and the later decisions of this Court further developed it into its present-day form.\textsuperscript{36}

The other source that informs the researcher about the nature and form of early bills of lading are the bills of lading themselves. The oldest surviving bill of lading is said to be from the 14\textsuperscript{th}

\textsuperscript{33} ibid, 20–21.
\textsuperscript{34} L Goldschmidt (1868) *Handbuch des Handelsrechts [Handbook of Commercial Law]* (Vol 1 Part 2, Verlag Enke 1868).
\textsuperscript{36} ibid; also refer to Bennett (n 15).
century and these early bills indicate the strong receipt function of this document. In the 14th century, in some of the nation states the practice of keeping the ship’s register on the ship was to ensure that the details of the goods on the ship were accurate.\textsuperscript{37} It was at this time that a basic version of the bill of lading was introduced with the function of providing proof of receipt without attending to transferability.\textsuperscript{38} The first recorded evidence of the bill of lading can be traced back to a 15th century transaction of wheat transported to Alexandria, Egypt, where the trade document carried most of the features of present day bills of lading, that is to say their receipt function, details of goods shipped and a promise on the part of the carrier to carry and deliver the goods to the agreed destination.\textsuperscript{39} Within a short span of time, this document was acknowledged to be one beyond a mere receipt in the legal arena.\textsuperscript{40}

Later examples and records of bills of lading have been preserved to some extent, especially those dated 1600 onwards.\textsuperscript{41} On the basis of the records, it was opined by Kozolchyk and Malynes that these bills were mere appendages of the charter-party and they found that bills of lading served the purpose of declaration of nature, quantity and quality of the goods loaded on the ship, including the conditions on which the goods were required to be delivered at the port of dispatch.\textsuperscript{42} In any case, these records are proof of the existence of a bill having the function of serving as a receipt.\textsuperscript{43}

\textsuperscript{37} McLaughlin (n 30) 550.
\textsuperscript{38} MD Bools, \textit{The Bill of Lading as a Document of Title to Goods: An Anglo-American Comparison} (LLP 1997) 4.
\textsuperscript{40} Sanders v Maclean & Co (1883) (n 16).
\textsuperscript{41} Bennett (n 15).
\textsuperscript{43} ibid, 136.
The historical perspective of the bill of lading is its negotiability. According to some legal jurists, transferability or negotiability of this document has its roots in the 1793 decision of the House of Lords which changed its perception,\(^{44}\) either by the establishing the principle of delivery against surrender of the document,\(^{45}\) or creating the norm of transferring the property through endorsement, in which it is the underlying transaction that transfers the property.\(^{46}\) However, prior to the 19\(^{1}\)th century, this paper was no more than the receipt of the goods and evidence of the contract of carriage of goods between the shipper and the carrier. By the middle of the 19\(^{1}\)th century, however, the European merchants introduced the endorsement function to this bill of lading as practice and it was soon adopted by the European Commercial Code. This function segregated it from the other shipping documents and merchantability of goods in transit was made possible by endorsement or delivery, conveying to the assignee thereof the rights as well as the obligation of the assignor. In the courts, the carrier of this document was considered as the due owner of the goods in his name, hence the bill of lading was considered as the document of title for all practical purposes.\(^{47}\)

The adopting of this Code provided all the features of a negotiable document to the bill of lading which instilled the confidence of the banking sector and a bill of lading was then accepted as security against the loans of the merchant. The holder of the bill, in good faith, carries the goods title against all others which assured the legal recourse of the bank and the holders against carriers in case of any discrepancy in goods at the time of delivery. The introduction of the bill of lading had further improved the modes of transaction and reliance

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\(^{44}\) *Lickbarrow v Mason* [1794] 5 TR 685.  
\(^{45}\) K Grönfors (n 39) 10.  
\(^{46}\) Bools (n 38) 19.  
\(^{47}\) GH Treitel, TG Carver, FMB Reynolds, *Carver on Bills of Lading*, (Sweet & Maxwell 2011) 23–89.
on the bill for the determination of rights and liabilities of the parties. Prior to the bill of lading, the contract of carriage was the exclusive proof of rights and liabilities of the parties and, in such a case, the rights and liabilities of the endorsee were to be determined by the contract itself on the basis of the principle of nemo dat quod non habet in the English jurisdiction.

The bill of lading was considered to be a fair document of title and this position was thus acknowledged in the aforesaid national and international treaties. This fairness of title attached to this document promoted its acceptance in banking transactions as collateral and was equated with other negotiable banking documents for the purposes of loans and guarantees. On the whole, in that period of time, this document provided a wholesome package for the needs of the shippers in providing the option to transport their goods by sea as well as for meeting the banking requirements.

The role of the bill of lading, however, is being redefined in the recent past due to changes in the modes of transportation in addition to lagging behind in adopting the advanced modes of communication with their desired characteristics. In the last few decades, the need for a paper bill of lading has been reduced as shipments have become more complex and rapid than ever before. Shippers are facing problems in the effectiveness of paper bills of lading in the case of cargo shipment, while the banks are not comfortable with accepting a mere clean bill of lading as collateral for the issuance of credit as they require in addition the cargo receipts of freight forwarders in addition to waybills to accept requests for loans. In the absence of an acceptable form of electronic bill of lading, it is no more accepted as a document of title or

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48 Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 163, 177.
49 ibid 163, 177.
50 ibid 163.
negotiable instrument and, in the absence of these functions, sea waybills in electronic format are more acceptable on the same footing. In the electronic sea waybill, the shipper has the right to change his instructions as to who is entitled to receive the goods at any time up until delivery. ⁵¹

Prior to the introduction of a paper bill of lading, the owner/shipper accompanied the goods shipped to acknowledge the receiver and to hand over the goods in person at the destination. The increasing pace of business necessitated the introduction of a paper containing the details of the shipment to be issued to the carrier to ensure the delivery of correct quantity and quality of the goods. However, it was also introduced to acknowledge receipt of the cargo with summary details of the terms of the contract of carriage. This practice was improved over a period of time and with the advancement of transport facilities and a copy was introduced to send to the receiver prior to the shipment reaching the port of destination. At this point in time, with the increased capacity for freight on the ships, the role of the ship’s register was reduced and the inclusion of freight contract details was popularised, which led to the enhancement of the evidence function of the bill of lading in the coming decades. ⁵²

1.3 Birthplace of the Bill of Lading:

Although the bill of lading was not the first document introduced to record transactions between a shipper and the carrier, it is still one of the most important documents developed in the medieval history era prior to the 16th century. There are some divergent views about the birthplace of the bill of lading. According to one source, the first recorded history of a bill of

⁵² Bools (n 38) 14.
lading dates back to the 16th century in England.53 According to another view, it was Italy where this document originated.54 Researchers have attempted to find a link between the trade practices and the sea trade development between the 12th and 17th centuries. The development of the societas arrangement under the Roman Empire in Italy is as old as the 11th century.55 This arrangement for trade loans was soon extended to Constantinople in the 12th century. That development led to the strengthening of ship ownership and, by the 15th century, Italy was the only place where private persons could own ships for that purpose.56 Furthermore, Roman law travelled from Rome to Italy where it flourished.57 These arguments, when read alongside the arguments made in the earlier section indicating the statutes of Italy, reinforce the argument that Italy is the most probable place where the bill of lading originated.

1.4 Straight Bill of Lading versus Sea Waybill:

The functions and the importance of negotiability in the bill of lading are discussed in later chapters; however, there are non-negotiable bills of lading which are considered closely resemble the sea waybills. At this stage a short review of non-negotiable bills of lading along with the sea waybill is required prior to looking at the different forms of bills of lading. This comparison is also intended to test the perception that the sea waybill is a substitute for the bill of lading in electronic form, excluding its negotiability.

Scholars have equated both the straight bill of lading and sea waybills as documents that make the goods deliverable to a named consignee and that either contain no words implying

53 ibid.
54 Polak (n 32) 17.
57 ibid.
transferability or contain words relating to negative transferability.\textsuperscript{58} But the features and the position of these two documents are not aligned. The bill of lading and sea waybill are similar in terms of their function as to the receipt of goods and are used to identify the goods cargo. However, different legal documents deal with these issues differently. None of the regimes covering the bill of lading also cover the sea waybill as their jurisdiction covers only document of titles. The Hague-Visby Rules are applicable to the document of title only.\textsuperscript{59} Although in some cases, commentators such as Tetley had advocated for the covering of sea waybills and all other non-negotiable bill under the Hague-Visby Rules, the majority overruled this opinion.\textsuperscript{60} It was opined that these rules are not applicable to sea waybills unless clearly mentioned and even today, sea waybills are not covered under these rules.\textsuperscript{61} CMI Uniform Rules for Sea Waybills, 1990 are, however, applicable to the sea waybills as independent rules provide for their applicability.\textsuperscript{62} Therefore, it is clearly established that both documents have their independent regimes of rules and the electronic format of each requires consideration of e-applicability of these different rules.

A straight bill or non-transferable bill of lading is a traditional bill without mentioning of the words \textit{to the order} and hence restrains its transferability during transit. These bills were popular at the time when goods were not often accompanied by the consignee on the ship and there was hardly any need for transferability due to major risks on the sea voyage. It was introduced as the promise by the carrier to the sender to consign the goods to the consignee as

\textsuperscript{58} AG Guest, \textit{Benjamin’s Sale of Goods} (5\textsuperscript{th} edn Sweet & Maxwell 1997) 18.
\textsuperscript{59} The Hague-Visby Rules 1968, art 1(b).
\textsuperscript{60} CM Schmitthoff, \textit{The Unification of the Law of International Trade} (Akademiförlaget-Gumperts, Scandinavian University Books 1968) 105.
\textsuperscript{62} CMI Uniform Rules for Sea Waybills, 1990, rule 1(i).
per the terms mentioned in that document.\textsuperscript{63} Therefore, all of the sea documents that appeared in the 15\textsuperscript{th} and 16\textsuperscript{th} centuries were non-transferable.\textsuperscript{64} On the other hand, the sea waybill is a later entry into the transaction and it was developed in the 17\textsuperscript{th} and 18\textsuperscript{th} centuries as the information was then sent from the sender to the receiver without involving the carrier,\textsuperscript{65} and was modelled on the other waybills prevailing in land transportation.

A major difference between the two documents is the promise made therein. In the case of sea waybills, there is no promise on the part of the carrier due to issuance of that note and hence no legal liability arises, whereas in the case of the bill of lading, it does function as a contractual document, an element that is discussed further in later chapters. The other difference is the requirement to produce the bill of lading when taking consignment from the carrier, who is liable to provide that counterpart bill of lading on the return journey if so required. The carrier is not duly bound to handover the goods without production of that document. But in the case of the sea waybill, the production of the document is not required and the carrier is allowed to hand over possession to the named consignee on production of proper identification.\textsuperscript{66} On the point of the contractual value of the bill of lading, the main discussion will take place in chapter two, however, it may be noted here that from the point of view of the majority, it acts as evidence of the contract between the carrier and the shipper, but in the view of the minority, it is interpreted as the contract itself.\textsuperscript{67} No such question is ever

\textsuperscript{63} K Grönfors, Cargo Key Receipt and Transport Document Replacement (Akademiforlaget 1982) 52.
\textsuperscript{64} ibid.
\textsuperscript{65} ibid.
\textsuperscript{66} N Palmer and E McKendrick (eds), Interests in Goods (2\textsuperscript{nd} edn LLP 1998) 560.
\textsuperscript{67} Detailed discussion is made in this regard in chapter two.
raised in terms of the sea waybill and it is never reputed to be a legal contract creating legal obligations between the parties.68

The other question is the element of constructive possession under these respective bills.69 In the case of the sea waybill, the chances of attornment or the transfer of constructive possession of the goods in transit is not acknowledged by scholars due to an absence of the condition of presentation and surrender of sea waybill at the time of taking delivery at the port of discharge.70 However, without entering into attornment or negotiability, the shipper of the goods in the case of a non-negotiable bill of lading can claim possession during transit due to the condition of presentation and surrender of the bill of lading at the time of delivery of the goods.71

1.5 Types of Bill of Lading:

The bill of lading, as a document, does not take a standard form across the globe but it does have local and functional variations from place to place on the basis of negotiability and the nature of the parties involved in the transaction. In order to fully understand the functions, characteristics and importance of this legal document, an investigation into its different prevalent forms will not be out of place. This understanding is important so that the conversion of all these elements in the electronic format may be brought into reality. It may be mentioned that there is no single agreed list of bills of lading across the globe, but there are regional and local variations in the names and the characteristics of these bills of lading. It

68 D Yates, Contracts for the Carriage of Goods by Land, Sea and Air (Lloyd’s of London Press 1993) 1.7.1.1, except Tetley had argued for its contractual position but that opinion has not found to be appreciated elsewhere.
70 Palmer and McKendrick (n 66) 554–560.
71 Palmer and McKendrick (n 66) 561.
may, however, be noted that from that long list of the types of different forms of bill of lading prevailing in the sea transportation trade, those discussed above are the main forms selected for the purpose of this research on the basis of either the presence or absence of transferability function therein. The discussion will attempt to focus on the major characteristics as per the generally agreed practice in most parts of the world. A general discussion on the types of bills of lading will be made under the following headings:

1.5.1 **Straight or “Non-negotiable” Bill of Lading:**

A straight bill of lading is non-transferable or non-negotiable and hence it is not found to be included in the definition of the bill of lading provided in the Article 1(7) of the Hamburg Rules. A straight bill of lading is, however, defined under the Act of 1916 as, *a bill in which goods are consigned or destined to a specified person named under the bill.* In the popular sense, a straight bill of lading is where goods listed on the bill are deliverable to a named consignee, irrespective of any non-indication of transferability by the mention of words such as “to order” or “assign of the consignee” or the mention of “non-transferable” or “non-negotiable” on the face of the bill. In this present scenario, goods are deliverable to the consignee named on the bill and no one else, either by negotiation or endorsement (negotiation). It may, however, be added that the shipper may retain the right to redirect the goods on vessel to any other vessel in this non-negotiable document. It gives the impression of possessory rights of the shipper over the goods through constructive possession of the

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73 Section 2, Federal Bill of Lading Act, 1916, USA.
74 *JJ MacWilliam Co Inc v Mediterranean Shipping Co SA* [2005] UKHL II.
77 *The Refaela* 5 [2003] EWCA Cir 556 at 560.
78 ibid.
goods in transit. This non-order bill of lading or straight bill of lading does not provide for the transfer of rights to the goods in transit or negotiability, but instead, at least for one time, this document allows for the transfer of right to a person who ought to present the bill to take the delivery. This person may be the same as the shipper but it may also be a third person. In this way, the constructive possession of the goods under a non-order bill has been found to be established by some scholars; however, with the difference that the shipper has no right to transfer this constructive possession more than once except on the occasion when he claims delivery at the port of destination.

In the UK, unlike any other form of bill of lading, such as the order bill which can be transferred by endorsement and delivery or the bearer or the blank bill that may be transferred by mere delivery and containing no name of the consignee, a straight bill of lading cannot be transferred by any of the above mentioned methods. Commercial practice endorses this position on the straight bill of lading. A straight bill of lading contains a clear name of the consignee which in itself indicates that the intention of the issuer is to restrict its transferability by way of endorsement or by the order of the consignee for which other types of bill may be preferred. The carrier in his own position is under no obligation to deliver goods on the order or endorsement of a straight bill of lading. This characteristic establishes the main characteristics of this form of bill of lading, which provides evidence of the promise of the carrier to deliver goods to the named consignee only. Furthermore, the straight bill of lading is not a document of title in the absence of its negotiability function. The practice of issuing

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79 Bools (n 38) 168–169.
80 ibid.
81 ibid.
83 ibid.
84 East West Corp v DKBS 1912 AF A/S [2002] EWCA Civ 83.
a straight bill of lading has been, however, discontinued for a long period of time considering that it is outdated in the present day trade practices and, mostly, only negotiable bills of lading are being issued in contemporary trade circles.\textsuperscript{85}

1.5.2 Order Bill of Lading:

Unlike the straight bill of lading, an order bill of lading is a negotiable document which includes the stipulation to deliver goods in transit to the order of a specified person upon reaching the port of destination or their assigned representative.\textsuperscript{86} This person specified on the face of the bill is usually, though not necessarily, the shipper himself, who endorses the bill in favour of the buyer once the payment against the contract of sale is secured.\textsuperscript{87} The stipulation as to the order of the specified person provides flexibility as to the transfer of the document of title to the other person upon endorsement, either in full or in blank, to keep the transferability restricted or open in future.\textsuperscript{88} However, all the parties, from shipper to the last endorsee and the carrier to any other assignee under him, have to rely on the conditions provided in the bill of lading, especially for the correctness of the quantity of the goods, dates of shipment and delivery, and the order of negotiability. Blank endorsement entitles the holder of the document to claim the goods on the same legal statute as that of the bearer bill in the banking sector.\textsuperscript{89} However, in some parts of the ocean trade world, the issuance of an order bill of lading is still discouraged to protect the carrier from uncertainties. In Latin America, it is still required that the receiver must be certain and known to the carrier beforehand.\textsuperscript{90}

\begin{thebibliography}{9}
\bibitem{85} Treitel et al (n 47) 23–89.
\bibitem{86} Section 3, Federal Bill of Lading Act, 1916 USA.
\bibitem{87} Williams (n 3) 581.
\bibitem{88} Williams (n 3) 582-585.
\bibitem{89} HA Giermann, \textit{The Evidentiary Value of Bill of Lading and Estoppel} (Lit Verlag Münster 2004) 16–17.
\end{thebibliography}
1.5.3 Blank or Bearer Bill of Lading:

As the name suggests, a blank or bearer bill of lading is blank and the goods are deliverable to the bearer of the bill. Such type of bill is issued without any mentioning of the name of the receiver and the carrier is subsequently bound to deliver the goods to the holder of the bill or the endorsee in name. This indicates that such a bill may change hands without any endorsement or may be endorsed in ink if the endorsee so desires. In both situations, the original bill, a copy of which is made available to the carrier of the goods, will remain blank and therefore a bearer document. On the face of the bill, there is an explicit mentioning of the words ‘to bearer of the document’ without mentioning any name or the words ‘as to the order thereof’. However, on the other hand, this document is a document of title as established in the legal judgements and practices of the trade. The bill of lading is thus the evidence of the transfer of title it is holding. The ease of employing this document for the shipper has popularised this document among the shippers but not among the carrier or cargo handlers due to uncertainty, although a carrier will be absolved of his responsibilities once the goods are delivered to a bona fide holder of the documents on the same analogy of the blank or bearer cheque in the banking sector.

1.5.4 Clean or Claused Bill of Lading:

The features of a bill of lading are discussed in detail elsewhere in this thesis to show that a bill of lading acts as evidence of the contract for the delivery of the goods and contains all necessary information such as the quality, quantity, description and condition of the goods.

92 Adesanya v Leigh Hoegh & Co 1968 1 All NLR 333, 340.
93 NNSL v Owners of MV Albion 13 NSC 200, 206.
94 TE Scrutton, Charter-parties and Bills of Lading, 18th edn (Sweet & Maxwell, 2008) 181.
shipped, along with information about the receiver and the port of destination.\textsuperscript{95} In this way, this piece of paper retains a lot of importance as the paper defines the terms and conditions of the contract and, in case of any breach of rights and duties, this will only be referred to in the court of law.\textsuperscript{96} Similarly, the bill of lading also performs some banking function where the shipper secures credit against the goods shipped on the vessel from a commercial bank. This feature adds to the importance of the document and requires that a bill of lading must be free from all charges and defects.\textsuperscript{97}

Keeping in view the condition of the goods shipped, there are two major types of bill of lading. If, at the time of shipping the goods on the vessel, the goods are properly packed and the clerk of the vessel is satisfied with the condition of the goods, he is required to issue a clean bill of lading in favour of the shipper. This physical inspection ensures that the goods are free from physical defects.\textsuperscript{98} Similarly, the documents accompanying the goods must also be examined at this point to ensure that the goods are free from any charge, such as a lien or bail upon them. If all these conditions are satisfied, the issued bill will be clean in all respect.\textsuperscript{99} This provides the shipper with an opportunity to sell the goods in transit and this clean bill provides security to the buyer as to the condition of the merchandise. Furthermore, the banks will only consider

\begin{flushright}
\textsuperscript{96} ibid.
\textsuperscript{97} R M Mulligan, ‘EDI in Foreign Trade: A Perspective on Change and International Harmonization’ (1999) 12 Logistics Information Management 4.
\textsuperscript{98} McDowell and Gibbs (n 90) 16-17.
\end{flushright}
a clean bill of lading for credit purposes. Absence of any observation gives rise to the presumption of a clean bill of lading for all legal purposes as well as for weight and quality.

On the other hand, if, during inspection, the goods are not found to be properly packed or the condition of the goods is contrary to the documents presented, the clerk of the vessel may record the present condition on the back of all original copies of the bill as ‘claused’. The operator of the vessel may insist on proper packing or restoration of the condition of the goods if so required, but if the shipper insists on the shipment as is, every observation of the vessel owner or operator/carrier will be noted as a separate clause. However, any unqualified statement as to the condition of the goods is not considered as a clause for a bill of lading in common law.

1.5.5 Through Bill of Lading:

A through bill of lading is a comprehensive bill covering more than one stage and sometimes more than one mode of transportation involved in the carriage of goods, including sea as the main mode of transportation. However, a through bill of lading is different from a combined bill of lading where two or more carriers agree to transport the goods via different modes of transportation, whereas in the case of a through bill of lading, it might be a single mode of transportation to be carried out by two or more different carriers/subcarriers. A through bill, however, issued to the shipper, is negotiable as a whole and not in part and is accepted as a document of title.

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100 ibid.  
101 Edward G Hinkelman, A Short Course in International Trade Documentation (3rd edn Atlantic Publishers and Distributors 2009) 41.  
102 McDowell and Gibbs (n 90) 16–17.  
103 Silver v Ocean Steamship Co Ltd [1930] (n 8).
1.5.6  Feeder/Cover bill of Lading:

With the advancement of the cargo industry, new innovations have emerged. Cargo handling is more than mere shipping and, therefore, the nature of contracts involved has also been transformed and sub-contracts are in practice to transport goods from one port to the other to promote smooth transactions.\(^\text{104}\) This change has also impacted upon the nature of the bill of lading. A bill of lading is a contract, a private arrangement between the shipper and the carrier to transport the goods under contract. The liabilities are confined to the parties to the contract in terms of the contract laws in both civil and common law regimes.\(^\text{105,106}\) This same principle is applicable to the contract of the carriage of goods by sea. In practice, the shipments change hands during a voyage on the basis of subcontracts.\(^\text{107}\) These procedures have introduced a modified bill of lading known as the feeder bill of lading in which cargo owners are considered as the parties to the contract due to the reason that carriers under contract with shipping agencies, as per shipping line contracts of ships, are under subcontract to the carriers.\(^\text{108}\) A feeder bill of lading is a document indicating upon contract where the acceptability of benefits to all parties is established while creating an exception to the principle of privity of the contract discussed above. This exception has gained acceptance in the common law decisions and practice.\(^\text{109}\) It was further observed that a subcontractor is not a party to the contract but once the responsibility is accepted on behalf of one party of the contract for price, the responsibilities of that party are assumed legally and the other parties are eligible to sue against him as a bailee for reward. As a bailee, a subcontractor is considered


\(^{105}\) *Couls v Bagot’s Executor & Trustee Co Ltd* (1967) 119 CLR 460, 478.

\(^{106}\) Pejovic, ‘Documents of Title in Carriage of Goods By Sea: Present Status and Possible Future Directions’ (n 6) 461–467.


\(^{109}\) ibid.
to be in the shoes of the carrier and is responsible for taking all necessary care of the goods under his bailment.\textsuperscript{110} A feeder bill is issued by a subcontractor/sub-carrier to the main carrier or ship operator under a combined or through bill of lading covering the part of transportation to be done by that sub-carrier. These bills are generally concerned with the relationship of two types of carriers and do not affect the relationship of a shipper with a sub-carrier. Hence, the feeder bill may be considered as an independent section under the through bill of lading. A feeder bill of lading does not carry all the features of a traditional bill of lading, including negotiability. It performs an evidence function, acts as receipt for the goods between the sub-carrier and the main carrier; however, it is admissible in the court of law for establishment of rights and duties.\textsuperscript{111}

1.6 Reasons for Changing Nature of Bill of Lading over Time:

The change of attitude in the shipping world and banking sector is neither spontaneous nor without reasons. These reasons are required to be discussed individually to understand the shortfalls of the present-day bill of lading in order to move forward to equip the electronic bill of lading with all the necessary characteristics that are required under the present-day shipping regime.

a) The prime reason perhaps is the slowness of the traditional bill of lading in the fast-paced global world. There could be a number of reasons for delays at the port of destination. One is the speed of the carriers which is swifter than the communication of the bill of lading after completion of all its legal formalities. Furthermore, if financial transactions and banks are involved as the guarantor of the transaction, there may be

\textsuperscript{110} New Zealand Shipping Co Ltd v AM Pioneer Container [1994] 2 AC 324.
\textsuperscript{111} Mahkutai (n 108).
banks involved in the case of negotiability of the bill. In such a case, the production of
the original bill of lading would not be possible for want of financial clearance of the
bill.\textsuperscript{112}

On the part of carrier, if the original copy of a bill of lading is not available, the
buyer/receiver is forced to claim the goods without a valid bill of lading, hence putting
the carrier under liability;\textsuperscript{113} if he delivers the goods without the proper bill, he is liable
on both the accounts, of both tort as well as breach of contract.\textsuperscript{114} The carrier and the
cargo handler are at risk and often, in order to avoid delays in their travel, they are
forced to deliver the goods against the issuance of a bond of indemnity by the claimant
to indemnify the carrier in case of any occurrence of loss due to this delivery. This
process is very much evident in the case of cargo delivery of oil and wheat where the
practice to deliver goods against a letter of indemnity has been established to avoid
delays in travel.\textsuperscript{115} This introduction of the letter of indemnity may be introduced at the
time of drafting the bill of lading for a charter-party or in case it was not introduced
earlier and it is evident that the original bill of lading will not arrive in time and that
may result in the delay of the cargo.\textsuperscript{116} This poses two risks for the carrier.\textsuperscript{117} One is
the non-enforceability of indemnity in certain jurisdictions and the other is the lengthy
proceeding and ship arrest in case of application from a holder in due course.\textsuperscript{118} This

\begin{itemize}
\item \textsuperscript{112} A Mugasha, \textit{The Law of Letters of Credit and Bank Guarantees} (Federation Press 2003) 195–198.
\item \textsuperscript{113} Sucre Export SA v Northern River Shipping Ltd (The Sormovskiy 3068) [1994] 2 Lloyd’s Rep 266, esp 272.
\item \textsuperscript{114} Sze Hai Tong Bank v Rambler Cycle Co [1959] AC 576, 586; it was held that in absence of a legally valid bill,
the carrier is responsible for any loss to the shipper; \textit{Voss v APL Co Pte Ltd} [2002] 2 Lloyd’s Rep 707 (CA Sing).
\item \textsuperscript{115} \textit{The Sagona} [1984] 1 Lloyd’s Rep 194; it was established that most of the oil carriers have modified the
requirement of original bill production with Letter of Indemnity.
\item \textsuperscript{116} JP Mattout, ‘Letters of Indemnity in Shipping Transactions: Legal Aspects’ (1991) 6 Journal of International
Banking Law 8, 320.
\item \textsuperscript{117} ibid.
\item \textsuperscript{118} \textit{China Shipping Development Co Ltd v State Bank of Saurashtra} [2001] 2 Lloyd’s Rep 691.
\end{itemize}
hampers the timely sailing of the ship as well as the potential loss of business and further damages to other shippers. Due to this aspect, carriers are reluctant to accept traditional bills of lading, especially in charter-party and container arrangements. This also has implications for the consignee at the end. For the receivers, the bank signs the letter of indemnity that costs the consignee heavily.

b) The other aspect is the multi-dimensional nature of this document. It was originally developed as the receipt for the goods shipped for carriage, but at the moment, it performs a number of functions, including security in the financial transactions. These functions have reduced its own effectiveness in the present-day world and, as observed in Bovill v Dixon about bill of lading, made it the victim of its own success. Over a period of time, this document has also encroached upon the carrier’s domain and they are feeling stricken by its influence. Furthermore, the roles assumed by this document are sometimes mutually contradictory and hamper its prime function of transferability of property in goods through negotiability.

c) In the present day, carriage of goods by sea has also encountered the problem of the identification of a contractual carrier under the bill of lading, especially in the case where any legal dispute arises in relation to enforcement or damages. Sub-letting of the carriage on time or through voyage charter more than once, results in the

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121 Mattout (n 116).
complication of legal relations between the parties, both in practice as well as due to the privity of contract under law of contract in the prevailing jurisdiction.\footnote{ibid.} As a broader guideline for the identification of the carrier under a bill of lading, the construction of its material clauses helps the courts to decide, on the basis of printed signatures, logos or the official stamp of the carrier for the construction of the bill of lading on either its face or reverse. In the case where a bill of lading is issued by the owner of the vessel, the carrier is the owner, or when it is issued by demise chartered to the line, the demise charterer and, in his absence, the owner, may be pleaded as party.\footnote{\textit{The Hector} [1998] 2 Lloyd’s Rep. 287 at 291–292 and 293–297; and \textit{The Ines} [1995] 2 Lloyd’s Rep. 144 at 148–150.} The practical situations are little more complex than the same. In the case of the owner as the shipper, there hardly arises any legal question as to the identification of the carrier, but this might arise in cases where the charterer shares obligations of the carriage of goods solely or in conjunction with the owner of the ship.\footnote{K Troy-Davies, ‘An introduction to Bills of Lading’ (1999) <http://besttradesolution.com/library/3.pdf> accessed 12 June 2013.} d) This situation has arisen due to a lack of clarity of definition in both the leading governing international regimes, that is to say, The Hague Rules as well as the Hamburg Rules, 1978 that provide that the carrier includes the ship-owner and the charterer who enters into a contract of carriage with the shipper, without any further elaboration.\footnote{Hague Rules, art 1 (a); Hamburg Rules, art 1(1) and (2).} This has left the door open to local interpretation. In some of these instances, the court refused to accept the ship-owner as the carrier and held that the carrier is that whose name is recorded in the antecedent book.\footnote{\textit{The Jalamohan} [1988] 1 Lloyd’s Rep 443.} However, in others, the court restricted the definition of carrier to the ship-owners while ignoring the
postulates of the bill of lading.\textsuperscript{132} In \textit{The Rewia} [1991], however, it was held that identification of the carrier shall be based on the construction of the bill of lading as a document of title and that parties alone can define their rights and liabilities and the transfer of rights to others.\textsuperscript{133} Still, there is no uniformity.

e) Similarly, this confusion prevails in that the identification of a person who can sue for the purpose of a legal suit. The prevailing rules are not indicative to this extent and one has to refer to the national legislations to determine the answer to this question. Under the Act of 1992, a person in whose favour a bill of lading is initiated, a lawful holder in due course (endorsee, consignee in possession, or holder of the bill as prescribed under the law) can initiate legal proceedings against a carrier.\textsuperscript{134} Furthermore, a pledgee bank can sue the cargo owner on behalf of the holder, who has suffered the actual loss as guarantor/financer of the shipment.\textsuperscript{135} On the side of the carrier/ship-owner, these parties can sue the holder(s) on the basis of the provisions in the bill of lading.\textsuperscript{136} Throughout this entire situation, the clauses incorporated in the bill of lading as the document of title are of prime importance as are their subsequent interpretation by the courts. In this practical and fast-moving world, these long and cumbersome legal formalities are hurdles to smooth and swift carriage and hence the trend towards the adoption of easier non-negotiable documents in sea trade. This problem will be a case to be tested in the replication of the bill of lading in electronic format.

f) The introduction of bulk cargo has reduced the chances of the issuing of individual bills of lading in each case of shipment of cargo, differing to how that was required in

\textsuperscript{132} Troy-Davies (n 129) 148–150.
\textsuperscript{133} \textit{The Rewia} [1991] 2 Lloyd’s Rep 325.
\textsuperscript{134} Section 2 of The Carriage of Goods Act, 1992 (UK).
\textsuperscript{135} ibid, section 2(4).
\textsuperscript{136} ibid, section 2(5).
the past, where the captain of independent ships were also owners. Practically, the owners are considered to be the freight forwarders in present-day transportation by sea, who are also carriers in their own rights, and who issue independent receipts to the shippers, a change that has now reduced the bill of lading to represent the receipt of the goods but not evidence of the contract of carriage of goods.\textsuperscript{137}

g) The cost of the paper bill of lading is another factor in lowering its popularity. In the commercial world it is estimated that the cost of generating the documentation of a paper bill of lading is as high as 10\% of the total value of the shipment, especially in small to medium volume shipments (40–100Kgs). Maintaining a paper trail is not only costly but is often blamed for slowing down the process of documentation and completion when compared to the average time required for completion of any other document of equal volume. Furthermore, the containerisation of the cargo has vastly enhanced the speed of transportation. Vessels often contain a number of consignments from different freight forwarders and timely delivery is important at the respective destinations.\textsuperscript{138} This is a particularly significant case in oil transportation where a single container has to pass through a number of ports to deliver oil in the discharge of its duties and a single delay in the documentation of a single shipper results in the delay of the whole consignment. This delay often translates into demurrages and overstays at port. In the case of the bill of lading this has been observed and has

\textsuperscript{137} Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 63–65.
discouraged the use of the bill of lading in such shipping consignments.\textsuperscript{139} The banking sector often discourages credit against a bill of lading on this point.\textsuperscript{140}

h) The chances of fraud being made against the bill of lading are also evident. The practice of non-surrendering the bill of lading at the time of receiving the goods opens up the chances for fraud for the person holding the original bill of lading. It is not the case that every time the goods are delivered on a letter of indemnity the holder of the bill will commit fraud, but if he is the fraudster, he may transfer the bill for a price and an innocent party may be cheated. This position of fraud is not inbuilt in the functioning of the bill of lading but this position has arisen due to the change in the nature of this document and its sluggishness to respond the quickening pace of global trade.\textsuperscript{141}

i) In the use of the negotiable bill of lading there is an inherent risk of insolvency of the endorser/transferor even prior to the transfer of title through endorsement to him or her. In the case of bulk transferring of goods, this risk is aggravated due to the faster speed of the modes of transportation. This type of insolvency results in the claim of the trustees over the goods in transit for the adjustment of the claims against the endorser/transferor that makes the endorsement by that endorser/transferor questionable. This may also cause delays at the port due to delivery identification issues.\textsuperscript{142}

\textsuperscript{139} ibid.
\textsuperscript{140} Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 64–66.
\textsuperscript{142} ibid, 192.
j) One of the major issues for which this paper intends to identify a solution, is the failure of the bill of lading to present itself as an electronic/EDI-supported document. This deficiency has resulted in its failure to match the pace of business and thus shippers as well as carriers have lost their faith in the document. On the other hand, the use of sea waybills has started to grow in representing the straight transactions involving no endorsement due to its issuance and translation into EDI mode. Similar to the bill of lading, in a sea waybill, the information is required to pass on only once, from the computer of the freight forwarder to the carrier, and it remains final for the whole transaction. The carrier, on the other hand, is responsible for informing the shipper about the data and time of delivery of the goods at the port of shipment and, in response, the shipper is required to confirm the details of the receiver at the port. These arrangements are suited to the containerised shipment mode as no intermediate transits or changes of receiver are involved.\textsuperscript{143} In regard to sale through endorsement, in the case of a sea waybill, there is no practice of shipment sale. It is appropriate that a sea waybill is not a document of title but, nevertheless, there is no provision in the law that bars the shipper to sell the goods in transit and if the goods are sold in transit, this function is hindered by the introduction of the “Cargo Key Receipt” (CKR) Rules, which requires the shipper to refrain from the disposal of goods on the ship during transit.\textsuperscript{144} This has kept the need of a negotiable bill of lading alive and in the present age of communication, this aspect invites the revision of the bill of lading into a more competitive format.

\textsuperscript{143} D Faber, ‘Electronic Bills of Lading’ (1996) 2 LMCLQ 242, 232.
\textsuperscript{144} Myburgh (n 138) 325.
1.7 Summary of Chapter One:

In this chapter, the basic definitional aspects of a bill of lading have been covered. It has been observed that, within different phases of its history, the definitions have varied depending upon the perceptions in that era about this document; however, the working definition of a bill of lading in the present era has also been discussed. It has been observed that, through the course of history, the bill of lading was not introduced in the same form as in the present-day world of trade, but it has passed through a definite evolutionary process. It has evolved from being a receipt for the shipment of goods on a ship for carriage to a document of title and evidence of the contract of carriage of goods by sea between parties. This evolution has resulted in it assuming a prime position as a legal document of shipment in trade by sea. Its acceptance in the sea trade is based on the effectiveness of this document which has developed over a period of time through both practice and legal interpretation to support its numerous established functions. The historical trail of this document is very much indicative of the different types of bills of lading that prevail in different parts of the world as well as in the country of origin of the bill, indicating the practicability and adoptability of this document in a changing world; hence its wide acceptance provides hope for its transformation into electronic format, too. In this regard, attempts to transform sea waybills into electronic format have already been made but the requirement of transferability has yet to be satisfied.

The use of the bill of lading as a legal document and a document of title has its own practical issues and is not without concerns. In the commercial world, from time to time, different issues have been identified and efforts have been made to address these concerns by employing various legal and commercial measures. It is important to review these concerns as they also form the basis of some of those apprehensions which the shippers and carriers are
echoing on the adoption of an electronic format of the bill of lading. Among these issues some
are strictly legal in nature and the others are commercial, but at the end of this debate, it is
expected to come up with the solutions for both sets of issues raised by the concerned parties.
There are possibilities that these issues may be addressed more effectively with the use of
technology, but it is yet to be seen how. In the ensuing parts of this research work, efforts will
be made to address all of the concerns raised in this chapter.
CHAPTER TWO: FEATURES AND CHARACTERISTICS OF THE TRADITIONAL BILL OF LADING AND THE NEED FOR ELECTRONIC TRANSACTIONS

The previous chapter has outlined how the bill of lading has remained the most important and vital commercial document in the history of the carriage of goods by sea and that this position has been attained over a period of time through the process of evolution. During this process of evolution, this document has adopted most of the qualities desired by the commercial traders in carriage by sea, despite the momentum this industry has gained over a relatively short period of time within international trade. Throughout this process it has successfully surpassed any other prevailing document that has been made available for the same purpose.

This document was designed to provide the most basic but essential information and has satisfied the needs of both merchants and carriers at the same time. It has elevated itself from a mere documentation of the quantity of the goods shipped to encompass quality and conditions of the goods, to the rights and responsibilities of the parties, and more. The most important feature that this document was able to adopt was, however, its characteristics of negotiability and document of title. The bill of lading in its advanced form performs a number of functions and represents a lot more than the receipt of the goods for the holder. The holding of the bill is established as the holding of the goods and, therefore, the holder of the bill is entitled to sell the goods while in transit, otherwise he is entitled to claim those goods at the port of destination as a matter of ownership.

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145 Proctor (n 26) 50–55.
147 Mitchellill (n 4) 691.
149 CM Schmitthoff, Schmitthoff’s Export Trade: The Law and Practice of International Trade (11th edn Thomson/Sweet & Maxwell 2007) 590; also refer to Sanders v Maclean & Co (n 16).
the result of rapid globalisation and the development of the bill of lading as the document of title facilitated this type of trade.\textsuperscript{150} Prior to the bill of lading, the delivery of goods was often delayed at the port of delivery due to an absence of the documents or their late arrival, and this problem was very much circumvented due to its characteristics of determining the rights to en-route sale and hence providing the avoidance of any financial losses to the holders, especially in the case of non-perishable items such as crude oil.\textsuperscript{151} Another major incentive provided for the promotion of the bill of lading was the recognition of this instrument as collateral for financing. In international finance, the bill of lading provides the basis for the letter of credit to secure a loan from the banks.\textsuperscript{152}

In the present day, the bill of lading faces even more challenges. Because the present age is one of virtual reality, transactions are taking place at an unimaginable speed. This accelerating pace is forcing the trade documents to be repositioned within the new realities and requirements of the world of trade today. Efforts have been made to introduce an electronic bill of lading, and this will be discussed in the coming chapters. This chapter will provide a review of all the special features of the bill of lading that have led this document to holding the crown above all other sea trade documents. In the second half of this chapter, the circumstances which are most pressing in promoting the transformation of the bill of lading into the equivalent electronic form of its traditional paper format will be discussed.

\textsuperscript{150} Giermann (n 89) 16–17.
\textsuperscript{151} A Lloyd, ‘The Bill of Lading: Do we really need it?’ [1989] LMCLQ 47, 49.
\textsuperscript{152} Proctor (n 26) 17.
2.1 Bill of Lading Act as Receipt of Goods:

With the coalescence of international trade and the merchants abstaining themselves from accompanying their goods, disputes on the actual quantity and nature of the goods began to arise. Here documentation stepped in.\textsuperscript{153} The documents began to develop in content to include the nature and specification of the goods and, as a result of disputes at the port of delivery, the triplicate bill was introduced. One of the copies of the bill was sent to the receiver in advance to ensure the identification of goods shipped against that document. It may be worth mentioning here that this document was issued in duplicate: the one copy remaining with the carrier served as the record of the goods shipped; and the other with the shipper as the record of the possessive rights at the time of handing over of these goods at the destination port.\textsuperscript{154}

Initially, the bill of lading was introduced to serve as the receipt of the goods on the ship, too. This function is still the primary function of a bill of lading.\textsuperscript{155} It was held in the early days of the bill of lading’s development as a document of title that, although all functions of a bill of lading may be interrelated, the absence of any other function of the bill would not render its function as receipt ineffective.\textsuperscript{156} It was therefore held that, despite the fact that the bill of lading was no more an evidence of the contract between the parties, as the contract had already been rescinded, the bill’s function as a receipt was found to be intact.\textsuperscript{157}

\textsuperscript{153} W Astle, \textit{Legal Developments in Maritime Commerce: Matters of General Interest and Importance Arising out of Selected Legal Issues} (Fairplay Publications 1983) 61; and McLaughlin (n 30).
\textsuperscript{154} Astle (n 153).
\textsuperscript{155} \textit{Sewell v Burdick} (n 6).
\textsuperscript{156} ibid.
\textsuperscript{157} \textit{The Forum Craftman} [1984] 2 Lloyd’s Rep 102 at 106; also reported in Treitel et al (n 47) 13.
A bill of lading contains the nature, quality and quantity of the goods received by the carrier on his ship for transportation by sea on his vessel or through the licensee thereof. It contains an acknowledgement on behalf of the carrier that ‘he has received the goods in question on the ship’. The bill of lading is therefore signed by the carrier after the shipment on the ship as the proof of its quality and quantity and the contents mentioned therein are presumed to be true unless otherwise proven. The bill of lading is considered to be binding as it is, unless it contains any qualification clauses. However, if the bill is signed by an unauthorised person or his agent, the shipper may not accept the same in case of variance and, in such a case, rules require the satisfaction of the carrier for signature. On the other hand, the conditions are inserted by the shipper and if the carrier is acting as his agent, the signature of the principle will be deemed to be the consent of the carrier and it will not require any further ratification. Similarly, for any other party willing to put themselves in the shoes of the holder of this bill, the information contained on the face or back of the bill are sufficient proof of the quantity and condition of the shipment.

The bill of lading’s function as a receipt of the goods may be seen from three different perspectives, as reflected in Article III of the Hague-Visby Rules, 1971. According to these rules, a shipper is entitled to demand issuance of a bill of lading containing information about

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158 *New Chinese Antimony Co Ltd v Ocean SS Co Ltd* [1917] 2 KB 664; and *Brown Jenkinson & Co Ltd v Percy Dalton* (London) Ltd [1957] at 621.
162 Hague Rules 1924, art III, rule 4; Hamburg Rules, art 16(3).
164 *The Galatia* [1979] (n 7).
quantity, quality and leading identification marks. Accordingly, firstly, the bill of lading serves as a receipt and provides evidence of the quantity of the goods. Courts tend to agree as to the quantity mentioned in the bill unless an element of fraud is proven. The signature of the carrier on the bill is enough proof of the goods shipped and if the bill is qualified with the statement that the quantity is unknown by the shipper, the carrier cannot be absolved of his responsibilities. There might be presentations as to the quantity of the goods shipped by the claimant. Such presentations are recognised both in common and civil law as well as in the Hague-Visby Rules. As a matter of principle, the quantity mentioned on the bill is prima facie evidence of the goods shipped, even if other documents are presented to prove otherwise, for which the onus shall remain on the carrier who contests the quantity mentioned in the bill. This principle of evidence of receipt is valid even if the bill is signed by the master and if the carrier claims the goods are of less than the quality stated. However, if such a deceit is proven, the shipper may be liable for fraud and a suit under tort may be brought against him.

The bill of lading also provides for the condition or quality of the goods shipped. Therefore, the second perspective is the quality of the goods shipped. Goods shipped are provided for with a statement as to the “apparent order and condition of the goods”, and it has now been settled that these conditions relate only to their external and visible state as opposed to the

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166 Carriage of Goods by Sea Act, 1971, art III, rules 3(a), (b) and (c).
168 *The Sirina* [1988] 2 Lloyd’s Rep 613-615; and art III, rule 3 of The Hague-Visby Rules, subject to its proviso.
169 There are a number of cases, e.g. *The Atlas* [1996] (n 163) 1153; *The Galatia* [1979] (n 7).
170 Gaskell et al (n 120) 211.
172 Section 4, Carriage of Goods Act, 1992 (this section removed the anomaly created by the decision in *Grant v Norway* [1851] 10 CB 665, 665 that protected the carrier against the act of his master, hence reduced the affectivity of function as receipt).
174 Hague-Visby Rules 1968, art 3(c).
quality and quantity of what is internal and concealed. In the case where there is any statement as to the internal conditions of the goods in the bill, the carrier is neither bound nor stopped from denying this statement. It has also been decided by the court in one decision that the master carrier is under no obligation to go beyond the appearance, on which he has to base his honest judgment. However, in case of any reservation of the carrier as to the quality at the time of shipment, he can raise a condition or clause on the face of the bill so that the quality of the goods at the time of delivery may not be disputed. Adding such a clause on the bill also provides the holders of the bill, in due course, advance knowledge about the defects in the goods under transit. Any statement mentioned on the bill about the condition of the goods is prima facie evidence under common law and any delivery of damaged goods needs no evidence for breach of contract. Although the responsibility of the carrier in the case of the quality and condition of the goods is stricter than mere quantity as the statement often includes the words “of satisfactory inspection”, there are still instances where difficulties arise as to the statement of the condition of goods, such as when the goods are packed by the shipper or sealed in containerised cargo. The responsibility of the carrier is thus reduced to the apparent condition of the packaging or container but not the internal

176 ibid; Compañía Naviera Vascongada v Churchill [1906] para 237.
177 The David Agmashenebeli (n 163) para 6.15.
178 ibid.
179 The Boukadoura (n 7); and The Nogar Marin [1988] 1 Lloyd’s Rep 412.
180 Robin Hood Flour Mills Ltd v NM Patterson & Sons Ltd (The Ferrandoc) [1967] 2 Lloyd’s Rep 276; Gaskell et al (n 120) 217.
181 Wilson (n 125) 138.
conditions of the goods.\textsuperscript{183} The responsibility of the carrier, however, is not absolved if the packaging is insufficient and the condition of the goods can be checked with reasonability.\textsuperscript{184} Receipts are also used for the identification of the goods mentioned therein. Therefore, thirdly, a bill of lading helps the receiver of the goods at the destination in the identification of the goods beyond their quantity and quality. The carrier is bound to incorporate a statement as to the leading marks of identification on the face of a bill of lading upon request from the shipper.\textsuperscript{185} The indication of leading marks for identification is considered conclusive\textsuperscript{186} if the leading marks are essential to identify the goods at the time of delivery, otherwise the carrier may contest any statement on the bill to this extent.\textsuperscript{187} These leading marks are for identification purposes and, therefore, the statements in the bill of lading normally list container numbers, serial numbers and other items, such as marks on the packages.\textsuperscript{188} The receipt function is not only important but is the primary function for any trade document, but, in the case of the bill of lading, it is rather more important as this function, when read with its negotiability and sale of the goods in transit functions, demand the reflection of the true worth of the goods on the ship.\textsuperscript{189} Buyers are confident in trading a commodity if its features, quality, quantity and identification is known and agreed by some law or tradition of trade. As bills of lading are issued in triplicate, the chances of any later manipulation are minimised and

\textsuperscript{183} ibid.
\textsuperscript{184} Silver v Ocean Steamship Co [1930] (n 8).
\textsuperscript{185} Hague-Visby Rules 1968, art III rule 3; and The Sea Success [2005] 2 All ER (Comm) 441.
\textsuperscript{186} Rodocanachi v Milburn (n 7) para 67.
\textsuperscript{187} The Sea Success (n 185).
\textsuperscript{188} Carriage of Goods by Sea Act, 1992 Section 1 (3) (a); and Carriage of Goods by Sea Act, 1971 section 6 (b)
\textsuperscript{189} Astle (n 153).
in the absence of any fraud, to be proved by the challenger of the bill, the contents of a bill of lading are considered as final.\textsuperscript{190}

At this time, when discussing the generality of the law regarding the receipt function of the bill of lading, it will be of interest to explore the minor differences in application under different prevailing laws about its conclusiveness and effects in case of breach. To the extent of common law, against the carrier, a bill of lading is conclusive evidence in favour of the shipper and any burden of proof lies on him in order to refute this principle,\textsuperscript{191} hence the carrier is responsible in the general conditions for any damage or breach of conditions at the port of destination.\textsuperscript{192} In case of any dispute on the contents of the bill of lading, the carrier is required to provide evidence to support his claim,\textsuperscript{193} but mere inferences are not admissible to refute this established principle under the common law.\textsuperscript{194} Likewise, the carrier can also claim damages if there is some damage due to the misstatement about the nature of the goods made on the bill by the shipper.\textsuperscript{195} However, for the third party in possession of the bill claiming delivery of the goods at the port of destination, common law does not provide for this conclusiveness directly.\textsuperscript{196} Courts have relied on the principle of \textit{estoppels by representation} in such circumstances, provided that all conditions to apply this principle were prima facie applied\textsuperscript{197} and the endorsee relied on the information available without any knowledge of the defect in the bill.\textsuperscript{198} In the present-day world with the containerisation of sea trade, some new

\textsuperscript{190} Hamburg Rules, art 17(3) & (4); and \textit{Brown Jenkinson v Percy Dalton} [1957] (n 158) para 62.


\textsuperscript{192} \textit{Henry Smith & Co v Bedouin Steam Navigation Co Ltd} [1896] AC 70.

\textsuperscript{193} \textit{Noble Resources Ltd v Cavalier Shipping Corp (The Atlas)} [1996] Note 161.

\textsuperscript{194} \textit{The George S} [1989] 1 Lloyd’s Rep 369.

\textsuperscript{195} \textit{The Boukadoura} (n 7) 393.

\textsuperscript{196} \textit{The David Aghashenebeli} (n 163) 738–739.

\textsuperscript{197} \textit{Brown Jenkinson v Percy Dalton} (n 158) 630.

\textsuperscript{198} \textit{Carr v London and North-Western Ry Co} [1875] LR 10 CP 307; and GR Treitel, \textit{An Outline of the Law of Contracts} (Butterworths 1989).
aspects have also arisen. The Hague-Visby Rules provide for the refusal by the carrier to incorporate the condition of the goods on the basis that he has no means to certify their condition. This rule may be applied due to the technical nature of the goods as well as the impossibility of ascertaining the condition of the goods, as happens in the case of containers with a number of goods packages therein. Such refusals are increasing every day in the container trade, rendering this function of the bill of lading non-effective. This has led to two things: one, the bill of lading as receipt has two slightly different meanings in different legal regimes; two, this function is dying in the wake of containerised trade and multi-transport models of the carriage of goods.

2.2 Bill of Lading Proves Contractual Obligation:

Another rather important function of the bill of lading that has been discussed with two opposite views is that it serves as evidence of the contractual relationship between the parties, that is, the carrier and the shipper, as well as between the carrier and endorsee. In both the UK and US jurisdictions, this function has been vehemently debated. This issue is important because, as soon as the goods are loaded on the ship, the bill of lading is the most important legal document for the parties. Its mere function as receipt does not indicate any contract of service between the parties as the possession of goods may also belong to the bailee on the ship or that person in any other capacity and the receipt may refer to the same. With the passage of time, the trade realised this difference and inclusion of the terms and conditions of the contract began to be included on the bill. The reasons for why a bill of lading is seen as

199 *The River Gurara* [1998] (n 9).
200 *The David Agmashenebeli* (n 163) 717.
201 *The Peter der Grosse* (n 175) 414.
a contract in itself or why the otherwise opinion was framed by the jurists requires an in-depth discussion on case law related to the point under consideration.

2.3 Debate on Contractual Nature vs Evidentiary Nature of Bill of Lading under US Jurisdiction:

In the US, discussion on this aspect was initiated with the decision *German American Savings Bank v Craig* (1903), but the matter was also discussed and the contractual value of bill of lading was confirmed in the judgment of *Rj Verderwater v E Mills* in 1856. In this noteworthy case, the terms of contract in a bill of lading were thoroughly discussed and it was stated that a bill of lading sets forth the terms of contract without referring to the existence of any prior contract or the existence of any other contract to which it represents. The Supreme Court was convinced in *Garrison v The Memphis Insurance Company* (1856), where the influence of customs and usages over the terms of the bill of lading was debated, that customs and usages cannot affect the terms set forth in the bill of lading as these terms have full legal meaning as opposed to the customs and usages. It was declared that, in order to opine on the rights and duties of the parties in a dispute, the contractual relationship must be cleared first and, therefore, as the preliminary question it was important to see whether the written document in the form of a bill of lading had any contractual obligation in the absence of any other expressed contract or otherwise. Therefore, attainment of finality of the terms of contract set out in the bill has definite indication of its contractual role in the US legal set-up and this opinion is supported by a further judgment where the court has refused to apply the

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203 *German American Savings Bank v Craig* (1903), 96 NW 1023–1025, 70 Nebraska 41.
205 ibid, 556.
206 15 Led 656 (1856), 656-658
207 ibid, 658.
doctrine of parol evidence upon the written terms of the bill of lading\textsuperscript{208} and confirmed the above presented opinion. This whole situation was summed up in the \textit{Delaware} case where this issue was discussed in detail and key points were cleared for good. The case was filed for libel and issuance of damages for the non-delivery of goods shipped for the port of \textit{Delaware} at the time set in the bill of lading. The defendant in the court of initial jurisdiction had relied upon a verbal agreement for variation from the conditions set out in the written bill of lading as the bill of lading was issued prior to the placing of the actual shipment of the goods on the ship, when the goods were still on the wharf. This case discussed issues such as whether there is any implication of the issuance of a bill of lading before the actual shipment is on board and whether the verbal variations can impact upon the written rights and liabilities of the parties as set in the regular bill of lading, in such case. It was decided that the effect of issuance of a bill of lading, even prior to the departure of the actual shipment, when the goods were on the wharf, would be the same as if this bill was issued after the actual shipment. On the other question, the court found the written conditions set in the regular bill of lading of having force of contract that would define the rights and liabilities of the parties in this case. The verbal assertions/commitments were not allowed to make an opinion otherwise. The bill was stated to provide evidence of all the contents of the contract between the parties but that it is not mere evidence of the contract. It was declared that the bill of lading was a contract of carriage of goods and the issue of parol evidence was adjudged as inadmissible against its exclusiveness.\textsuperscript{209} However, the nature of the rights and liabilities of the parties was found to be dependent upon the actual delivery of goods to the carrier and where, irrespective of the fact of the issuance of a bill of lading, if the goods were not delivered to the carrier within the

\textsuperscript{208} \textit{The Lady Franklin} 75 US 325 (1868) 457.  
\textsuperscript{209} ibid.
stipulated time or before the start of the scheduled journey of the ship, the bill of lading would be considered not executable; hence there is no contract in the bill of lading without actual delivery of the goods to the carrier.\(^{210}\) This entire debate leads to one major understanding that a bill of lading is a contract that supersedes all prior agreements and oral agreements\(^ {211}\) made before or after the issuance of that bill, in the American legal jurisdiction, without prejudice to the fact that a bill still may be verbal in terms of international conventions as well, according to the American organisation, COGSA (USA), 1936.\(^ {212}\)

Another aspect that was discussed and debated in the legal circles was the nature of a contract that a bill of lading had, as though it is a contract in itself. It was opined that a bill of lading is a contract of adhesion. These contracts are prepared by the carriers and hence they are predisposed in favour of the carriers/drafter\(^ {213}\) as the other party just has to accept the terms stated in the draft in order to conclude the contract. Because of the limited opportunity available to the acceptor to make amendments, and because such clauses, in customary practice, have been monopolised by the carriers over a period of time, the carriers/drafters are barred from challenging its enforceability.\(^ {214}\) This has led to the opinion that perhaps the bill of lading is considered to be a contract of adhesion instead of a contract of carriage of goods; however, this opinion is not fully correct. The presence of parallel transactions within the same contract as the contract of carriage of goods eliminates this apprehension and its scope is found to be wider than a mere contract of adhesion.\(^ {215}\) This discussion was further substantiated with the point that in the case of a bill of lading, only the drafter/cARRIER is

\(^{210}\) \textit{Nebco International In v MIV National Integrity} 752 F Supp 1207.

\(^{211}\) \textit{Universal American Corp v SS Hoegh Drake} (1966) 264 F Supp 747.


\(^{213}\) \textit{Cabot Corporation v SS Mormacscan} (1971) 441 F2d 476.

\(^{214}\) \textit{Mori Seiki Inc v Mitsui Osk Lines Ltd} (1993) 990 F2d 444.

\(^{215}\) \textit{Allied Chemical International Corp v Companhia de Navegacao Lloyd} (1986) 775 F2d 476.
allowed to dispute any ambiguous terms of the bill, and this provision does not indicate that it is not a contract of carriage in itself, whereas it is under the jurisdiction of the same legal provisions that govern the contractual liabilities\textsuperscript{216} and the intents of the parties and are interpreted with the same legal sense as any other contract for that matter.\textsuperscript{217}

This discussion would, however, be one-sided without discussing the cases holding the contrary view. Despite the fact that the majority of American decisions led towards the contractual role of a bill of lading, still there is a minority view presented about the evidentiary role of the bill of lading as a contract instead of it being a contract itself. In one of the opinions given in the Supreme Court, the bill of lading was declared to be evidence of the contract and not the contract itself although all the terms of earlier concluded contracts are reproduced in the bill and, therefore, its contents are binding due to that very contract. This further leads to the fact that any evidence against the explicit terms mentioned in the bill of lading are not allowed as parol evidence.\textsuperscript{218} It was further explained in this case that a bill of lading delivered by the consignee to the consignor is evidence of the terms agreed between the parties at the time of delivery of the goods to the ship and both affirm themselves to be bound by these terms. In the form of a written contract for the carriage of goods independent from any other contract, however, it had to be agreed that its nature must be a special written contract that would not be hampered by parol evidence.\textsuperscript{219} Another explanation of this fact was made in terms of the relationship between the consignee and the consignor that are evident from the bill of lading and this is the jurisdiction of COGSA in USA. Its application to the relationship

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\textsuperscript{216} Maggard Truck Line v Deaton Inc (1983) 573 F Supp 1388 1392.
\textsuperscript{217} Mexican Light & Power Co v Pennsylvania Co (1940) 33 FSupp 483.
\textsuperscript{218} Davis v Central Vermont Co (1893) 29 A 313 314.
\textsuperscript{219} ibid.
\end{flushleft}
between the carriers is invalid.\textsuperscript{220} This case again explains the evidentiary nature of the bill of lading in the opinion of the court. The nature of the bill of lading, in view of this opinion, is at best a special contract or evidentiary note to the terms of the contract concluded between the parties. This opinion gained importance in some other cases where the court aligned its opinion with international practices and declared that in both the US and UK jurisdictions, a bill of lading ‘constitutes, or is at least good evidence of the terms of the contract of carriage between the carrier and the shipper’;\textsuperscript{221} especially in the circumstances where a booking note is a memorandum and the details are available only in the bill of lading, and are agreed and not objected to during the proceedings before the court by any party.

From this discussion from the perspective of the US law, it may be concluded that, as a major opinion in the courts, the bill of lading has been considered as a contract of carriage although there is a minor difference of opinion in relation to its evidentiary nature. The minor opinion in the American courts was influenced by British decisions, which have considered the bill of lading as receipt and evidence of the contract of carriage for a long period of time. The American view is further supported with the nature of the contract in the bill of lading as a contract of adhesion. However, it is yet to be seen what the opinion of the judicial system in the UK is.

\textbf{2.4 \hspace{1em} Debate on Contractual Nature vs. Evidentiary Nature of Bill of Lading under British Jurisdiction:}

Unlike the USA, the British courts showed adamancy in their acceptance of contractual role that was otherwise developed in the international trade as the result of contract of adhesion and later on the resolving of the terms of the contract between the carrier and the cargo owner.

\begin{itemize}
  \item \textsuperscript{220} \textit{Arbed Inc v SIS Ellispontos} (1980) 482 F Supp 991 995.
  \item \textsuperscript{221} \textit{Hellenic Lines v Embassy of Pakistan} (1969) 307 F Supp 947 953.
\end{itemize}
on the high seas. In British jurisdiction, the function of evidence of contract is considered to be a newer introduction as researchers do not find a bill of lading performing any other function except receipt function until the end of the 16th century, although the indication of the elements of this function were very much established in the form of the identification of parties, description of goods and destination, etc.

Under British case law, the contractual relationship, however, is simply not evident from the face of the bill of lading and, therefore, it remains a point of intense legal debate among the jurists and practitioners. The major difference is on the nature of this document itself. In the opinion of some of the jurists, the bill of lading is a contract in itself as it includes more or less all of the clauses of a contract and therefore it provides evidence for the contractual relationship on its own merits. In order to prove this relationship, no other contract or piece of paper is required. On the other hand, in the opinion of others, the bill of lading is mere evidence of the contractual relationship between the parties and this contractual relationship exists on the basis of some other legal contract. This contract exists much earlier than the signing of the bill. Therefore, bill of lading cannot be constituted as the contract in itself but instead, it truly reflects the contractual relationship and obligation which is reproduced on it in the form of details about the goods to be transported by ship or other sea carriers.

In the coming sections, these contractual relationships are discussed under various relevant headings.

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222 Treitel et al (n 47) 12–33.
223 Knauth (n 20) 115–117.
224 Bools (n 38), 4–8.
225 Brandt v Liverpool Steam Navigation Ltd (n 9) 575–577.
2.4.1 Contractual Relationship between the Carrier and the Shipper:

A bill of lading indicates a relationship between the carrier and the shipper. However, this relationship is viewed from two different perspectives. One is the prevailing legal opinion in the European courts in which the bill of lading is considered to be evidence of the contract between the carrier and the shipper. The other is that the bill of lading is itself a contract between the parties. In the English legal corridors, the bill of lading was given this status of a contract in its initial days and this status was somewhat confirmed via section 5(1) of the Carriage of Goods Act, 1992 which provides for the both the evidentiary as well as the contractual nature of bill of lading, depending upon the parties involved.\textsuperscript{226} However, the latter one is a minority view.

2.4.1.1 Bill of lading as a Contract in the Cases of the Shipper and the Carrier:

A bill of lading has also been seen as the contract itself between the shipper and the carrier instead of merely evidence of the contract. This position has not been maintained by the courts in most of the cases and hence has only a limited acceptability among the jurists in the British jurisdiction.\textsuperscript{227} As the introductory function in the seventeenth century, the bill of lading was recorded in a more elaborate form and the terms of the contract were introduced for the first time on the bill of lading and this resulted in an increase in the overall length of the bill of lading.\textsuperscript{228} Another element to support this aspect was the promotion of the presence of freight money as consideration of the contract,\textsuperscript{229} and it is further argued that the recording of freight is not included in the bill of lading.\textsuperscript{230} The major support for this argument was in the actual

\textsuperscript{229} MP Furmston, \textit{Cheshire, Fifoot & Furmston’s Law of Contract} (14\textsuperscript{th} edn Butterworths 2001) 144.
\textsuperscript{230} ibid.
practice in the carriage of goods by sea, where the shippers as well as the carriers were more keen to observe the terms and conditions mentioned in the bill of lading than in the contract itself despite the fact that the contract was issued many days prior to the issuance of the bill of lading.231

In common law provisions, there was a gap in accommodating the bill of lading as the contract of carriage itself and hence there was little support for this fact. However, parliamentary intervention had provided the Bill of Lading Act, 1855 that had considered the contractual rule of the bill in the first instance. The Bill of Lading Act, 1855 had stated the bill to be a document containing the contract and hence, although for a limited period of time, this point of view was given the force of law.232 The moot point in the legal document was the negotiability of the bill of lading that created the rights and liabilities of a third party to the original bill of lading upon endorsement. It was stated that, “Every consignee of goods named in a bill of lading ... to whom the property in the goods therein mentioned shall pass, upon or by reason of such consignment or endorsement shall have transferred to and vested in him all rights of suit, and be subject to the same liabilities in respect of such goods as if the contract contained in the bill of lading had been made with himself”.233

Leduc & Co v Ward was perhaps the first case in which the intent of the legislature about the contractual role of the bill of lading was debated. Decided in 1888, it was an action by the endorsee of a bill of lading against the ship-owner for non-delivery of the goods as per the conditions set in the bill of lading. The plaintiff was claiming the right to receive the delivery on the basis of the terms and conditions as shown by the consignor/endorser on the bill of

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231 Leduc & Co v Ward (1888) 20 QBD 475.
232 Sections 1 and 17, Bill of Lading Act 1855.
233 18 & 19 Victc 111, Bill of Lading Act, 1855.
lading in his favour and the defendant was denying any contract between the parties to the suit. The court found the exclusiveness of the bill of lading as the contract of carriage of the goods between the consignee and the consignor at the time of issuance of the bill. It was stressed that when the writing of the contract is reduced in the bill of lading, the bill has been made a contract in itself against which any parol evidence was inadmissible. In the absence of any charter-party, the receiving of the goods by the captain on the ship was found to be sufficient proof of the contract of carriage between the parties as per the terms contained in the bill of lading. Even if the argument of issuance of the bill of lading or a reduction of the contract in writing could be considered, it would not breach the general principles governing the intent of the parties in a contractual relationship as well as the sanctity of the written terms of the contract over the verbal assertions. While discussing the impacts of this case on the contractual role of a bill of lading, it was opined that, in this case, declared in the British jurisdiction, the bill of lading is a contract enforceable even if the endorsee refutes its enforceability or claims damages against its breach. This discussion and the related opinions reflect the intention of the legislature to regulate the bill of lading as a document of a contractual nature for all the parties, including endorsers/holder of the bill of lading in due course and the courts’ decisions upon this aspect are part of ratio decidendi leading toward the affirmation of contractual role under the Bill of Lading Act, 1885.

However, there was a contrary view expressed, too, In the case of Sewell v Burdick (1884) as, “[The Bills of Lading Act 1855] speaks of the contract contained in the bill of lading. To my mind there is no contract in it. It is a receipt for the goods, stating the terms on which they

234 Leduc & Co v Ward (n 231) para 475.
235 Leduc & Co v Ward (n 231) para 479–480.
236 Debattista (n 227) 659.
were delivered to and received by the ship, and therefore excellent evidence of those terms, but it is not a contract. That has been made before the bill of lading was given.”

This position is further strengthened by some of the jurists while criticising the impacts and interpretation of the important case of Leduc & Co v Ward. In later rulings, the finding of this case was overruled on the basis that in the appeal, the Appellate Court had restricted the situation and had no intention of upgrading the bill of lading to the level of contract despite one of the views contained therein that defined the bill of lading as a document containing all contractual characteristics except in cases where one copy is issued to the charter-party and the other issued for the unloaded goods. This, however, is not a stand-alone judgment; rather, it was supported by several other earlier judgments.

That the bill of lading is a contract in itself had also been discussed from the perspective of the interpretation of the terms of the bill itself. In another case, the court had encountered a situation where one of the terms of the bill provided liberty to the defendant during the course of the voyage. The defendant actually deviated from the route and diverted to Burinna during a voyage from Malaga to Liverpool that resulted in the destroying of shipped oranges during the course of transport. The court however, refused to interpret the terms of the bill under the general principles of its interpretation as a contract. The court insisted that the terms of the bill of lading must be interpreted and construed to present the real intention of the parties in order to define the rights and liabilities of the concerned parties. It was decided that the carrier was not authorised to change its route arbitrarily or without proper justification. This judgment placed the bill of lading among those legal documents that can be interpreted to know the

237 Debattista (n 227); and Leduc & Co v Ward (n 231).
238 ibid.
intention of the drafter at the time of the dispute among the parties and thus a mere surface reading is avoided.\textsuperscript{239} The assertion that a bill of lading is not a contract of carriage was refuted and this decision also held water in the appeal in the House of Lords. It was observed that the court has the authority to construe the meaning of the terms mentioned in the bill of lading and the court, in the first instance, was right in interpreting the terms of the bill of lading as clauses of the contract of the carriage.\textsuperscript{240} In the later part there were some other similar precedents that reinforced the version deduced from the above cited case. In the case of \textit{Frenkel v Macandrews \& Co}, the bill of lading was discussed as the contract in the first instance and its rights and liabilities, transferred to the endorsee, was declared to be the same as those of the original parties.\textsuperscript{241} The House of Lords, hearing the appeal, upheld the contractual nature of the bill of lading that was consistent with the judgement of \textit{Margetson v Glynn}. This opinion has prevailed at the margins of the major opinion throughout the last century and, in the case of \textit{Virnar Seguros v MIV Sky Reefer}, it was re-endorsed with discussion on the negotiable characteristic of the bill of lading. It was held that the possession of the bill of lading is akin to the possession of the goods in transit; however, in any other opinion about the bill of lading, the negotiability of the bill of lading is bound to be compromised.\textsuperscript{242}

\textbf{2.4.1.2 Bill of lading as Evidence of Contract in case of Shipper and the Carrier:}

It may however, be added that the above discussed opinion is a minor opinion and on the contrary, the bill of lading is rather considered as a good piece of evidence of the contract concluded prior to the issuance of the bill itself. In the \textit{Ardennes (Cargo owners) v Ardennes}

\begin{footnotes}
\footnote{\textit{Margetson v Glynn,} [1892] 1 QB 337 339.}
\footnote{\textit{Glynn v Margetson \& Co} [1893] AC 351 357.}
\footnote{\textit{Frenkel v Macandrews \& Co} [1929] 33 Ll L R 191.}
\footnote{\textit{Virnar Seguros v MIV Sky Reefer} [1995] 132 Led 2d 462, 483.}
\end{footnotes}
(owners) (1951) case, this opinion was discussed in detail and the bill of lading was declared as evidence to the contract of carriage between the parties, rather than being the contract in itself. Lord Goddard CJ declared this verdict in the following words, “It is, I think, well settled that a bill of lading is not in itself the contract between the ship-owner and the shipper of goods, though it has been said to be excellent evidence of its term ...” In this case, the plaintiff based his claim on the verbal promise of the defendant while placing his oranges on the vessel that the ship would sail directly to Liverpool, whereas the written terms and conditions provided liberty to the vessel carrier to deviate from the route on a needs basis. The deviation from the route resulted in the re-routing of the oranges and hence the suit was filed. The court held that unless all conditions for a contract are satisfied on the bill of lading, it could not be constituted as the contract and hence was recognised as evidence of the contract. The existence of the contract must be established independently by the person claiming its existence for any variation between the contract and the bill of lading. In this case, the court was of the opinion that the contract had already been concluded prior to the issuance of the bill of lading in question and had that bill of lading been relied upon, the right of the plaintiff could not be safeguarded against the liberty clause contained therein. The independence of the carrier was construed against the essence of the verbal contract concluded between the parties. The court, in this way, ignored the judgment made in the Margetson v Glynn, [1892] case, where conditions were identical and the court had relied on the interpretation of the liberty clause to reach the conclusion that the bill of lading was in itself a contract. Rather, in this case, the existence of an earlier contract (verbal contract) was accepted to construe the true nature of the liberty clause refuting the contractual function of the bill of lading. Lord

243 Ardenne (Cargo Owners) v Ardenne (Owners) (The Ardenne) [1951] 1 KB 55.
244 ibid.
Goddard, while recording his opinion, noted that the application of the Act of 1855 was restricted to the relationship between the ship-owner and endorsee of the bill of lading rather than the original parties and hence the application of *Margetson v Glynn, [1892]* was unwarranted. In the presence of a verbal contract made prior to the issuance of the bill of lading, its enforcement would be mandatory, even if a subsequent bill of lading had been issued. Once the carrier/vessel owner had made a promise that the vessel would proceed directly to the destination port, it amounted to the withdrawal of liberty otherwise available, and hence it was binding upon the party making such a representation.  

The decision of *Ardennes (Cargo owners) v Ardennes (owners)* was, however, criticised on many grounds, such as ignorance of earlier decisions made on this point on the basis of personal opinion and consideration of *obiter dictum* rather than a *ratio decidendi*.  

The nature of the bill of lading should not be ignored by the court while denying the contractual function as it would be counterproductive, and in this case the court ignored the received nature of the bill as against the loaded bill of lading. Furthermore, according to Lord Goddard CJ, the absence of a signature on the bill of lading by the shipper indicates the absence of a contractual relationship between the parties; however, this point has been contested by many jurists who presented a number of instances where the contract was concluded without signature of the parties. This opinion was also found in the case of *Hardwood Package Co v Courtney* where it was found, although it is a well settled principle in law that unsigned contracts cannot be enforced, that if

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246 Debattista (n 227) 659.
247 *Parker v South Eastern Ry* [1877] 2-3 CPD 416, 422.
the parties agree to the binding nature of the contract without signatures, it will be binding upon them.249

At the end of this discussion it may be concluded that, in the English justice system, the role of the Ardennes decision may be disputed, but nevertheless, it was able to establish that a bill of lading is a mere memorandum of the contract of carriage between the parties instead of being the contract of carriage itself. It was construed that the terms of the contract of carriage should be interpreted in terms of the contract made prior to the issuance of the bill of lading instead of any prior agreement made subjective to the terms mentioned in the bill of lading that are mere evidence to the contract prior to its conclusion.

Interpreting the bill of lading as evidence of the contract was also considered in other cases. In another case, the court held that reliance on the terms mentioned in the bill of lading was legal for the parties to determine their respective rights and duties and their execution thereof.250 In the case of the endorsement of such a bill of lading, an endorsee will also have the same rights and liabilities as the original holder of the bill but no liability beyond the bill, if there is variance in the contractual obligation of the original parties besides what is stated on the bill.251

Therefore, over a period of time, the courts, through their various decisions, have given sanctity to the contents of the bill to the extent of jurisdictional issues,252 identity of the parties and responsibility of the carrier/ship-owner in case of the cessation by any legal authority or

249 Hardwood Package Co v Courtney Co 253 F 929 931.
250 Allied Trading Company Ltd v GBN Line [1985] 2NSC 348.
251 Leduc & Co v Ward (n 231).
loss of the ship at sea, time and port of destination for delivery, quantity and quality of the goods, inclusion of charter-party or otherwise, etc. This aspect has also been supported with the general principles for the constitution of a contract under prevailing contract laws. A contract may be defined as a legal agreement between the parties which indicates presence of reciprocal promises between the parties for legal consideration. Furthermore, under English and many others jurisdictions, contracts do not require to be documented. This indicates that the actual contract may be concluded much prior to the issuance of bill of lading and may also be evident in documents issued prior to the bill, such as mate’s receipts or booking notes, etc.

2.1.4.3 A Bill of Lading is not even Evidence of Contract in the case of Charter-Party:

On the contrary, a bill of lading has not been considered as evidence of the contract in the case where it is issued to the charter-party. It has been declared that a bill is evidence of a contract between the parties and not among the issuer and the charter-party. It is more probable that the terms of the contract between the parties against the bill are in contrast to the terms of the charter-party. Therefore, the bill of lading’s function as a receipt may be recognised in the case of charter-party, but not as the evidence of the contract itself.

2.4.2 Nature of the Bill of Lading in the Case of the Endorsee (Third Party):

A bill of lading has a slightly different meaning when it comes to the relationship between the carrier and an endorsee in terms of value. An endorsee is considered to be a bona fide purchaser of the goods mentioned in the bill of lading on the terms and conditions mentioned

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253 Rodocanachi v Milburn (n 7).
254 ibid.
255 ibid.
256 Section 10, Indian Contract Act 1872.
258 Sewell v Burdick (n 6) para 104–106.
259 President of India v Metcalfe Co Ltd (The Dunelmia) [1970] 1 QB 289 at 304–306.
260 ibid; and Rodocanachi v Milburn (n 7) para 478–480.
therein and any variation in the actual contract between the carrier and the shipper cannot bind the endorsee.\textsuperscript{261} Privity of the contract restricts the endorsement of rights of party to a third party by contract. The position of a third party or endorsee is, therefore, peculiar. Therefore, any verbal contract between the carrier and the shipper at the time of sailing cannot be considered effective against the endorsee if it is not duly recorded in the bill of lading.\textsuperscript{262} Furthermore, the bill of lading in this case is the exclusive evidence of the contract. The judges found it very harsh to consider contractual variation agreed between the carrier and the shipper prior to endorsement but not for these to be communicated and agreed by the endorsee, thus the terms were binding against the endorsee.\textsuperscript{263} The transfer of the bill of lading was considered in the common law to be the transfer of property in the goods shipped on the vessel and not the transfer of rights under the contract that led to the inclusion of the original party of the bill of lading in any legal action as the plaintiff.\textsuperscript{264}

This situation was considered and debated at length in the English jurisdiction to realise such statutory solutions as the introduction of the Bill of Lading Act, 1855 that protected the rights of a third party where the endorsee has the benefit to avoiding legal action in the name of actual owner/party to the contract. However, the present-day bill of lading is governed under COGSA (UK), 1992, which provides “the lawful holder of a bill of lading ... to sue the carrier under the original contract of carriage even though he may not have been party to the original contract”.\textsuperscript{265} This Act is lacking in the definition of the bill of lading itself, however, a contract of carriage is defined as the contract contained in or evidenced by the bill of lading.

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\textsuperscript{261} The Royal Exchange Shipping Co Ltd v WJ Dixon (1886) 12 App Cas 11.  \\
\textsuperscript{262} Leduc & Co v Ward (n 231).  \\
\textsuperscript{263} R Bradgate, Commercial Law (3rd edition Butterworth 2000) 735–736.  \\
\textsuperscript{264} J Chitty, Chitty on Contracts: Vol 1 General Principles 1826 (Sweet & Maxwell 2012) 953 sec 19–001.  \\
\textsuperscript{265} Section 2, COGSA 1992, UK.
\end{flushright}
This leads towards an indication, while reading the *Ardennes* case, that because the bill of lading is mere evidence to the contract of carriage concluded between the shipper and the carrier in the first instance, the endorsement results in the endorsee becoming party to the original contract of carriage instead of the contract contained in the bill of lading. Therefore, this leads to the filing of a suit for specific performance in the name of the endorsee rather than the inclusion of the original party to the contract.\(^2\)\(^6\)\(^6\) It still, however, absolves the original party to the contract from his primary duty to take care and to inform the other parties about the dangerous nature of the goods at the time of shipment and it was held that the carrier was entitled to sue the original shipper on the basis of the shipper liability principle, even though the bill of lading was endorsed to a third party.\(^2\)\(^6\)\(^7\)

### 2.4.3 Himalaya Clause:

There is another relationship that must be discussed under the contractual obligations of bill of lading, as a special clause in the contract of carriage. This special clause in a contract was introduced as the result of the decision in *Alder v Dickson*,\(^2\)\(^6\)\(^8\) dealing with the ship named *Himalaya*, to protect independent contractors in the contract of carriage, such as protecting stevedores from liabilities under that contract of carriage. The special clause or exemption clause introduced as a result of that decision is now known as the *Himalaya Clause*.\(^2\)\(^6\)\(^9\) In the Himalaya case, the claimant (the passenger) was injured when the gangway fell, dropping him eighteen feet below. He sued the master and the crew of the ship in the presence of the exemption available to the carrier and relied on the principle of privity to the contract under which defendants were not party, hence claimed responsible. In the decision, it was found by

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\(^2\)\(^7\) ibid, 181.

\(^2\)\(^8\) *Alder v Dickson* [1955] 1 QB 158 (CA).

\(^2\)\(^9\) ibid.
the court of appeals that, “in the contract of passengers as well as in the carriage of goods, the law permitted a carrier to stipulate not only for himself but also for those to whom he engaged to carry out the contract” and therefore, held that in absence of any such stipulation, express or implied in favour of master of the ship and his crew, they were responsible. This decision was later accepted in many other cases and has now been considered as a settled principle of common law upheld in the United States in the decision of Herd v Karawill and many others. As a direct result of such decision, the Himalaya clause was introduced, especially in the carriage of goods contracted by sea, although it may be part of any contract to benefit any third party outside the contract, for example, stevedores. The Himalaya clause, now included in many bills of lading, is stated to be given effect in a court of law, provided, that:

I. “The bill of lading makes it clear, that the carrier intended by its terms to protect the stevedores;

II. The carrier of bill contracted for the stevedores’ protection as well as for his own; and

III. The authority of the carrier to act for stevedores in this respect whether antecedently or by ratification was made out.”

This permission clearly indicates the contractual nature of the bill of lading itself for the purpose of the exemption in favour of the carrier and his staff. Furthermore, as provided in the Himalaya case, the terms and exemption may be expressed or implied, and this also leads towards the contractual nature of bill of lading itself for the purpose of the carriage of goods

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270 ibid.
274 Scruttons Ltd v Midland Silicones Ltd [1962] (n 272) 1891-190A.
by sea between the carrier and the shipper.\textsuperscript{275} All subsequent endorsees of the bill of lading are bound by these terms, mentioned therein.\textsuperscript{276}

This whole discussion on the nature of the contractual role of bill of lading in UK sums up how, over the last century, the following of common law and the Act of 1855 helped the jurist and the judges to frame their opinions about the contractual role of the bill of lading. However, with the \textit{Ardennes} case and the subsequent enactment of COGSA, 1992 in the UK, the role of the bill of lading has now been defined as evidence of the contract of carriage contained in or evidenced by the bill of lading with exemptions such as the Himalayan clause discussed above. To the extent of the UK, in future, any attempt to digitalise the bill of lading must take this perspective into consideration.

\subsection*{2.5 Bill of Lading as a Document of Title:}

The function of the bill of lading as a document of title is much more complicated in the legal sense than it is understood. A major reason for this complexity is the lack of a comprehensive definition of the document of title in the common law from the outset,\textsuperscript{277} and this has led the researcher to examine just what a document of title means in the present-day world. This term sometimes leads to confusion. In shipping transactions, even in these modern times, travelling takes a considerable amount of time and, to keep the pace with the market, the negotiability factor found its place on the bill of lading. A bill of lading in its lifetime has been seen to

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\item Guest (n 58) 18.
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perform all or most of its functions, as discussed in this thesis, along with its financing, sales and carriage aspects.278

The bill of lading is often considered as a document of title and its indication is embedded in the earliest decision on the point made two centuries ago in the case of *Lickbarrow v Mason*.279 This case is often quoted as the founding case of the modern bill of lading where first time the question as to the proprietary rights of the holder in due course was raised. The plaintiff attempted to claim possession of the goods in transit when they came to know that the defendant was bankrupt. The directions made to the carrier by the plaintiff (the shipper) not to deliver the goods to the defendant were held without legal authority. However, this decision was analysed by jurists as being confined to the proposition that the bill of lading transfers the property in goods but it is silent about the negotiability of the bill of lading.280 In this leading case it was held that holder of the bill of lading has a right to claim possession of the goods mentioned therein from the captain of the ship. On the other hand, the original decision was based on the principle of negotiability and this has led the debate on the status of the bill of lading.281 To some of the experts, the success of this piece of paper against all other sea documents rests in its function as a document of title and the negotiability associated with the same.282 It may be considered that the function of the bill of lading as a document of title is the only difference between a sea waybill and the bill of lading, as the sea waybill’s function as a receipt may be equated with that of bill of lading.283 In recent years, when there have been

278 Palmer and McKendrick (n 66) 569–577.
279 *Lickbarrow v Mason* (n 44).
280 Bools (n 38) 10–11.
281 *Lickbarrow v Mason* (n 44) para 71.
283 GI Zekos, ‘Negotiable Bill of lading and their Contractual Role under Greek, United States and English Law’ (1998) 40 Managerial Law 25.
efforts to introduce electronic bill of lading, the function of being a document of title is the function which is perhaps the most difficult to replicate in electronic format and this has resulted in serious hindrance.\textsuperscript{284} However, at the same time, there are reservations about the role of the bill of lading as being negotiable, particularly as banking instruments. Firstly, it has been mentioned that not all bills of lading are negotiable and only those documents that are \textit{ordered} or that carry instructions on the face are negotiable.\textsuperscript{285} Second, and a more important fact, is that the negotiability of a bill of lading is not the same as that of banking instruments as the holder of a bill of lading in due course does not hold the title any more securely than the issuer in any case and his title is subservient to the title of the issuer.\textsuperscript{286} This later discussion has been made from another aspect where the notion of the document of title is described as misnomer and the term \textit{controlled document} was proposed.\textsuperscript{287} However, before moving to these two aspects, discussion on the definition of a document of title may help in understanding the true nature of the bill of lading as a document of title.

\textbf{2.6 What Constitutes a Document of Title?}

In the leading case of \textit{Lickbarrow v Mason}, the bill of lading was named as the document of title. However, in the whole judgment, the term \textit{document of judgment} is not defined to qualify in what sense of this term it was qualified as the document of title. In general parlance, \textit{title} is a term to identify the right of ownership of property or goods, and this sense of the word is much more prevalent in land records or documents of entitlement of land.\textsuperscript{288} Therefore, this sense of the word \textit{title} is very much related to a permanent or semi-permanent record, which,
in any case, a bill of lading is not and any oversimplification is uncalled for. It calls instead for a more appropriate definition of title and document of title for a bill of lading and for this purpose jurists are free to opine and judges remained free to adjudicate. It is somewhat recognised that the characteristics of a document of title are effective on the endorsement that passes the title in property, as was established in *Lickbarrow v Mason*. This endorsement transfers only that property which the parties intend for the purposes of a mortgage, or absolute transfer with or without the right to the stoppage of goods in transit. Similar observations have been made in later and modern judgments where it was recognised as a document capable of the constructive possession of goods. It was further mentioned that, “... it is a document which, although not itself capable of directly transferring the property in the goods to which it represents, merely by endorsement and delivery, nevertheless is capable of being part of the mechanism by which property is passed”. It was also found to be held in an earlier decision that a contract of carriage of goods by sea performs two functions. In the first instance, the carrier/ship-owners undertakes the goods as the bailee of the goods and on the other he undertakes to deliver these goods to the people who are entitled to take possession of these goods under bailment, legally. Hence the bill of lading containing the contract of carriage therein is the custodian of these two functions and therefore the carrier/ship-owner is bound by the instructions of the original shipper of the goods in the case of a *negotiable* bill of lading. Other scholars have also debated and analysed this concept. *Benjamin* defined the document of title as being capable of transferring constructive possession of goods and that it

289 Palmer and McKendrick (n 66) 550–572.
291 *Sewell v Burdick* (n 6).
292 *The Delfini* [1988] 2 Lloyd’s Rep 599.
293 *Barclays Bank Ltd v Commissioners of the Customs and Excise* [1963] 1 Lloyd’s Rep 81 at 88–89.
294 ibid.
may operate as a transfer of the property of the goods.\textsuperscript{295} According to \textit{de Wit}, the first function of the bill of lading is to operate as document capable of transferring contractual rights and the other, to operate as transfer of the property of goods.\textsuperscript{296} Many others have understood the constructive possession and transferability characteristics of bill of lading as its function as a document of title.\textsuperscript{297} On the other hand, Wilson equated possession of the bill of lading with the possession of the goods.\textsuperscript{298} In this definitional aspect, there is a need to add the perspective of the users of the bill. For the merchants using the bill of lading for their trade and transactions, it is the document with the power to control receipt of the goods at the destination. It acts as security for the credit supplied by the financial institutions, hence it somewhat represents a document of title in this respect.\textsuperscript{299} Moreover, possession of the bill of lading was not equated with the possession of the goods by the time the decision on \textit{Lickbarrow} was delivered. However, in later cases, there were indications that possession of the bill of lading was seen as the possession of the goods and the symbol of property.\textsuperscript{300}

\section*{2.7 Negotiability of Bill of Lading:}

It has been discussed that a bill of lading may or may not be negotiable; depending upon the nature of the document, and it is only the negotiable bill of lading that can change constructive possession and binds the carrier to handover possession to someone other than the original recipient according to the original bill of lading. This also somewhat provides the essentials for the bill of lading to represent a document of title. In this part of the discussion, the focus is

\textsuperscript{295} Guest (n 58) 18.
\textsuperscript{296} R de Wit, Multimodal Transport (LLP 1995) 413–414.
\textsuperscript{297} Debattista (n 69) 29; Bool (n 38) 10–11.
\textsuperscript{298} Wilson (n 125) 137–180.
\textsuperscript{300} \textit{Pattern v Thompson} (1816) 5 M & S 350; \textit{Sargent v Morris} (1820) 2 B Ald 277; and \textit{Newsom v Thornton} (1806) 6 East 17.
on the negotiability of a bill of lading, and what it actually refers to and how it might be important for its function as a document of title or document of transferability.\textsuperscript{301}

A non-negotiable bill of lading provides for the delivery to the named consignee only, even without the production of the bill of lading upon identification of the consignee at the port of destination.\textsuperscript{302} A negotiable bill of lading, on the other hand, requires the carrier to deliver the goods to the consignee or to his order. This order to deliver to a third person may be introduced by any of these three methods: one, it may be done with the introduction of the direction as to the consignee or to order on the face of the bill, if the carrier is also the consignee, too; two, it may also be done through the introduction of the words “to the order of” to provide a room for endorsement on the bill of lading and introducing the name of any third party through endorsement; and lastly, the issuance of an open bill of lading with the directions as to the bearer of the document with the provision of blank endorsement in favour of any third party.\textsuperscript{303}

\subsection{2.7.1 What is Negotiability?}

Negotiability is a well-established concept in law as well as in commercial practice. Negotiability provides for the transfer of property title/rights embodied therein from one person to another.\textsuperscript{304} Known negotiable documents in the banking sector, such as cheques and promissory notes, need no introduction in common parlance. Besides the bill of lading, warehouse receipts, bonds, deed stocks and other documents have the function of transferring

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\item ibid.
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property title and are negotiable documents.\textsuperscript{305} In general, the rights contained in a negotiable instrument are transferable by delivery if drawn by the bearer and by endorsement if transferable by endorsement and, at the same time, if the holder of a negotiable document is in good faith a bona fide purchaser, the bearer has the right to the title of the goods/property under the document, even if the title of endorser is defective\textsuperscript{306} and the holder of the bill can maintain a law suit against any person imposing up on this right in his own name.\textsuperscript{307} Furthermore, such an instrument should not be a contract to pay money or to deliver another negotiable instrument as security representing money.\textsuperscript{308}

At this point in time, the aspect of negotiability may be discussed in light of the US and UK practices individually.

\textbf{2.7.2 Negotiability of a Bill of Lading under US Jurisdiction:}

US courts were however, reluctant to accept any negotiability in the bill of lading. In many opinions and in the decisions of scholars and courts, the doctrine of privity of the contract is the major bar in assigning any such role to the bill of lading and by endorsement. It was held in the early decisions of US history that delivery, that what has been transferred, is the transfer of the title of the goods, but it is not the assignment of the contract itself, unless otherwise provided in any piece of legislation, such as in the UK through the enforcement of the relevant statutes.\textsuperscript{309} In the opinion of the scholars at that time, it was clearly evident that they did not consider the bill of lading as a negotiable instrument as the promissory note or bill of exchange were, due to the barrier imposed by the doctrine of privity that had been accepted as

\textsuperscript{305} ibid.
\textsuperscript{306} Schmitthoff, \textit{Schmitthoff’s Export Trade: The Law and Practice of International Trade} (n 149) 590–599.
\textsuperscript{307} \textit{Crouch v The Credit Foncier of England Ltd}. [1873] LR 8QB 374, 381.
\textsuperscript{308} JM Holden, \textit{the History of Negotiable Instruments in English Law} (2\textsuperscript{nd} edn, Sweet & Maxwell 1955).
\textsuperscript{309} \textit{Cox v Vermont Cent Co} (1898) 49 NE 97; \textit{Pollard v Vinton} (1881) 26 Led 998.
law in most states of the USA. The opinion that endorsement of the bill of lading is devoid of any force of transferability of the contract contained therein or evidenced by it, was found firm in most of the cases heard in the 19th century and the early part of the last century.\(^{310}\) It was best considered as the contract by the carrier with the shipper to deliver the goods to the person at the destination under his directions and nothing beyond that. However, this opinion was not sustainable over a period of time, due to the rapid changes in activity in the commercial world and the increasing reliance on the negotiability function of a bill of lading in the maritime trade. The contractual role of this bill of lading was recognised as being parallel in that that era had its own impacts on the acceptance of negotiability function with the passage of time.

In the US, the first acceptance of this negotiability function can be seen with the enactment of the *Uniform Bills of Lading Act* in 1909 that considered bill of lading as a fully negotiable instrument in intra-state sea trade transactions\(^{311}\) and the same effect was replicated by the later enacted federal statute of the *Federal Bills of Lading Act 1916* that extended this effect to the USA foreign trade and interstate maritime trade. It provided that “a person to whom an order bill has been duly negotiated acquires thereby a) ... b) The direct obligation of the carrier to hold possession of the goods for him according to the terms of the bill as fully as if the carrier had contracted directly with him”\(^{312}\). This statute for the first time established in the US jurisdiction the right of an endorsee to sue the carrier in his own name for any specific performance of the contract of carriage contained in the bill of lading, which gives the bill of lading the status of contract of carriage itself that was capable of being transferred upon

\(^{310}\text{S Williston, *Williston on Sales* (Revised edn, Vol. 2 1948).}\)

\(^{311}\text{Uniform Bills of Lading Act 1909.}\)

\(^{312}\text{Section 111, Federal Bills of Lading Act 1916.}\)
endorsement. Under the above mentioned legislations, a bill of lading that was expressly declared as negotiable was a negotiable instrument comparable with the negotiable instruments of banking in its features and characteristics. This led to the transfer of rights and responsibilities of the endorser to the endorsee as the holder of the bill of lading or the person named in the bill of lading (contrary to the case of named/non-negotiable bill of lading) and similarly, the endorser could not be held responsible for any non-performance of the contract of carriage. 313

The negotiability aspect of the bill of lading was further enhanced with subsequent efforts in this direction. COGSA (UK), 1992, 314 as well as Uniform Commercial Code, 1952 (USA), 315 both had provided to the bill of lading similar negotiability that was earlier enjoyed by the negotiable instruments of the banking sector only. 316 These provisions had literally overruled the opinions and precedents in the USA based on the doctrine of privity discussed earlier. In the later juristic literature and contract law, 317 the bill of lading is considered to be negotiable instrument in parity with those of the banking sector. Abrahamsson referred to this fact as; if a bill of lading is directed to the order of someone, it is an order bill of lading, which is negotiable. 318 G Gilmore and C Black mentioned in 1975 that, from then on, all bills of lading are negotiable in the USA. 319

313 Section 115, Federal Bills of Lading Act 1916.
314 COGSA 1992 (UK).
315 Uniform Commercial Code, 1952 (USA), art 7.
This discussion clearly refers to the fact that in the present-day USA jurisdiction, a bill of lading is a negotiable instrument having most of the characteristics that a banking sector negotiable instrument has.

2.7.3 Negotiability of a Bill of Lading under English Jurisdiction:

It has been seen that, in the case of the USA, there was a transition from the non-transferability and non-negotiability of the bill of lading towards it becoming a negotiable instrument. In the case of the UK, the history is much deeper and the transition of events is rather more complicated. This transition has its roots in the mercantile practices of the early 16th century and later on it was developed as a parallel arrangement of the issuer of the bill (the carrier), the transferor (the shipper/endorser) and the transferee (endorsee) of a negotiable instrument. The mercantile practices referred to above were frequent, and, in its usage, the bill of lading issued to the order of the shipper was assumed to be fully negotiable and these often unnamed instruments were accepted as mere proof of the lawful receiver at the end of the ship’s voyage.

Around the world there are varied opinions about the extent of the negotiability of a bill of lading. In the Dixon case,320 it was observed that there are certain other pre-requisites of a negotiable instrument. A document is not a negotiable instrument if the same is not considered as a negotiable instrument in the trade or by tradition in that particular area and hence a promise to deliver 100 tons of iron to the bearer was not a negotiable document as the same did not bear the traditional and trade backing behind it. Along the same lines, the bill of lading is found devoid of force unless the trade and traditions deem it to be a negotiable instrument,

as observed by Negus that “in attempting to arrive at the truth concerning the negotiability of the bill of lading, the very first thing to bear in mind is that if to be to-day or tomorrow the general customs of merchants to treat bills of lading as negotiable instruments, courts of law will very readily sanction that custom”, \(^{321}\) and, in this sense, a bill of lading is not a negotiable document, traditionally. From a South African precedent it appears that one more fundamental difference that bars a bill of lading from qualifying as a negotiable instrument in the traditional sense is that, unlike the general principle discussed for negotiable instruments above, the holder of a bill of lading does not attain a superior title than the consignee of the goods.\(^ {322}\) On the other hand, in the COGSA (UK), 1992, a bill of lading appears to be a negotiable instrument, in line with the negotiable instruments of the banking sector.

As a result of these sequential decisions on the issue, it was well established by the end of the 19\(^{th}\) century that the bill of lading is a document that better transfers the rights mentioned in the bill of lading but that it is not a negotiable instrument in the same way as the promissory note or the cheque in the banking sector.\(^ {323}\) Whether a holder of the bill of lading can get more rights than the endorser or not, has also remained a subject of keen interest for the jurists as well as the traders. There are three instances where the holder can get better rights as the result of endorsement. In the first instance, if the goods are in transit the vendor can exercise his right to stop the goods in transit known as right of disposal upon obtaining information that the vendee is insolvent. This right is distinct from right to stoppage of goods under sales of goods law applicable that provides for the contractual relationship of buyer and seller without any

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\(^{321}\) R Negus, ‘The Evolution of Bills of Lading’ (1921) 37 LQR 304, 444.
\(^{323}\) Gurney v Behrend [1854] 3 EL & BL 622 at 633-634. This decision was reinforced in the latter half of the 20\(^{th}\) century in Kum v Wah Tat Bank Ltd [1971] 1 Lloyd’s Rep 439 at 446 (n 286).
contractual role of consignee and therefore, has specific case law.\(^{324}\) It was therefore held that the bill of lading behaves like a negotiable instrument only to the extent of the stoppage while in transit.\(^{325}\) This behaviour, however, is not strictly negotiable as it is confined to the stoppage right and not the transfer of good title.\(^{326}\) The other two situations are defensible title of the assignee/endorsee,\(^{327}\) respectively, but still the courts have not favoured this position to any extent.

This discussion now moves to the other side, where the other position is taken by the jurists and the law courts. It was noted in *Lickbarrow v Mason* that a bill of lading is a negotiable instrument as the endorsee has trust in the paper endorsed to him as far as the transferability of the goods in transit is concerned in his favour. This trust is fully supported by the practice by the carrier who honours the endorsement on the bill of lading and delivers the goods to the final endorsee of the bill.\(^{328}\) The bill of lading is accepted as a negotiable instrument, transferable by endorsement and delivery.\(^{329}\) This is consistent with the 16\(^{th}\) century practice mentioned above and reported by Wordsworth.\(^{330}\) The question as to whether negotiability of the bill of lading is compatible with the negotiable instruments of the banking sector, especially the bill of exchange, still remains. In case of the USA, the later statutes provided the bill of lading with the same level of negotiability as the banking sector instruments and even included the same in the law of contract for enforceability along with the bill of exchange.\(^{331}\)

However, in the UK, this is not the case. The major focus in the UK remains on the feature of

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\(^{325}\) *Fuentes v Montis* [1886] LR 3 CP 268 at 276.

\(^{326}\) Holden (n 308).

\(^{327}\) Cowen (n 322).

\(^{328}\) *Lickbarrow v Mason* (n 44) para 3.

\(^{329}\) ibid.


\(^{331}\) Discussion is made in the last chapter in detail.
transferability rather than the feature of negotiability as it is conceived in the contract law for the banking sector instrument/bill of exchange. In this way, the major difference pointed out was the express indication of transferability in the case of the bill of lading that is not required in the case of other negotiable instruments and the bill of exchange. It was further substantiated in other findings where it was maintained that transferability indicates the transferability of the goods in transit and not the transferability of the contract of the carriage contained in the bill of lading.\textsuperscript{332} However, the enactment of the Bills of Lading Act, 1855 had supported the transferability function to an extent. An endorsee under its provision was entitled to sue the other parties without involving the original shipper/endorser. Hence, in this way, as observed in \textit{Brandt v Liverpool Steam Navigation Ltd}, it assigned the contract to the endorsee that was previously not known in the legal circles in the UK.\textsuperscript{333} The judicial approach followed in the previous era was criticised on the basis of the approach presented by the Act of 1855. The Act was considered an unnecessary intervention and had to be brought into action due to the judicial denial of the characteristic of negotiability, otherwise part of the mercantile customs. It was pointed out that, in the past, the holder of bill of lading was equally entitled to take possession of the goods at the port of destination and this feature is impossible to imagine without his stepping into the shoes of the endorser.\textsuperscript{334} The evidence is clear that transferability was synonymous with negotiability; otherwise, it had no meaning at all. This is why, as it was phrased, ‘\textit{this is simply to say that the two documents [bills of lading and bills of exchange] are negotiable in different, if sometimes overlapping, circumstances: not that one is negotiable while the other is not’}.\textsuperscript{335} In \textit{The Federal Bulker} it was stated beyond doubt

\textsuperscript{332} M Chalmers, \textit{The Sale of Goods Act 1893} (Butterworth, 1924) 178.

\textsuperscript{333} Brandt \textit{v Liverpool Steam Navigation Ltd} (n 9).

\textsuperscript{334} The Aramis [1989] 1 Lloyd’s Rep 213.

that a bill of lading is a negotiable instrument in the commercial meaning of the term where a foreign party/the carrier could not have knowledge of the endorsement of the bill.\textsuperscript{336} The same opinion has been put forward in\textit{ The Merak} where the bill of lading was declared as a commercial document for commercial activity on the seas and used by commercial people in line with the negotiability of other commercial negotiable instruments.\textsuperscript{337} In another case, it was stated that, for a bill of lading, there should be three signed negotiable papers.\textsuperscript{338} There are many other cases that refer to the negotiability of the bill of lading as accepted in the UK jurisdiction. The present-day legal position on this issue has further support from the exceptions provided in section 47(2) of the Sale of Goods Act 1979,\textsuperscript{339} and earlier, in section 10 of the Factors Act, 1889,\textsuperscript{340} to maintain negotiability of a bill of lading.

This whole discussion leads to a point where it is clear that a bill of lading generally used to be considered as a negotiable instrument, but that it is not a negotiable instrument in the strictest sense of the word in legal commercial parlance. However, with the enactment of statutes such as the Bill of Lading Act, 1855 and the Sales of Goods Act, 1979, this role became strengthened and now it exhibits most of the qualities of a negotiable document while being recognised as a negotiable document by the judicial circles. It is a semi-negotiable document (\textit{if very strictly construed}) that transfers the rights, as well as the contract of carriage for every holder in due course.

\textsuperscript{336} \textit{The Federal Bulker} [1989] 1 Lloyd’s Rep 103 105.
\textsuperscript{337} \textit{The Merak} [1964] 2 Lloyd’s Rep 527 531.
\textsuperscript{338} \textit{The Mobil Courage} [1987] 2 Lloyd’s Rep 655 658.
\textsuperscript{339} Sale of Goods Act 1979, section 47(2).
\textsuperscript{340} Factors Act 1889, section 10.
2.8 Bill of Lading as a Document of Transferability: Transfer of Possessory Rights:

That the bill of lading represents the goods mentioned therein is a very old English principle and it does not provide for the transfer of rights beyond those given in the bill. The exception to the rule of *nemo plus iuris ad alium transferre potest quam ipse habet* that is available to the negotiable documents of the banking sector is somehow not applicable to the bill of lading under earlier English jurisprudence and common law. This cites the intermediate position of the carrier between the seller and the buyer; it definitely falls short of a negotiable document. The carrier has independent liabilities against both the seller and the buyer under the contract of carriage of a bill of lading. This intimates its position as a document of transferability or transferor of possessory rights.

Possessory rights are of two parts: one, where the goods are in possession of the carrier with the right to deliver on production of the original bill of lading; and two, rights due to possession vested in the holder of the bill of lading as the result of endorsement. To some extent, this possession is discussed in terms of constructive and legal possession. Where custody is mere physical possession of the goods, legal possession may or may not be the physical possession but it equates to the possession of the legal possessor with the custody holder of the goods in terms of the possession of the goods. This possessor has the right to claim physical possession of the property at the port of destination or to dispose of it. This power for the disposing of the property is translated in the transferring of these rights to a third

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341 ibid.
344 Bools (n 38).
party while the goods are in transit. Hence, it is the transfer of the right to require delivery of the goods as transfer of the bill of lading is not the transfer of the property but instead, constructive possession, a right arising out of the contract of the carriage of goods and not the contract of sale between the seller/shipper and the buyer/holder of the bill. The contract of carriage is the mode to dispose of the responsibility of the seller to deliver goods at the defined place under the contract of sale.

It can be seen in the context of the earliest form of endorsement made at the start of the 15th century when a bill was endorsed to another merchant with the directions to the carrier as his agent to act according to the wishes of an endorsee and, subsequently, this document was further endorsed to another one with the same directions. Does this endorsement amount to the transfer of ownership? No; rather, it was initiated with the transfer of the right to the disposal of the goods. This could be the start of the era of the bill of lading as a transferable document of title in the latter period of its history. The decision of *Lickbarrow* leads towards a more elaborate facet of the document of title for the bill of lading. In later cases, the bill of lading was seen as symbol of possession as well as a symbol of property. Another half-century later, this transition was clearly leading towards more clarity in the decision and the symbol of property was interpreted as the symbol of goods or symbol of possession.

It may be noted that, as a document of title, the bill of lading has two functions, in respect of its holder, that is, to claim delivery of goods on the production of the original bill of lading and

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345 B Tushevska, *Transfer of Rights Incorporated into a Bill of Lading as a Type of Commodity Security* (2013) 1 Balkan Social Science Review 149.
346 ibid, 151–154.
347 E Bensa, *The Early History of Bills of Lading* (Stabilimento d’Arti Grafiche 1925) 8 [1390].
348 *Newsom v Thornton* (1806) (n 300).
349 *Martini v Coles* (1813) 1 M & S 140.
350 *Pease v Gloachec* (1866) LR 1PC 219 at 227–228; and *Barber v Meyerstein* (1870) LR 4 HL 317.
the right to dispose of the goods in transit as holder of the goods, similar to mortgage and pledge of the goods in transit.\textsuperscript{351} The claim of delivery of the goods is therefore vested in the holder of the bill and the carrier is bound to hand over possession to the person having constructive possession of the goods through the bill of lading. As already seen in the case of \textit{Barclays Bank Ltd v Commissioners of the Customs and Excise} [1963], the ship-owner/carrier is bound under the contract of the carriage of goods to hand over possession to the holder of the bill,\textsuperscript{352} therefore, this decision endorses the opinion of \textit{Bool's} in this regard. But, in the \textit{Houda} case, it was also clearly held that verbal directions to hand over possession after issuance of an original bill of lading are not binding upon the carrier and his act to hand over possession of goods upon production of the original bill of lading was correct.\textsuperscript{353} This decision also leads towards the primacy of the written bill of lading over the verbal directions of the shipper of the goods to the extent of their constructive possession as this decision does not speak on this point about ownership.

\subsection*{2.9 The Bill of lading as Collateral Security in Credit Transactions:}

Besides the traditional functions associated with the bill of lading, present-day requirements have grown beyond expectations. Incidence of the use of the bill of lading as collateral in commercial transactions is on the rise assisting in its acceptance as the document of title and its inherent nature of financing the carriage of goods by sea in both domestic as well as international transactions.\textsuperscript{354} Issuance of credit against valid bills of lading is a routine banking practice nowadays, and this practice is encouraged by the banking systems of the respective

\begin{footnotesize}
\begin{enumerate}
\item Bools (n 38).
\item \textit{Barclays Bank Ltd v Commissioners of the Customs and Excise} (n 293).
\item \textit{The Houda} [1994] 2 Lloyd’s Rep 541.
\end{enumerate}
\end{footnotesize}
countries. Banks accept drafts drawn against shipments where the bill of lading covers the transaction in the first place. Alternatively, drafts drawn on the buyer of goods are also accepted where the bill of lading covers the transaction and it is attached with the draft as security to the note or credit of the bill. Similarly, promissory notes secured by a bill of lading are also acceptable to the banks for credit transactions. This position has been further strengthened by the decisions of the courts. In *Douglas, Receiver, etc. v People’s Bank of Kentucky*, it was held that it is now a well-established right of the owner of the bill of lading to pledge his right under the bill as collateral security of the debts. The court has further held that the pledging of the bill of lading is equivalent to the pledging of the goods, although it does not give the pledgee a title over the property that will remain with the pledger. The lien of the pledgee will remain superior to all the prior equities to which the bank/pledge has no notice of. The bank has a constructive possession over the goods under pledge. In most of the cases, however, there is a trend that buyers tend to pledge property under the bill and it appears as an anomaly as the buyer has imperfect rights over the property. To perfect this situation, it was assumed that the buyer’s pledge is created by the seller on behalf of the buyers. In order to achieve uniformity of the processes and practices, the banking sector, as well as the legal provisions, has broadly defined the acceptability of the bill of lading as documentary credit only. These intense transactions have also resulted in complicated case law on this subject. In a case where goods under a bill of lading were sold subject to the acceptance of the goods by the buyer, it was held that the title is not vested in the buyer but in

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355 ibid.
357 *Petit v First National Bank of Memphis*, 4 Bush (Ky) 334.
359 International Chamber Of Commerce (ICC) Uniform Customs and Practice for Documentary Credits Act 24 (1993) [hereinafter UCP 500].
the seller and if a credit is raised against such a bill of lading, the title would be vested in the bank to secure its loan and the goods would be considered under mortgage with the bank under constructive possession. The bank is entitled to take physical possession and to hold it until payment of the debt, of course, in the case of inconclusive contract of sale due to the rejection of the goods by the buyer.\footnote{Non-Magnetic Watch Co NY St Rep 98.}

2.10 Banking Practices in the Present Era as to the Bill of Lading:

Despite all the precedents quoted above and the legal securities available to the banks against a bill of lading credit transaction, the ground situation has been changed a lot, primarily due to the containerisation of the sea trade. The above discussed position was fair enough until 1960 when the majority of banking credit transactions and most letters of credit were presented against the ocean bill of lading.\footnote{B Kozolchyk, Commercial Letters of Credit in the Americas: A comparative study of contemporary commercial transactions (Bender 1966) 12-14, 42, 43.} Until 1990, bills of lading were considered as collateral against the loans issued by the banks. This position was strengthened due to two major factors. On the one hand, these were the bankers who were willing to accept the collateral against the bill of lading, and on the other hand, the judicial backing to the document of the title function that helped in shaping the universal characteristic of this document. In the present era, despite all the characteristics it had earlier, the increasing pace of the trade has forced the banks to view the bill of lading differently.\footnote{T Kawasaki and T Matsuda, ‘Containerization of bulk trades: A case study of US–Asia wood pulp transport’ (2014) 17 Maritime Economics & Logistics 2, 179–197; and K Grönfors, ‘Towards a Transferable Sea Waybill: An Answer to Shortcomings of Bills of Lading’ (A Report to the Hamburg Symposium on Sea Waybills 7 (2 October 1987).} In the present era, this status has been lost and a bill of lading’s collateral is not fair enough to give precedence over the other prevailing documents of title. Instead, loan sanctions are more against freight forwarders’ cargo receipts; although a
freight forwarder’s cargo receipt lacks many characteristics of a negotiable bill of lading.\textsuperscript{363} Containerisation is the recent phenomenon in the sea shipment trade where the cargo of several shipments is placed in the same container on a vessel carrying many containers at the same time. The holder of the bill of lading in such a case has no possessory rights, but only the inspection rights over the goods placed in the container.\textsuperscript{364}

\subsection*{2.11 Bill of Lading versus Sea Waybills:}

Under the preceding headings, the bill of lading has been analysed from its functional perspective. The bill of lading is considered as the most important sea trade document but there are other sea documents that are equally as important. One of these documents is the sea waybill. In order to highlight the importance of the bill of lading, a comparison of these two documents will help.

The development of the sea waybill is considered as the alternative to the sea bill of lading.\textsuperscript{365} The sea waybill is considered as a non-negotiable receipt document for carriage of goods by sea. This characteristic is the major difference between the two and renders the sea waybill incapable of holding or of the transfer of title during transit as the bill of lading is.\textsuperscript{366} Furthermore, sea waybills are not considered as a reflection of the contract of carriage between the parties, but is instead the short form of the terms and conditions of the carriage of goods issued by the carrier and refers to the same in case of any disparity or dispute.\textsuperscript{367} UCP provides for the acceptance of sea waybills in the documentary credits provided for it and the

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{363} Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 144–54.
\item\textsuperscript{364} Kawasaki and Matsuda (n 362) 179–197.
\item\textsuperscript{365} Schmitthoff, \textit{Schmitthoff’s Export Trade: The Law and Practice of International Trade} (n 149) 278–282.
\item\textsuperscript{366} Dubovec (n 99) 432.
\item\textsuperscript{367} ibid.
\end{itemize}
\end{footnotesize}
right to stoppage of goods in transit is retained by the shipper.\textsuperscript{368} The use of a sea waybill was often promoted in all transactions where the goods are not intended to be endorsed but it is not the case in the present-day carriage of goods scenario. Therefore, practically, the sea waybill has been transformed into an electronic format with much more ease.\textsuperscript{369}

### 2.12 The Need of Electronic Transactions and Replication of these Special Features in the E-Bill of Lading in the Present Age:

In the earlier part of this work and in the preceding chapters, a brief introduction to the bill of lading as it is conceived in the maritime trade has been discussed and its evolutionary steps have been traced back. In the meantime, in this chapter, different useful functions of this legal document have been reviewed to determine the importance of this document in the carriage of goods by sea. Because it has been established that this document has been in existence for a long time and its affectivity is well-established among all the stakeholders, including the judicial system, there is a need to review its need in the present-day world of a global economy as well as to identify the changes required in the bill of lading to enable it to survive the challenges posed in the present era.

The present-day world has been recognised as the global age of no distances, where the whole world is visible on the palm of your hand, virtually, and communication occurs many times faster than the available speed a century ago. The nature of communication and transportation has also been modified over a short period of time and hence the laws and regulations dealing with trade, transportation and carriage.\textsuperscript{370} The traders are well aware of the value of time in

\textsuperscript{368} UCP 500, 1993.
this competitive world and the volume of information pouring into the business every second is pushing them to rely on the best information to remain in the market and to be at the top. This shift has also changed the expectation of the shippers, carriers and the traders in relation to the documents used in these transactions to a noticeable extent. The carriage of goods now involves cargo containers instead of independent ships and the multimodal transportation model has been introduced. This whole chain of improvements has resulted in the shippers having to squeeze in the time required for the transport as well as the value of time for the traders. The international market is based on the exchange of goods measured in hours, whereas the trade transactions themselves take place at the speed of light using the internet and electronic modes of communication. In the case of the oil and wheat trades, the commodity is subject to be sold a number of times over the duration of its transportation and the final receiver of the commodity is variable.\textsuperscript{371} The banking transactions are completed on a click of the mouse and this interconnectivity has changed and energised the modes of business over a period of time. Banking credits are scrutinised in one part of the world and the credit is issued in another. This increased capacity has facilitated the trade of a commodity, making it much easier, swifter and economical for the traders than ever before. In the whole scenario, the enabling factor is the use of technology.\textsuperscript{372}

The use of technology has been fully evident in the case of transportation modes, banking transactions and traders’ practises, but there is still a gap between the practice and the legal reality in the case of the bill of lading. The bill of lading is a paper document in the strictest sense of the word; even today it has not evolved alongside the evolution of the trade itself. There have been efforts made by the business community to introduce an electronic bill of

\textsuperscript{371} Gaskell et al (n 120) para 1.54.
\textsuperscript{372} ibid.
lading to bridge this gap; however, these could not gather enough support to fully develop it into a replacement for the paper bill of lading.\textsuperscript{373} Furthermore, the effective replication of all the essential functions of the paper bill of lading is still subject to discussion.

Therefore, in order to introduce the electronic bill of lading, there are two definite areas on which to focus. First is its technological aspect, in which the replication of its functions is the task, and the second is the legal backing of the whole new initiative. All earlier efforts in the form of SeaDocs and CMI remained fruitless due to the absence of the backing of the legal realm through the individual governments, although some apprehensions within the stakeholders have also had an impact upon these attempts.\textsuperscript{374}

\subsection*{2.13 Summary of Chapter Two:}

At the end of chapter two, the bill of lading has been evaluated for its affectivity and the functions it performs in the carriage of goods by sea. In this process, it has been found that the bill of lading is a multi-purpose document which is not only a receipt of the goods shipped but it is also evidence of the contract of the carriage behind this carriage of goods. Historically, this document has served multiple purposes for the shippers and carriers involved in sea transport and the present position of this document has historically evolved, acknowledged by the trade practices and has been provided legal authenticity by the verdicts of different courts over the same period of time. In the present-day world, where its basic function as the receipt and whole proof of delivery of goods on the ship, in some ways it is the document of title in itself and in others, it is the proof of the legal/contractual relationship between the parties. For

\textsuperscript{373} The efforts made to introduce electronic bill of lading are discussed in the preceding chapters in detail.\textsuperscript{374} Detailed discussion on this aspect is made in Chapter Four, infra. Please see C Pejovic ‘Main Legal issues in the Implementation of EDI to Bills of Lading’ [1999] \textit{European Transport Law} 163, 164–165.
the shippers, it helps in the provision of financial credits from the banks and acts as collateral for the loan. For the carriers it is the basic document entailing their rights and liabilities. Among all of these qualities that it exhibits and functions, its prime function is its position as the document of title or, more precisely, its quality to make the transfer of goods in transit possible. No other document in the sea transportation trade is able to exhibit this function as successfully as the bill of lading, and this is the reason for its popularity among the traders, shippers and bankers. The affectivity it offers in the trade and transportation has resulted in the efforts to transform this document into an electronic format to match the speed of the global trade. The paper bill of lading is not a quick enough method to support the pace of the trade and there is an urgent need to find ways to modify this document through the use of appropriate technology and legislation to support these technological advances. Although it is essential to replicate all of the important functions of the bill of lading in its electronic format, it may be pointed out that regional differences observed while discussing the nature of this document in the different jurisdictions, it is obvious that there will be some pressing questions as to how all of these differences might be managed in designing a single effective electronic format.
CHAPTER THREE: THE BILL OF LADING – INTERNATIONAL AND NATIONAL REGIMES GOVERNING TRADITIONAL AND ELECTRONIC BILLS OF LADING

The last chapter was dedicated to discussing the characteristics of the traditional bill of lading. This chapter will now examine the future of the bill of lading in electronic format and will provide the reasons for the sustained popularity of this legal paper among sea traders over such a long time, as has been established in chapter one of this thesis. It is not only a need that makes something popular, but also the ease it provides to satisfy that need. A traditional bill of lading acts as the receipt for the goods shipped and thus equates to the ease provided by a sea waybill. It represents and proves the existence of a legal contract between the parties and, according to some jurists; it acts itself as the contract between the parties. Both these interpretations lead towards a legal role for this bill and imply that it sits over and above the counterpart documents. The distinguishing factor or the jewel in the crown of the bill of lading is its roles as a document of title and negotiability. Without going back to the legal aspects of these roles, it may be deduced that these are the features that have made the bill of lading a candidate worth replicating in electronic form to match the pace of commercial activities in present-day business.

In this chapter, after discussing the importance and features of the paper bill of lading from a legal, and to some extent a commercial perspective, the international business rules and conventions covering international trade with respect to trade documents including bill of lading will be examined. Among the leading regimes, the discussion in the coming sections

375 McLaughlin (n 30) 550–553.
376 Debattista (n 227) 652–663.
377 Bools (n 38) 4; and Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 170.
will be focused on The Hague, Hague-Visby, Hamburg, and Rotterdam Rules (UNCITRAL). To some extent this discussion will cover some bilateral and national laws covering the bill of lading in the present-day world to explore the undercurrents and developments at the respective levels. Soon after discussing some basic introduction of different legal regimes covering bill of lading, treatment of different legal and technological issues in all the three regimes as well as in some of the relevant national legislations have been tried to cover.

3.1 International Legal Regimes Governing the Electronic Bill of Lading:

In the international context, there is a clear lack of clarity and unification in private law about major trade aspects, including the use of electronic bills of lading in the sea trade arena. No single legal body or set of rules holds the whole ground. Although the efforts for unification and harmonisation of private international law date back to the 19th century, the process is still not at a stage where the differences of opinion and apprehensions of all the parties can be addressed amicably. Many efforts have been made towards a single body of rules, such as the Hague Conference on Private International Law (the Hague Conference) and the International Institute for Unification of Private Law (UNIDROIT), and these have been applauded in the academic world. However, these efforts were mainly supported by European stakeholders and they remained confined to this part of the world for a considerable period of time. Later on, organisations such as UNCITRAL and other organisations under the UN and some non-governmental organisations such as the International Chamber of Commerce concentrated on these efforts, and they had some leading success, such as the

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379 ibid.
Hamburg Rules, the Hague, and Hague-Visby Rules, all of which govern the affairs of the traditional bill of lading in the sea trade with variations within national laws on them.\(^{381}\) In the efforts made in the promotion of electronic trade, especially the electronic bill of lading, the major contribution was that developed for UNCITRAL (Rotterdam Rules). However, discussion at this level requires a review of all legal regimes covering the bill of lading for its understanding and to make comparisons, keeping in view the fact that all the three sets of rules represent different times and were drafted under the specific compulsions of each respective era.

### 3.1.1 Bill of Lading under The Hague and Hague-Visby Rules: Historical Perspective and Application/Scope:

In the era prior to any regime, the shippers and carriers had the liberty to agree on any term they preferred, mostly in favour of carriers who often claimed indemnity for their work. By the time of the rise of international commerce and at the end of First World War, a call for a uniform body of rules to govern the carriage of goods by sea was raised from leading commercial states that resulted in the adoption of the Convention for Unification of Certain Rules of Law Relating to Bill of Lading (commonly known as the Hague Rules) in 1924 in Brussels.\(^{382}\) The aim of these rules was primarily to protect the shipper and to define the maximum indemnity to a carrier under these rules.\(^{383}\) Soon after its endorsement, the major political powers adopted these rules in their national legislations. In 1968, these rules were amended to some extent in light of new requirements and are now known as the Hague-Visby Rules, 1968,\(^{384}\) and these rules enhanced the scope of the contracts covered under the bill of lading.

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\(^{381}\) ibid.


\(^{383}\) ibid.

\(^{384}\) The United Kingdom adopted these rules as such in its Carriage of Goods by Sea Act, 1924. The Carriage of Goods by Sea Act, 1971 further included the amendments made in 1968 as the Hague-Visby Rules.
lading in maritime trade. The main purpose was to regulate bill of lading contracts against the exceptions of availing the liabilities of aversive behaviour of the carriers. The rights and liabilities of the shipper and the carriers are devised in the rules in such a way that the carrier should not be in the position to manipulate the contract.\(^{385}\)

Application of these rules is discussed in Article 1 (b) to the extent of the document it covers. It provides the rules for the contract of carriage.\(^{386}\) It states that these rules are applicable on the contracts of carriage by sea covered by the bill of lading or similar to documents of title. The word "covered" indicates that a bill of lading is normally issued after the actual carriage of the goods on the ship and needs not to be issued at the time of the commencement of carriage.\(^{387}\) These rules are also applicable to a document treated as the document of title by virtue of customs or trade usage, as held in the *Kum v Wah Tat Bank Ltd* case subject to the condition that the burden of proof as to the document of title rests with the party who pleaded to avail this facility.\(^{388}\)

However, this rule is not applicable to other documents such as the sea waybill or the bill of lading issued to the charter-parties, except when a bill is endorsed to a third party.\(^{389}\) While discussing the scope of these rules, Devlin J in *Pyrene Co Ltd v Scindia Navigation Co*, opined that the issuance of a bill of lading after conclusion of a contract of carriage is required under law and that the contract of carriage is covered by a bill of lading from its very inception within the meaning of the (Hague) Rules.\(^{390}\) It is applicable only when the shipper under the


\(^{386}\) Hague-Visby Rules, 1968, art 1(b).


\(^{388}\) *Kum v Wah Tat Bank Ltd* (n 286).

\(^{389}\) Hague-Visby Rules 1968, art 1(b).

contract of carriage is entitled to claim goods given under the bill of lading but not under a non-negotiable bill of lading.\textsuperscript{391} A similar opinion was made in \textit{The Happy Ranger} [2002] case.\textsuperscript{392}

In terms of the goods covered under these rules, all goods, wares, merchandise, articles and materials are covered except live animals and deck cargo.\textsuperscript{393} The scope in relation to Article 1(e) of The Hague Rules ignores the time before loading and after discharge at the port of the destination during which the carrier was under possession or control of the goods\textsuperscript{394} and was limited to the actual loading and unloading at the respective ports.

The geographical scope of the Hague-Visby Rules is provided in Article X, which provides that these provisions are applicable to every bill of lading relating to carriage of goods between two states, if:

\textquotedblleft (a) the bill of lading is issued in a contracting State, or

(b) the carriage is from a port in a contracting State, or

(c) the contract contained in or evidenced by the bill of lading provides that these Rules or legislation of any State giving effect to them are to govern the contract; whatever may be the nationality of the ship, the carrier, the shipper, the consignee, or any other interested person…..\textquotedblright

However, this scope is limited to the contracting states only and it requires that, in order to attract its application, either the bill of lading should be issued at the port of a contracting state

\textsuperscript{391} \textit{The European Enterprise} [1989] 1 Lloyd’s Rep 185.
\textsuperscript{392} \textit{The Happy Ranger} [2002] 2 Lloyd’s Rep 357 at 363 (CA).
\textsuperscript{393} Hague-Visby Rules 1968, art 1(c).
\textsuperscript{394} Hague Rules 1924, art 1(e).
or the port of loading should be located in one of the contracting members of the rules. State parties are bound to apply these Rules to the bill of lading mentioned therein, but it does not bar the parties from applying these rules to any other bill of lading excluded from the scope. This indicates the intention of the state parties to adhere to the provisions of the Rules.

3.1.2 The Bill of Lading under Hamburg Rules: Historical Perspective and Scope:

The Hamburg Rules on the Carriage of the Goods by Sea were finalised in the Convention on the Carriage of Goods by Sea on the draft prepared and presented by the United Nations Commission on International Trade Law (UNCITRAL) in 1978 in the United Nations General Assembly’s meeting in Hamburg. The purpose and the intent to introduce these Rules were predominately different from those of the framers of the Hague Rules and their subsequently amended Hague-Visby Rules. The earlier rules were said to be introduced to safeguard the interests of the ship-owner countries, that is to say the carrier fleet-holding countries, and were followed by those countries in the colonised world. These rules have little or no interest in the rights and interests of the shippers (the carriage owners) who increased in number after the Second World War and the freedom of colonised states. These rules are said to have been prepared and introduced in order to safeguard the interests of the newly-independent states. The major areas where these two rules differ may be highlighted as a difference in the scope of the operation, the transport documents these rules deal with, the liability of the carrier and its basis, claims and action, and the basis of these two Conventions.

396 ibid.
398 ibid, para 1.04–1.05.
399 ibid, para 1.08.
On the point of the influence of these rules in the maritime trade, it may be noted that, to date, most of the maritime trade still operates under the earlier regime of the Hague-Visby Rules\textsuperscript{400} and only 25 countries have ratified the Hamburg Rules so far.\textsuperscript{401} The majority among the countries that have ratified the United Nations Convention on the Carriage of Goods by Sea 1978, the Hamburg Rules, are still low-income countries and many are economically less effective African countries that have little say in international world trade. Similarly, no major European or Arab oil-producing country has yet given leverage to these rules. This fact is important because in the promotion of an electronic format of sea documents, the backing of its supporters is crucial.\textsuperscript{402} Therefore, within a general discussion on the Hamburg Rules, 1978, these differences will be highlighted in the coming paragraphs.

As seen in case of The Hague and Hague-Visby Rules, the application or the scope of these rules is threefold. One is the scope in terms of the contract document and the other in terms of geographical location. The geographical scope or application of these rules is broader than that of the earlier rules. On the one hand, it ignores the location of issuance of the bill of lading as it might be different from the port of loading or discharge and, therefore, it focuses instead on the latter types of ports and requires that either of these should be situated in the legal jurisdiction of a member state\textsuperscript{403} where the national legislations have been given due legal effect to these rules.

The scope of these Rules in terms of the contract documents has been discussed in Article 1(6) where the contract of carriage has been defined, but, unlike the Hague-Visby Rules, it does not

\textsuperscript{402} ibid.
\textsuperscript{403} Hamburg Rules, art 2.
mention the scope limited to the bill of lading; rather, it provides for the contractual approach although not applicable to charter-party. This contractual approach extends to other transport documents. Article 18 of the Hamburg Rules states that “Where a carrier issues a document other than a bill of lading to evidence the receipt of the goods to be carried, such a document is prima facie evidence of the conclusion of the contract of carriage by sea and the taking over by the carrier of the goods as therein described”. This clearly indicates that the provision of the Hamburg Rules is applicable to all sea trade documents in addition to the bill of lading, but only a bill of lading will be conclusive evidence of the contract of the carriage of goods and above all others will be treated as the prima facie evidence of the contract.

The third scope is in terms of the time coverage of the responsibility of the carrier under these rules, which is limited to the time a carrier is under charge of the goods, from taking possession of the goods at the port of loading to the unloading of the goods at the port of discharge. These terms are extended somewhat as compared to the scope provided in Article 1(e) of the Hague Rules which ignores the time before loading and after discharge at the port of the destination during which the carrier was under possession or control of the goods. There were instances where, when loss of the goods occurred during the safe custody of the goods at a safe house at the port under the agents of the carrier, and these carriers were able to absolve their responsibility by making the necessary contracts with their agents. Such losses being uncovered under the previous rules were required to be borne by the shipper, although

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404 ibid, art 2(3).
405 ibid, art 18.
406 Joko Smart (n 397) para 1.78.
407 Hamburg Rules, art 4(1) para 1.20.
408 ibid, art 1(e).
410 Joko Smart (n 397) Para 1.21; and Captain v Far Eastern Steamship Co (1979) 1 Lloyd’s Report 595.
the parties were free to incorporate the Hague-Visby Rules / COGSA in USA to cover losses before shipment and after loading under contractual arrangements.\footnote{Sabah Shipyard v Harbel Tapper 178 F 3d 400 (5th Circuit 1999).} This principle of tackle-to-tackle was also on par with the conventions of the other modes of transportation and the multimodal transportation of the carriage of goods and hence it provided uniformity to all the regimes,\footnote{Joko Smart (n 397) Para 1.23.} although it has also been debated that, following the English Courts’ judgements, such as \textit{The Captain Gregos Case},\footnote{\textit{Captain Gregos Case} (1990) 1 Lloyd’s Rep 311.} where the entitlement to sue was debated on the plea of taking possession without having good title in the goods under a bill of lading, or the Australian verdict in \textit{Rockwell Graphic System Ltd v Fremantle Terminals Ltd},\footnote{\textit{Rockwell Graphic System Ltd v Fremantle Terminals Ltd} 106 FLR 294 (1991).} where it was established that the responsibility of the carrier goes well beyond the unloading at the port of destination under the Hague Rules. In the \textit{Rockwell Graphic System Ltd v Fremantle Terminals Ltd} case, the consigner/plaintiff in the original suit had sued the stevedore of the ship for the damages against the loss incurred due to the negligence of the bailee on the ship that rendered the printing press shipped on the vessel damaged. The printing press was owned by the consignor and was shipped from the port of London, UK for Freemantle in De Loris on the bill of lading. This bill of lading was a simple port-to-port bill and was stipulated with the Himalaya clause. According to that Himalaya clause, the carrier had been granted certain immunities and defences against the shipper in case of damages/loss to the goods shipped during travel due to any mishandling or negligence of independent contractors operating on the port to lodge or dislodge the goods from the ship. The printing press was being off-loaded by the stevedore from the ship on a low bed trailer when it fell and was damaged. The defendant sought a plea of immunity available under the Himalaya clause that was refused by
the court and the damages were awarded. Subsequently, an application to allow special leave for appeal was also refused from the High Court.\textsuperscript{415} Therefore, the extension of the responsibility period under the Hamburg Rules is of no practical value.\textsuperscript{416}

\textbf{3.1.3 Legal framework under UNCITRAL – Rotterdam Rules: Introduction and Purpose:}

The UNCITRAL organisation was established in 1966 under the auspices of the UN General Assembly in order to bring about uniformity in international trade laws. Since then it has played a major role in framing unified and global trade laws. As it is a body that falls under the authority of the UN and its mandate is supported by a majority of the nation states involved in international trade, therefore, the mandate and the powers to achieve this mandate were supported by different governmental and non-governmental organisations, and UNCITRAL was successful in directing and substantiating international rules on commercial activities.\textsuperscript{417} UNCITRAL was assigned tasks in six working groups and the third and fourth working groups were concerned with the transport law and electronic commerce respectively; these are major areas which will be discussed under the legal framework concerning the electronic bill of lading. Under the UNCITRAL legal framework, the Rotterdam Rules, UNCITRAL Model Law on Electronic Commerce, 1996, and UNCITRAL Model Law on Electronic Signature, 2001, are worth discussion to define the outer boundaries within which the electronic bill of lading is proposed to be accepted at the international level. The Rotterdam Rules are considered wide enough to cover major issues affecting maritime trade, which had either already been covered under the previous regimes of rules or which were

\textsuperscript{415} ibid.
\textsuperscript{416} Luddeke and Johnson (n 409).
novel and emerging aspects in this area to introduce uniform transport law documents across the globe.\textsuperscript{418} Therefore, it is a document representing both traditional approaches as well as innovating future perspective for processes to accommodate functional equivalents while providing for elaborate rights and liabilities of the respective stakeholders. This \textit{functional-based approach} that has been hinted at here had led this document to accommodate the electronic format of transport documents.\textsuperscript{419}

The UNCITRAL Convention on Contracts for the International Carriage of Goods Wholly or Partially by Sea (commonly known as the Rotterdam Rules) was concluded in 2008 and is open to the endorsement of the parties, hence is not uniformly operated in the world of trade.\textsuperscript{420} Upon its ratification from the requisite number of members, the Rotterdam Rules will be able to replace its preceding regimes such as the Hamburg Rules and the Hague-Visby Rules to end the era of polarisation in the international trade. The Draft Rotterdam Rules diverts from these previous rules in that they address those aspects which were not discussed earlier, and one example of these is the issue of electronic commerce.\textsuperscript{421} The Rotterdam Rules, however, took the assistance and advantage of previously conducted research and rules formed by the Comité Maritime International (CMI) and worked to achieve a functional equivalence among all means of communication, whether that be paper or electronic.\textsuperscript{422}

\textsuperscript{418} Faria and Angelo (n 378) 11–12.
\textsuperscript{419} ibid.
The scope of the Rotterdam Rules can also be seen in terms of the documents it covers, geographical scope and coverage of the element of time as the responsibility of the carrier. In relation to the geographical terms, connecting factors are considered. The Rules are silent as to the incorporation of the Rules in the bill of lading/carriage contracts. They cover the documents, both the bill of lading and other transport documents, and hence have a wider scope in this regard.\textsuperscript{423} The Rotterdam Rules have been said to increase the scope of the existing law beyond the Hague Rules by incorporating the element of door-to-door transport as opposed to the tackle-to-tackle or port-to-port approaches of earlier regimes.\textsuperscript{424} Cover starts from the time when a carrier or a performing party under contract with the shipper takes over the possession of the goods to the time of actual handing over/delivery of these goods to the consignee at the agreed place in good time in terms of the contract of carriage.\textsuperscript{425}

In Article 5 of these Rules, the scope extends without any exception to the nationality of vessels and concerned parties. The general scope of these rules, as defined in Article 5, provides that “subject to article 6, this Convention applies to contracts of carriage in which the place of receipt and the place of delivery are in different States, and the port of loading of a sea carriage and the port of discharge of the same sea carriage are in different States, if, according to the contract of carriage, any one of the following places is located in a Contracting State:

(a) The place of receipt;

(b) The port of loading;

\textsuperscript{423} MF Sturley, T Fujita and G 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).
\textsuperscript{424} ibid.
\textsuperscript{425} Rotterdam Rules, art 12.
(c) The place of delivery; or

(d) The port of discharge”.

As its name suggests, the Rotterdam Rules are applicable to carriage wholly or partly by sea, and in the definition of the contract of carriage, the reference is to the contract of carriage by sea excluding the expression of water or inland carriage. The Rules indicate only compulsory marine transportation and therefore, because Article 5 of the Rules is related to multimodal transport, this may include other modes of transport, before or after the main sea contract. These Rules are multimodal in nature but do not cover other modes of transportation unless agreed by the parties in terms of Article 1(1). In the geographical scope, these rules are for international contracts and not for internal trade. This international scope may be defined on the basis that the place of receipt and delivery are usually in two separate states, and these are not necessarily contracting states. Alternatively, the port of delivery and discharge are also required to be in different states, which may or may not be the contracting states. The reason for the introduction of the recognition of this dual internationality is perhaps the nature of the rules in that they do not cover other international modes of transportation such as rail and road. But these rules will not be applied if none of four ports mentioned in Article 5.1 are in the contracting state in terms of the definition of the contracting state given in the Article 92 of the Rotterdam Rules.

The control of Article 6, however, restricts the application on charter-parties and other contracts for the use of a ship or its space as well as non-liner transport, except in those cases

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426 ibid, art 5.1.
427 ibid, art 1 and 5.
428 ibid, art 5.1.
429 ibid, art 92.
where charter-party involvement is excluded by any clause of the contract and the transport documents are issued subsequent to introduction of such clause.\textsuperscript{430} Practically, there is more than one type of charter-party. These rules are, however, non-indicative of the type of charter-party; therefore, presumably, these rules are applicable to all types and suggestions of charter-parties.\textsuperscript{431} Furthermore, these rules are not applicable to passengers and luggage in terms of Article 84.

3.2 \textbf{Comparison of Hague-Visby, Hamburg and Rotterdam Rules in respect of Bill of Lading:}

In the preceding paragraphs, the position of these three regimes viz-a-viz different requirements of a bill of lading especially in electronic era is compared. This covers nature of a bill of lading, contractual nature, needs of signature and acceptance of electronic signatures under the recent times.

3.2.1 \textbf{“Written” and “Document” Nature of Bill of Lading under Different Regimes:}

One of the basic features of a bill of lading that has been discussed in all the three regimes is the documentary and written nature of the bill of lading. The term written and document have traditional meanings in the legal sense but on the other hand, different countries have redefined the terms. These definitional issues are evident from the historical record and transcripts of meetings before adoption of these legal regimes on marine transportation as well as from the interpretation prevailing in different legal systems. As the latest development after electronic communication, these both terms have lost their traditional meanings altogether and therefore, have been discussed in Rotterdam Rules from this new perspective too. UK

\textsuperscript{430} ibid, art 6.
\textsuperscript{431} ibid.
Electronic Communication Act, 2000 had moved to the acceptability of the electronic documents and data messages whereas by the time of agreement on Hague-Visby Rules, there was no such concept as to electronic document etc. This raises the reason to discuss these aspects of these three regimes.

i. In the Hague-Visby Rules, 1968, which remained prevalent until the enforcement of the Hamburg rules, the requirement was to issue a bill by the carrier on the demand of the shipper without referring to its nature as to a document in writing. The carrier is bound to state all the information required under that bill of lading. In this way, indirectly, this rule has an inbuilt but indirect provision for the document nature of the bill of lading but no reference to an electronic form of the bill of lading.

ii. In reference to the bill of lading, the document condition is clearly provided in its definition in the Hamburg Rules. Article 1 (7) of the Rules provides that “‘Bill of lading’ means a document which evidences a contract of carriage by sea...” This indicates that a bill of lading, in traditional terms, is a document; however, these rules have a provision of compromise in the recognition of electronic commerce which paves the way for future recognition of an electronic bill of

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432 Article 3, Rule 3 of the Hague-Visby Rules provides that “the carrier shall, on demand of the shipper, issue to the shipper a bill of lading”.
433 ibid.
434 Hamburg Rules, art 1(7).
These rules are more liberal in the inclusion of documents in the definition than its predecessors, The Hague or Hague-Visby Rules. The written character of the document is emphasised traditionally in many legal systems and international conventions. It may be a condition precedent for the validity of the contract without which a contract may be considered as null and void. However, if the written character is not required to validate the very existence of the contract, it may be enforced in presence of other permissible corroborating evidences which may prove its existence. But once it is the prime requisite for a legal transaction, it presents an absolute a priori impediment in its adoption in electronic form.

For the traditional bill of lading, there are many rules which are applicable on both national and international levels requiring a written bill for its admissibility expressly or impliedly. In the case of the Hague-Visby Rules, the written requirement of the bill is assumed and customary as no formal provision is found. The nature of the written document is further extended to cover faxes and telexes in the case of the Hamburg Rules. Similarly, the modified Amended Hague Rules provides that “these Rules apply, with any necessary changes, to a
sea carriage document in the form of a data message in the same way as they apply to such a document in printed form” and writing is defined as “electronic mail, electronic data interchange, facsimile transmission, and entry in database maintained on a computer system, covering possibilities of acceptance of electronic bill of lading”.

iii. On the other hand, UNCITRAL’s Vienna report, a proposed document by the commission, furthered the written document requirement as provision of a document legible for all and these conditions have remained unaltered over a period of time. A document may be reproduced and replicated for the purpose of the custody of all the parties concerned as record of data for authentication of the same by means of a signature. It may be presented in the form of a document acceptable to public authorities and courts.

The UNCITRAL Model Law on Electronic Commerce discusses the aspect of writing in Article 6, which is reproduced as follows:

“6(1) where the law requires information to be in writing, that requirement is met by a data message if the information contained therein is accessible so as to be usable for subsequent reference.

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442 Articles 2(A) and (H) of Amended Hague Rules, contained in Schedule 1, Australian Carriage of Goods by Sea Amendment Act 1997 (Cth).
443 Para 32–36, the Vienna Report.
(2) Paragraph (1) applies whether the requirement therein is in the form of an obligation or whether the law simply provides consequences for the information not being in writing.

In this article, however, there is no indication of a compromise or dilution of the sanctity of the term “writing” by implying that a data message is a replacement of the information in writing only if the law allows it to be so. Hence, in any case, this provision has not breached the requirement of a written document and is based on a functional equivalence approach instead of replacement.

UNCITRAL is a proposed model law prepared under the auspices of the UN. However, these rules have no force of law. This inclusion of these rules in the discussion is meant to highlight the efforts made at different forums to identify gaps and to reach a suitable conclusion, as discussed in Hill & Walden 1996.

iv. On the part of European legislation, there are efforts to reconcile the gap between the need for a written document on paper and the application of an electronic document in the business world. The EU has directed all its member states to incorporate the necessary provisions to cover and to accept an electronic contract. In pursuance of these directives, which are guidelines for member

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445 UNCTAD (n 438).
states to ensure uniformity of law throughout the region, changes are underway in
electronic communication and its related laws in EU.\footnote{448 Electronic Communications Act 2000; Copyright, Designs and Patents Act 1988.}

Acceptance of electronic communication in legal parlance is the prerequisite for the
acceptance of the e-bill of lading as a valid legal document. Therefore, any rule to favour
electronic communication as a legal mode of communication, transfer of rights, creation of
rights, etc., is both directly and indirectly important within this discussion.

\section*{3.2.2 Contract of Carriage of Goods and Contractual Nature of Bill of Lading:}

In the chapter two of this research work, a detailed discussion on different aspects of bill of
lading have been made. In the preceding paragraphs, some of those key features have been
seen through the legal development at international level i.e. covered under the above
mentioned three international regimes, wherever found applicable, are covered with
comparative analysis.

\subsection*{3.2.2.1 Contractual and Evidential / Receipt Function of Bill of lading under The Hague
Rules and Hague-Visby Rules:}

In the first instance, section 2.2 to 2.4 previously has covered the debate from the evidentiary
and contractual nature of a bill of lading. This discussion is furthered in this part of chapter
three with reference to legal provisions in The Hague Rules and Hague-Visby Rules. This
primarily pertains to the development of bill of lading over the period and its acceptability in
different periods of time.

The Hague Rules deal with both the receipt and contractual function of the bill of lading,
however, the contractual role is more important and prominent due to the internationalisation
of maritime trade and the rights and liabilities arising out of the terms of the bill of lading.\textsuperscript{449} The purpose of this convention is in itself evidentiary to the intention of the drafters that this effort was made in order to achieve diverse practices and usages of the bill of lading in the sea trade. The extent of the contractual role of the bill of lading has been cursorily reviewed above. It may be added here that the bill of lading, under these rules, is applicable as both the contract of carriage itself and its extended effects to the negotiated bill of lading issued under charter-party. These rules cover all the contracts covered by the bill of lading under its Article 1(b) and inwardly, this implies that the contract of carriage should have been in the form of bill of lading instead of its separate identity.\textsuperscript{450} However, if the words covered by the bill of lading are interpreted as the contract contained therein, the bill of lading will emerge as a document that is the contract of carriage by virtue of the fact that its wholeness or its part contains the contractual terms of the contract of carriage and is evident through this piece of the agreement.\textsuperscript{451} Thus the application of the rules is irrespective of the details of the form but on the basis of the function that a bill of lading performs, including its contractual function. This led to the opinion from the jurists that the application of the Rules is linked with the contractual function of the bill of lading and that contract should be binding in nature. In the opinion of Tetley, the contract of carriage in the bill of lading is the contract of carriage that is a subject matter of these rules.\textsuperscript{452} However, this aspect of the contractual nature of the bill of lading versus the contract evidenced by the bill of lading has been discussed in the perspective of these rules, too. Some scholars are of the opinion that these rules are applicable to the contract of carriage in the bill of lading and some see the words “contract of carriage” in the

\begin{footnotes}
\item[449] Knauth (n 20) 112–117.
\item[450] Hague Rules 1924, art 1(b).
\item[452] ibid.
\end{footnotes}
form of the bill of lading itself. The courts, however, favoured the later version that considered the bill of lading as the contract itself.\textsuperscript{453} In this way it was found that the bill of lading is discussed and adjudged as the contract itself rather than the mere receipt, although with the bare reading of the convention this aspect is found to be missing.

In the case of the Hague-Visby Rules, the areas covered under the bill of lading are rather enhanced. The application of the Rules/Convention is extended \textit{to every bill of lading relating to contract of carriage}.\textsuperscript{454} Contract of carriage is again not properly defined in the convention, but the inclusion of this contract was broadened with the words, \textit{“the contract contained in or evidenced by the bill of lading provides that the rules of this Convention or legislation of any State giving effect to them are to govern the contract”}.\textsuperscript{455} The contract of carriage is still a contract covered by a bill of lading, as previous. Where it is clear that this convention, like the earlier one, deals with the bill of lading contracts only, the inclusion of the words \textit{“evidenced by the bill of lading”} has further diluted the contractual role of the bill as compared to the Hague Rules. Furthermore, there is another ambiguity as to its role vis-à-vis the charter-party transactions that are covered only in the case where the bill of lading is acting as the contract of carriage in itself, although the discussion in The Hague Rules about the contractual role is still valid. The major opinion is still the same; that these Rules are also applicable to the contracts covered by the bill of lading as the earlier version was, and hence, its contractual function remained unchanged.\textsuperscript{456}

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{453} The Torni [1932] 78 86; and Coast Lines Ltd v Hudic & Veder Chartering N V [1972] 2 QB 34 48, 47.
\item \textsuperscript{454} Hague-Visby Rules 1968, art 5.
\item \textsuperscript{455} ibid.
\item \textsuperscript{456} Zekos, \textquote{Judicial Analysis of The Contractual Role of Bills of Lading As-It Stands in Greek United States And English Law} (n 212).
\end{itemize}
\end{footnotesize}
The term *contract* is defined under the Contract law of the respective member states and both The Hague and Hague-Visby Rules (as amended) do not provide for any definition of contract of carriage. It rather takes the documentary approach that links the contract of carriage with the contract documents issued in the form of a bill of lading. The scope of the Hague Rules is provided as “contract of carriage applies only to contracts of carriage covered by a bill of lading, ... in so far as such document relates to the carriage of goods by sea; ... any bill of lading ... issued under or pursuant to a charter-party from the moment at which such instrument ... regulates the relations between a carrier and a holder of the same”.  

Similarly, Article 1 (b) of The Hague-Visby Rules provides that “Contract of carriage applies only to contracts of carriage covered by a bill of lading or any similar document of title ...”  

This indicates not only the identical approach as far as the definition of contract of carriage is concerned but also the continuity of the approach followed in these rules.

However, for the definition of a bill of lading, it is unfortunate that the Hague Rules and their subsequent amendments, such as the Hague-Visby Rules, did not attempt to define the term Bill of Lading or to scale its characteristics for legal purpose. Even the other subsequent regimes have not provided any elaborate definition of the term, which has led to inconsistency as well as conflicting definitions from place to place and time to time by the common law courts. The general reading of both of these articles refers to the existence of different types of contract prevailing in the maritime trade but these provisions had been limited to the contract covered by the bill of lading. Without an attempt to define the bill of lading or the contract of carriage, it may be debated that what is meant by contract is covered in the bill of lading.

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459 It is widely observed that definitions used in case law are from the jurist and not from the legal provisions.
lading. The provisions are silent to this effect but the scope of The Hague Rules is able to point to some indication about the intention of the drafters of the rule at that very time. The aim of the convention provided for the standardisation of the terms of contract of the carriage of goods by sea and it further clarifies that the drafters were anxious to standardise and clarify the terms of the contract with the help of the bill of lading upon which the provisions of this convention would be applied. Here either the bill of lading should be dealt with as the contract of carriage itself,\(^\text{460}\) or the contract covering the relationship between the carrier and the shipper.\(^\text{461}\) It is further argued that the Rules are not relevant to the bill of lading as the original bill of lading, but as the negotiable bill of lading as the contract of carriage itself that covers the rights and liabilities of the subsequent holders of the bill, vis-à-vis the carrier.\(^\text{462}\) However, it should be noted that rights and liabilities under the negotiated bill of lading are not a result of a contractual arrangement as discussed in the previous chapters, but it is instead the result of the special usage that confers these rights and liabilities upon the respective parties in the bill of lading. The terms and conditions that are required to be standardised as per the aim of the convention for Hague Rules, are considered as the agreed terms of the contact of carriage, regardless of the issuance of the bill of lading that may be subsequent to the loading of the goods.\(^\text{463}\)

In Article 3(3) of the Hague Rules, only the essentials of a bill of lading are discussed; those that provide what it must contain to qualify as a bill of lading under these rules. It must contain the identification marks of the goods, and the

\(^{460}\) Tetley, *Marine Cargo Claims* (n 451) 228.


\(^{463}\) TE Scrutton, *Charter-parties and Bills of Lading* (15th edn Sweet & Maxwell 1948) 2.
quantity and quality of the goods.\textsuperscript{464} However, the absence of this information shall not invalidate the bill automatically as it is valid to indicate on the bill that the quality, quantity or nature of the goods shipped cannot always be ascertained due to technical or other reasons.\textsuperscript{465}

### 3.2.2.2 Contractual Nature and Evidential Value of the Bill of Lading under the Hamburg Rules:

Unlike the earlier two regimes, the Hamburg Rules have deviated from the confinement of jurisdiction to the contracts covered by the bill of lading and have broadened its application to other forms of contract, too. On the other hand, the scope was reduced to the extent of the bill of lading issued for the contract of carriage governing the relationship between the carrier and the shipper only, hence expressly excludes the scope for the issuance of the bill of lading in favour of a charter-party transaction.\textsuperscript{466}

The bill of lading was previously described in these rules in the following words, ‘\textit{bill of lading means a document which evidences a contract of carriage by sea and the taking over or loading of the goods by the carrier and by which the carrier undertakes to deliver the goods against surrender of the document},’\textsuperscript{467} this definition ignored the contractual role of the bill of lading most by confining it to be the document evidence of the contract of carriage, receipt of the loading or taking over of the goods on the vessel, or a document of title upon which the surrender of the goods is liable to be delivered to the holder of the bill. Furthermore, the enhancement of the scope of the other contract of carriage has further shadowed the

\textsuperscript{464} Hague Rules, 1924, art 3(3).
\textsuperscript{465} S Dor, \textit{Bill of Lading Clauses and the International Conventions of Brussels, 1924} (Hague Rules): Study in Comparative Law (2\textsuperscript{nd} edn W Pickering and Sons 1960) 90.
\textsuperscript{466} Zekos, ‘Judicial Analysis of The Contractual Role of Bills of Lading As-It Stands in Greek United States And English Law’ (n 212).
\textsuperscript{467} Hamburg Rules, art 1.
contractual role established in the earlier regimes at first glance. It was therefore considered that these rules are applicable to the contract of carriage as such without dependence upon the bill of lading. These rules are often seen as being devoid of any single contractual function for the bill of lading by omitting the phrases kept in earlier rules such as “contracts covered by the bill of lading” or “contract contained in” the bill of lading. There could only be an implied contractual function for a bill of lading under these rules as no clear evidence of this role is established in the scholarly work or legal precedents.

Unlike the Hague-Visby Rules, the Hamburg Rules define the contract of carriage of goods by sea and it is well noted that this definition is restricted to the carriage by sea, expressly excluding all other modes of transportation. It provides that,

“Contract of carriage by sea means any contract whereby the carrier undertakes against payment of freight to carry goods by sea from one port to another; however, a contract which involves carriage by sea and also carriage by some other means is deemed to be a contract of carriage by sea for the purposes of this Convention only in so far as it relates to the carriage by sea”.

The importance of this definition lies in the fact that, in contrast to the Hague-Visby Rules, it at least made an effort to confine the scope of a contract of carriage, although the contract is still defined under the provision of contract law of the respective member states.

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469 Zekos, ‘Judicial Analysis of The Contractual Role of Bills of Lading As-It Stands in Greek United States And English Law’ (n 212).

470 Hamburg Rules, art 1(6).
On the aspect of the definition of the bill of lading as a contract document, the Hamburg Rules are silent, just are its predecessor rules. Article 15 of the rules, however, provides for the contents of the bill of lading. In addition to the contents provided in the Hague-Visby Rules, it requires the information as to the dangerous nature of the goods, apparent condition of the goods, name of principle and the place of business of the principle, name of the shipper and the consignee, if any, port of destination and discharge, place of issuance of the bill, freight payable and signatures of the carrier on the face of the bill.⁴⁷¹

### 3.2.2.3 Contractual Nature of the Bill of Lading under the Rotterdam Rules:

In the Rotterdam Rules, the contract of carriage is defined as “a contract in which a carrier, against the payment of freight, undertakes to carry goods from one place to another. The contract shall provide for carriage by sea and may provide for carriage by other modes of transport in addition to the sea carriage”.⁴⁷² This version is an addition to the earlier versions by extending its operation to include other modes of transportation, provided the parties are agreed to it, and in this sense it provides an opportunity for multimodal transportation on the agreement of the parties. The USA has adopted this broader definition in its state legislation, but it is still far from being adopted worldwide.⁴⁷³

### 3.2.3 Obligations and Immunities of the Carrier and Shipper under Contract of Carriage:

Because the prime purpose of all these discussed rules, as stated above, were to provide a free and fair regime for both the carriers and the shippers, it is important to review the provisions relating to the obligations of carriers under these Rules. Over the period of time, the changing

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⁴⁷¹ ibid, art 15.
⁴⁷² Rotterdam Rules, art 1(1).
nature of the bill of lading had impacted upon the relationship of parties involved in the contract of carriage and the three regimes prevalent over the last one century had deliberated upon the rights and obligation of the parties in light of respective position of bill of lading. The purpose of inclusion of this part to understand and imagine a bill of action as living document survived over a long period of time. It will help in understanding the adjustments required in its electronic format to an extent.

3.2.3.1 **Obligations and Immunities of the Carrier: Hague-Visby Rules:**

Articles 2 and 3 of the Hague-Visby rules discuss the same. Article 2 provides the responsibility of the carrier towards the goods under the contract. It provides that, subject to the provisions of Article 6, a carrier in a contract for the carriage of goods by sea is liable and responsible for loading, handling, stowage, carriage, care, custody and discharge of goods on his ship under that contract.\(^{474}\) Article 3 is about the carrier’s responsibility towards the ship directly and indirectly about the responsibilities already assigned in Article 2. It binds the carrier to exercise due diligence,\(^{475}\) before the beginning of the voyage, to the extent of the seaworthiness of the ship, proper supply of equipment and manpower to the ship, and all relevant preservation facilities such as cooling, refrigeration, etc. required to keep the safe custody of the goods on ship.\(^{476}\) The duty of due diligence cannot be transferred to any other person.\(^{477}\) However, once this condition is fulfilled before the start of the voyage, the carrier cannot be held responsible for the loss to the goods/cargo occurred due to un-seaworthiness of the ship after the commencement of the voyage.\(^{478}\)

\(^{474}\) Hague-Visby Rules 1968, art 2.
\(^{475}\) The Happy Ranger (n 392).
\(^{476}\) ibid, art 3.
\(^{477}\) Riverstone Meat Co Ltd v Lancashire Shipping Co Ltd (The Muncaster Castle Case) (1961) AC 807.
The liability of the carrier has been widened from the time of the inception of the Hague Rules to the present-day decisions of the courts. Initially, the liability of the carrier was limited to his person, his servants and agents but not including the independent contractors.\textsuperscript{479} This liability was further limited to the period from the loading to the unloading of the goods, including the period at sea. This limitation is evident from the provisions that require the shipper to intimate loss of the goods at or before taking the delivery where the loss is apparent and within 3 days of the receipt of the goods at the port of the destination where the loss is not evident on bare examination.\textsuperscript{480} Otherwise, such a delivery of the goods would amount to discharge of duty of the carrier and discharge of the bill of lading, too.

At the same time, the Rules provide for the immunity of the carrier in the performance of his duties. These exceptions are provided in Article 4 (1) (i) – (xviii),\textsuperscript{481} and in case of any assertion to the contrary, the burden of proof will be on the shipper, while in the case of allegation as to the un-seaworthiness of the ship that resulted in the loss, the burden of proving due diligence is on the carrier.\textsuperscript{482} A list provided in the Article IV (I) for immunities is exhaustive and still provides a larger scope than the present-day immunities in the Hamburg Rules or Rotterdam Rules, and these will subsequently be discussed.

So far as the liability of the third parties, such as servants, agents of the carriers and independent contractors working on the deck are concerned, these Rules are not effective and provide only that “if such an action is brought against a servant or agent of the carrier (such servant or agent not being an independent contractor), such servant or agent shall be entitled to avail himself of the defences and limits of liability which the carrier is entitled to invoke

\textsuperscript{479} Hague-Visby Rules 1968, art 4(2)(q).
\textsuperscript{480} ibid, art 3(6).
\textsuperscript{481} ibid, art 4(1)(i) to (xviii).
\textsuperscript{482} Riverstone Meat Co Ltd v Lancashire Shipping Co Ltd (n 477).
under these Rules’. This indicates the limitation on the suits against all these two categories of parties. For the independent contractors, this exemption is not provided, as held in the case of The New York Star. It was held in this case that stevedores are not the employees of the carrier but are an independent contractor; therefore, the exemption available to servants and agents of the carrier is not available to them.

3.2.3.2 Obligations of the Carrier under the Hamburg Rules:

Article 1(1) of the Hamburg Rules provides for the definition of the carrier as ‘any person by whom or in whose name a contract of carriage of goods by sea has been concluded with a shipper’, but these rules have a distinction from the Hague-Visby Rules in that these rules distinguish the carrier from the actual carrier. Article 1(2) defines this new term, ‘actual carrier’ as, “any person to whom performance of the carriage of goods, or part of the carriage, has been entrusted by the carrier, and includes any other person to whom such performance has been entrusted’. This distinction was created purposefully in these rules, keeping in mind the pace and the nature of the sea trade. There are instances where the carrier himself may undergo the actual voyage and thus performs all the functions of the carrier, but in modern-day practice, the sub-contracting of certain functions and routes is common and, in such a case, this distinction activates, although both are jointly and severely responsible for any loss to the cargo under carriage. The Liability of the actual carrier in this scenario, is however, limited to the part he actually performs in the whole carriage and not beyond. At the same time, any special arrangements and obligations assumed by the carrier under contract with the

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485 Hamburg Rules, art 1(1).
486 ibid, art 1(2).
488 Hamburg Rules, art 10.
shipper will not affect or enhance the responsibilities of the actual carrier, unless he agrees to it expressly or in writing.\textsuperscript{489} The relationship between the carrier and the actual carrier is internal to them and, in the case of incurring responsibility of one another; they can still seek indemnity from the other.\textsuperscript{490} In the case of a bill of lading under the Hague-Visby Rules, the identity of carrier clause provides for the owner of the vessel as the responsible party, often provided on the reverse of the bill.\textsuperscript{491} However, any such identification is in contravention of the Hamburg Rules; these rules instead identify the actual carrier as the responsible party.\textsuperscript{492}

The obligation and duties of the carrier, the owner and the master of the ship, under the Hague-Visby Rules have been discussed earlier as those that provide for the seaworthiness of the ship and the safety of the cargo. There is not such reference in the Hamburg Rules; rather, this liability is implied in terms of Article 5(1) of the Hamburg Rules.\textsuperscript{493} It states that the carrier is responsible for the loss or damage to the goods and delay in delivery while the carrier was in charge of these goods at that time as provided in Article 4 of these rules.\textsuperscript{494} Here the carrier is liable for both the safety of the goods during the whole carriage until delivery to the consignee as well as the timely delivery of the goods at the destination. This rule has a provision that the carrier may contest the liability if he is able to prove that he, his servants and agents, had undertook all the necessary and reasonable steps to avoid that loss.\textsuperscript{495} This article provides the basis of the carrier’s liability and the liability is now based on the fault of

\textsuperscript{489} ibid, art 10(3).
\textsuperscript{490} ibid, art 10(6).
\textsuperscript{491} Vikfost I Lloyd’s Rep. 560 (1980).
\textsuperscript{492} Hamburg Rules (n 1 at art 1(2) & 4); and WE Astle, The Hamburg Rules (Fairplay Publications 1981) 86, 93.
\textsuperscript{493} Hamburg Rules, art 5(1).
\textsuperscript{494} ibid.
\textsuperscript{495} ibid.
the carrier or, in other words, he is no more responsible in the strictest sense of the word.\footnote{UNCTAD, ‘The Economics and Commercial Implications of the Entry into Force of the Hamburg Rules and the Multimodal Transport Convention’ (1991) TD/B/C.4/315/Rev 1.}

On the other hand, the obligations of the carrier that were given under Article 3 of the Hague Rules specifically to ensure certain things at the beginning of the voyage only, are now, under the Hamburg Rules, required to be maintained by the carrier throughout the course of travel. Hence it is seen as the extension of the responsibility of the carrier.\footnote{R Force, ‘A Comparison of The Hague, Hague-Visby, and Hamburg Rules: Much Ado About (?)’ 70 Tul L Rev 2052 (1995–1996) 2063.} However, it has also been argued that the responsibility of a carrier should be seen in terms of (a) the allocation of risk; (b) the nature of liability; and (c) the burden of proof under these rules\footnote{Hague-Visby Rules 1968, para 1.23.} that will collectively define the liability of loss.

On the allocation of risk, the underlying principle in Article 5(1) has been discussed where the carrier is liable for any loss to the goods under his possession for carriage, throughout the voyage from the time of taking possession at the port of loading to the actual handing over to the consignee at the port of delivery/destination and, during this period, he is responsible for any loss made to the goods due to his or his servants/agents’ fault. These rules, however, ignore the list of obligations of the carrier under the Hague Rules except fire defence to the carrier.\footnote{UNCTAD, Bill of Lading: Report by Secretariat of UNCTAD (United Nations Publication 1971).} This removal of immunities was a result of the debate on the impacts of this rule and the withdrawal of all immunities in the form of Article 3 of the Hague Rules that has not only increased the cost of business and insurance of the freight and cargo for the ship-owners but has also made the bill of lading a more costly legal document as compared to other similar documents.\footnote{Joko Smart (n 397).}
The nature of liability under the Hamburg Rules has somehow become wider as the terms *fault or neglect* are subject to differing interpretations by different national courts and, therefore, the carrier is under a constant fear of being misconstrued in his actions.\(^{501}\) This provision requires a comparison with the Hague Rules’ meaning of liability. On the face of it, it appears that the Hague Rules are silent about nautical faults and managerial responsibilities at sea. But this assumption has been contested in some of the legal cases. In one of the US jurisdiction cases, it was decided that under the Hague Rules, at the time of the collision of the vessel, the carrier is responsible if the accident can be prevented with human skills and precautions, unless otherwise proven.\(^{502}\) In another case, it was found that the carrier is responsible for selecting a capable crew on the ship. Any accident resulting due to the fault of such a crew makes the carrier responsible for the loss.\(^{503}\) Therefore, the nature of the liability is, in practice, the same in both the Hague and Hamburg Rules, except for one difference that, in a later case, the carrier was found responsible for negligence of his servants and agents too, which can otherwise be suited in tort in the regime of the Hague Rules.\(^{504}\)

Another important aspect of liability of the carrier is the burden of proof of not performing the duties imposed in Article 5(1) of the Hamburg Rules. As mentioned earlier, there are only a few exceptions allowed under these rules, for example, fire. In all other conditions, it is the carrier who has to prove the absence of negligence or fault on his part and on the part of his crew and agents, but in case of fire, it is the shipper who is required to prove negligence or

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\(^{502}\) Swenson v Argonaut, 204 F 2d 636 3rd Cir (NJ) May 7th, 1953.


\(^{504}\) Force (n 497) 2063.
fault on the part of the carrier or his crew and agents.\textsuperscript{505} This requirement is somehow difficult to prove in reality, because, if the fire broke out at sea, the shipper, from his position, might not be able to establish any negligence, even there was any.

In the case of liability of delay in the carriage of goods to the port of shipment, Article 5(4) (a) of the Hamburg Rules applies. The amount of time for delivery is, however, required to be stated under this Article and, in the absence of any stated time, a delay in the delivery of the goods at the port of destination will be defined on the basis of the standard time required by a reasonable carrier to complete the task under a bill of lading.\textsuperscript{506} This test was endorsed in a decision of \textit{Song Dong Geun v Geumchun Maritime Shipping} \textsuperscript{507} in the Republic of Korea, where, in absence of any standard time for delivery under domestic laws, these standards were adopted.

Unlike the list of exceptions given under the Hague Rules, only three exceptions are defined under these rules.

- In the case of the shipment of live animals on the ship, the carrier is not responsible for any loss or death of the animals provided the manual/instructions provided by the shipper to safeguard those animals from damage have been fully followed. This exception is included due to the inherent risk involved in making such kinds of shipments.
- In the case of fire, as already discussed, the carrier is responsible for the loss caused by the fire if the shipper/claimant is able to prove the fault or neglect of the carrier or his

\textsuperscript{505} Hamburg Rules, art 5(1).
\textsuperscript{506} ibid, art 5(4)(a).
\textsuperscript{507} Song Dong Geun v Geumchun Maritime Shipping, C 745 August 28, 2002, A/CN.9/SER.C/ABSTRACTS/70.
crew. Otherwise, the carrier avails the plea of natural/beyond normal control circumstances to avoid the liability.\textsuperscript{508}

- The case of deviation is not expressly provided under the rules but is deduced from Article 5(6) which provides that ‘the carrier is not liable, except in general average, where loss, damage or delay in delivery resulted from measure to save life or from reasonable measures to save property at sea’.\textsuperscript{509}

3.2.3.3 \textit{Obligations of a carrier under Rotterdam Rules:}

In the Rotterdam Rules, the liability of the carrier has been varied in comparison to the Hague-Visby and Hamburg Rules. The carrier’s responsibility was expanded from the port-to-port scenario to the door-to-door scenario, and to include the entire voyage of the ship. Some features of the Hague-Visby Rules, such as the carrier’s responsibility to exercise due diligence, seaworthiness and worthiness of the ship’s cargo, were retained.\textsuperscript{510} Furthermore, these rules have also done away with the classifications of “carrier” and “actual carrier” as were introduced in the Hamburg Rules and instead, only the term “carrier” has been retained to ensure uniformity in the whole body of rules.

Article 13 of the Rotterdam Rules requires the carrier to ‘properly and carefully receive, load, handle, stow, carry, keep, care for, unload and deliver the goods’.\textsuperscript{511} Article 14 provides some similar responsibilities as those outlined in the Hague-Visby Rules, and makes the carrier responsible for exercising due diligence in making a ship seaworthy and to equip the ship with a proper crew and supply and to ensure the on-voyage maintenance of the ship. However, the

\textsuperscript{508} Hamburg Rules, art 5(4)(a).
\textsuperscript{509} ibid, art 5(6).
\textsuperscript{510} ibid, art 13–17.
\textsuperscript{511} ibid, art 13.
difference between this similar provision of the Hague-Visby Rules and Rotterdam Rules is the period of responsibility. This new regime imposes responsibility for the entire period of the voyage instead of at its beginning and end, to now consider it as a door-to-door responsibility of the carrier.\(^{512}\) This exercise of due diligence and seaworthiness of the ship is also a provision for containerised carriage that was missing in previous regimes.\(^{513}\)

The liability of the carrier against persons other than the carrier himself has been discussed in Article 18 of the Rotterdam Rules, and is much broader in terms than the earlier Rules. A carrier is responsible for the acts and omissions of the master of the crew, any other party acting under him, and employees or any other person under him directly or indirectly at the request of the carrier or under his supervision or control.\(^ {514}\)

Notice of loss is another area that may be worth discussion. These rules provide that notice of any loss must be given to the carrier before or at the time of the delivery of the goods, if the loss or damage is apparent on the face of the goods. However, if the damage cannot be seen with the naked eye, the notice must be placed within seven days of the delivery of the goods to the consignee. The burden of proof for the loss to the goods during carriage is upon the consignee, as per Article 17. This provision, when read with the burden of proof requirement, in fact relieves the carrier from his liability and timely notice of loss does not change the nature of his responsibility to provide proof that the damage occurred during carriage.\(^ {515}\) There are certain defences under Article 17 of these Rules and are discussed as under:

\(^{512}\) ibid, art 14, read with Hague-Visby Rules, art 2 & 3.  
\(^{513}\) ibid, art 14,  
\(^{514}\) ibid, art 18.  
\(^{515}\) ibid, art 23 and 17.
• A carrier is bound to prove that he, his crew and the persons performing under him are not at fault in order to avoid the liability of a loss. However, there should be no fault of the carrier if the loss is caused by an act of God, war, hostilities armed conflicts, piracy, terrorism, riots and civil commotion, sea roughness beyond control, legal processes of governments, labour strikes and lockouts at ports, etc., as provided under this article.

• This list is broader and more comprehensive in comparison to the defences provided in The Hague and Hamburg Rules. It has added defences such as war hostilities, terrorism, and piracy, keeping in view the present-day global environment and also considers reasonable measures to attempt to save property at sea or avoid damage to the environment as a defence for the carrier performing his duties.516

• On the other hand, these rules have ignored the defence of error in navigation or management of the vessel available in case of the Hague-Visby Rules and now any loss due to navigational and management errors are bound to be indemnified by the carrier.517

3.2.4 Obligations and liabilities of the Shipper:

Obligations and liabilities of the shipper under these three regimes are discussed as under:

3.2.4.1 Obligations and liabilities of the Shipper under Hague-Visby rules:

A contract is an agreement between two parties, therefore, the respective obligations and liabilities of the other party in a bill of lading contract must also be discussed. In the Hague-Visby Rules, the liabilities and obligations of the carrier have been discussed and those of the shipper are provided in Articles 3(5), 4(3) and 4(6). The first liability of the shipper is the

516 ibid, art 17.
517 ibid, read with Hague-Visby Rules 1968, art IV 2(a).
corresponding responsibility to provide and ensure the carrier an accuracy of the marks, number, quality and quantity of the goods, and any other necessary details to be provided in the bill of lading subsequently, at the time of shipment.\textsuperscript{518} Articles 4(2) and 4(3) of the rules provide for the indemnity of both the carriers and the shippers from the loss or the damage done to the goods caused by their respective acts, faults and/or neglect. This indicates that in the case of fault, neglect or act of the shipper, he cannot bring a suit against the carrier for damages and he has to bear the loss himself.\textsuperscript{519} This indicates a responsibility for the fault, and there might not be a case of damage despite neglect or fault. Therefore, unless a loss occurs, this provision will not be operative. It was held that the carrier was expected to know the nature of the goods shipped for safe carriage. Justice opined in this case that “\textit{I do not think it is to be imputed as vice in a cargo that it cannot safely travel with another cargo with which it ought not to be stowed}”.\textsuperscript{520} The other provision is about the strict liability of the shipper against any shipment of a hazardous or dangerous nature without the knowledge of the carrier\textsuperscript{521} or charter-party, if the carrier was not consented. In the latter situation, the carrier and the charter still have the right to remove the hazard for the safety of the ship and the other cargo.\textsuperscript{522} Article 4(6) provides responsibility in the strictest sense where the shipper will be responsible for all damages, directly or indirectly to the ship, to other goods, or to the goodwill of the carrier. However, dangerous does not necessarily mean explosive,\textsuperscript{523} but it may hint towards its intrinsically dangerous nature rather than its danger of stowage.\textsuperscript{524} However,

\textsuperscript{518} Hague-Visby Rules 1968, art 3(5).
\textsuperscript{519} ibid, art 4(2) and 4(3).
\textsuperscript{520} \textit{Hovis Ltd v United British SS Co Ltd} (1937) 57 LL Rep 117.
\textsuperscript{521} \textit{Micada Compañía Naviera SA v Texim} [1968] 2 Lloyd’s Rep 57.
\textsuperscript{522} \textit{Chandris v Isbrandtsen-Moller Co} [1951] 1 KB 240.
\textsuperscript{523} ibid.
\textsuperscript{524} \textit{Heath Steel Mines v The Erwin Schroder} [1970] Ex CR 426.
details of the shipping of dangerous goods may be found in other relevant pieces of legislation, as these particular rules are silent about these details.

3.2.4.2 Obligations and Liabilities of the Shipper: Hamburg Rules:

Similar to the Hague-Visby Rules, the Hamburg rules do not provide for the independent responsibility of the servants and agents. However, a claimant may bring a suit under civil law against an agent. Article 7 is applicable to non-contractual claims, but for independent contractors, suit may be brought against an independent contractor for any loss or damage.  

As a matter of general principle contained in Article 12 of these rules, a shipper or his agent or servants has no liability for the loss sustained during the voyage by the carrier or the actual carrier as defined under these rules unless the loss is incurred due to the negligence or contributory negligence of the shipper and/or his servants or agents. This article is simple and straightforward; that a carrier cannot impose responsibility upon the shipper or his agent or servants for any loss incurred to him or his ship.

The shipper, in the course of the transaction of contract with the carrier, is bound to guarantee the general nature of the goods, their marks, number, weight and quantity, which has to be mentioned on the subsequent bill of lading. If any loss is incurred due to the inaccuracy of the information provided by the shipper, the carrier or the actual carrier may sue the shipper for compensation of the loss under this guarantee. The shipper has liability against all the guarantees and agreements concluded with the carrier to indemnify against the loss resulting

525 Hamburg Rules, art 7 & 10.
526 ibid, art 12.
527 ibid, art 17(1).
from the issuance of the bill of lading, but such a guarantee and agreement is void against any third party, including a consignee, to whom the bill of lading has been transferred.528

However, the shipper has the responsibility for the dangerous goods on the ship. He has to mark the dangerous nature of the goods in a suitable manner and to inform the carrier or actual carrier, as the case may be at the time of handing over of the goods, about the nature of the goods prior to shipment.529 To this extent, if the carrier or the actual carrier sustains a loss due to lack of knowledge of the dangerous nature of the goods on the ship, he has the right to claim damages/compensation from the shipper. Additionally, upon obtaining the knowledge of the dangerous nature of the goods, the carrier, or the actual carrier, may unload, destroy, or rendered the goods innocuous, as the circumstances may require, without payment of compensation.530

3.2.4.3 Obligation of Shipper under Rotterdam Rules:

This new regime of rules of the carriage of goods by sea, partially or wholly, does not change the liabilities and duties of a shipper to any substantial level and hence is very much comparable with the corresponding provisions in the Hague Rules and Hamburg Rules. Therefore, this paper does not discuss the comparison of the shipper’s liability in order to avoid duplication.

528 ibid, art 17(2).
529 ibid, art 13(1).
530 ibid, art 13(2).
3.2.5 Change in Obligation of Parties under the Three Regimes through Freedom of Contract:

All the three legal regimes discussed freedom of contract in determination of rights and obligations of parties to a contract of carriage. This aspect from all the three regimes has been covered as under:

3.2.5.1 Freedom of Contract under Hague-Visby Rules:

A distinguishing feature that the Hague-Visby Rules have is their freedom of contract. These rules allow freedom of contract in all those cases where these rules do not apply. Article 3(8) states that “any clause, covenant, or agreement in a contract of carriage relieving the carrier or the ship from liability for loss or damage to, or in connection with, goods arising from negligence, fault, or failure in the duties and obligations provided in this article or lessening such liability otherwise than as provided in these Rules, shall be null and void and of no effect. A benefit of insurance in favour of the carrier or similar clause shall be deemed to be a clause relieving the carrier from liability.” 531 This provision is further supported by Articles 6 and 7, that provide that any contract may be concluded if a bill of lading is required to be issued, 532 and this freedom is available prior to the loading and after shipment.

3.2.5.2 Freedom of Contract: the Hamburg rules:

Article 23 deals with the freedom of contract under the Hamburg rules. These rules provide that the carrier may increase his responsibly under a contract, but on the other hand, it safeguards the protections provided to a shipper under these rules. Unlike the Hague-Visby

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531 Hague-Visby Rules 1968, art 3(8).
532 ibid, art 6.
Rules, this article of the Hamburg rules discourages any deviation from the provisions of these rules.\textsuperscript{533}

3.2.5.3 Freedom of Contract under Rotterdam Rules:

The freedom of contract and the derogation from the provisions of the Rules was secured in both earlier regimes to a certain level, and the Rotterdam Rules also provide for derogation within the convention. However, the inclusion of derogation for volume contracts is one aspect that is different from earlier regimes governing the carriage of goods by sea and is considered controversial.\textsuperscript{534} These provisions provide the necessary level playing field to the contracting parties and the freedom to adjust the terms in the case of volume contracts between the parties and it does not differentiate from the basic principles provided in The Hague and Hamburg Rules.\textsuperscript{535} However, the mandatory provisions of the Convention are not subject to derogation and are considered the default rule.

Provisions indicating the freedom to derogate from the Rotterdam Rules in the case of volume contracts allow the shippers of certain commercial sizes and quantities of goods in a series of shipments to enter into a personalised agreement with the carrier with no contractual obligations other than those provided in the convention except the default rules. In order to protect the shipper at large and small shipments from any disadvantage due to this provision, these rules have provided the shipper an opportunity to insist on the operation of the Rotterdam Rules without any derogation in the case of volume contract, too.\textsuperscript{536} Article 1 (2) of these rules further provides that the shipper may also insist on the issuance of a separate bill of

\textsuperscript{533} ibid, art 23.


\textsuperscript{535} ibid.

\textsuperscript{536} Rotterdam Rules, art 80(2)(c).
lading for each shipment to avoid this issue in the case of volume contract.\textsuperscript{537} Otherwise, derogation is required to be notified.\textsuperscript{538}

Mandatory provisions under the default rules are the carrier’s responsibilities, under Article 14, to keep the ship seaworthy and to provide a proper crew, etc.,\textsuperscript{539} and shippers’ obligations under Article 29 to provide information about the nature of the goods, instructions and documents.\textsuperscript{540} A third party under a volume contract cannot be liable automatically as the result of any derogation of the Convention. Article 80(5) requires the information provided to a third party to be affected by the derogation and, as the result of that information, that third party is required to give their express consent to its revised liabilities as the result of these derogations.\textsuperscript{541} Although the rules provide for the derogation, these derogations are allowed only in conditions when the derogation is for the benefit of the party claiming such derogation. The burden of proof for this benefit also rests upon that party.\textsuperscript{542}

3.2.6 Provision related to Electronic Commerce in the Rotterdam Rules:

A detailed discussion about the hurdles facing the adoption of an electronic format of the bill of lading will be made separately in chapter five of this thesis. However, it is necessary to discuss the extent of the provisions that indicate or facilitate the use of an electronic bill of lading or electronic commerce individually here. It is however, important to note that none of the previous legal regimes have touched upon the subject and therefore, the discussion is made only with reference to Rotterdam Rules. In the proceeding paragraphs, all the important

\textsuperscript{537} ibid, art 1(2).
\textsuperscript{538} ibid, art 80(2).
\textsuperscript{539} ibid, art 14(a) and (b).
\textsuperscript{540} ibid, art 29.
\textsuperscript{541} ibid, art 80(5).
\textsuperscript{542} ibid, art 80(6).
concepts and provisions discussed about the electronic form of documents in the Rotterdam Rules are summarised under the following headings:

3.2.6.1 **Provisions regarding the use of Electronic Transport Record:**

The Rotterdam Rules provide for the use of both paper documents and electronic documents at the same time with the same force.\(^{543}\) This inclusion of the electronic record and e-commerce is a direct result of the trends within the trade during the recent past and the aspiration of the business community to accelerate global trade by sea,\(^{544}\) especially where the simple delivery of the documents has already been covered by the Electronics Communications Convention of 2005.\(^{545}\) However, consideration of electronic documents as negotiable transport documents is still out of the fold.\(^{546}\)

3.2.6.2 **Functional Equivalence and Media or Technological Neutrality:**

In order to obtain the legal position of electronic commerce, the same recognition of electronic documents and records as their paper counterparts is required. Therefore, principles such as functional equivalence and technological neutrality came under discussion in the meetings of the Committee. In other words, in order to achieve the acceptability of electronic trade, the first and foremost requirement is to achieve media neutrality for all sorts of transactions, both paper-based and electronic.\(^{547}\)

The drafters of the Rules had considered three options. The first available option was to align the existing law on the carriage of goods by sea with the accepted sales law provisions to

\(^{543}\) Rotterdam Rules, art 38–40.


achieve the target of uniformity across the seas that would enable the practitioners to identify methods and time of transfer of title from one person to the other while in transit.\(^{548}\) This option was wide enough to cover all trade practices, commercial usage and language as well as the established body of legal precedents beyond unification of the legal codes referring to different trade documents under use at that time. However, the unification of the property aspects of the sales contract that would overarch the efforts, was not the objective of the drafters, and hence this option was rightly ignored.\(^{549}\) The other option was not to contend with any of the uncertainty prevailing and to confine the scope of these rules to cursory changes only. Therefore, this option did not provide any solution to uncertainty about the proper delivery requirements of goods under a different trade document, which hampered the functional approach, especially for documents having negotiable function. Some aspects discussed were specific to trade practices and those were considered crucial to the success of that document such as the delivery of goods upon production of letter of indemnity instead of the proper copy of the bill of lading. This aspect remained uncovered under this option.\(^{550}\) Instead, the Rules are framed with the premise of clarifying the position of the parties involved without an attempt to search for a unified code approach. This formed the basis of the function approach that provides for the nature of the documents, and tries to find equivalence without attempting to change the very basic nature of that trade document.\(^{551}\)

The functional equivalence approach to be applied in electronic equivalence requires that, for the purpose of recognition, there shall be no difference in the paper mode of communication

\(^{548}\) Faria and Angelo (n 378).
\(^{549}\) ibid.
\(^{551}\) Faria and Angelo (n 378).
and the electronic form of communication and both shall have the same treatment under that law as to the enforceability of the contracts concluded as the result thereof, provided the electronic means of communication also fulfils all the requirements which are otherwise satisfied in the case of a paper document.\textsuperscript{552} This neutrality during the discussion, however, came under severe criticism due to the over-stretching of the paper-based rules’ reliance and preconceived notion of a document developed outside the trade world, especially in those areas where electronic communication has already been accepted as a norm of business communication. It was for the same reason that all the efforts made in this regard, whether at international level or at organisational level, that this problem posed a threatening challenge.

In an effort to resolve this issue in the Rotterdam Rules, the term “electronic communication” under Article 1, paragraph 17 is defined as, ‘Electronic communication’ means information generated, sent, received or stored by electronic, optical, digital, or similar means with the result that the information communicated is accessible so as to be usable for subsequent reference’.\textsuperscript{553} Such a definition of electronic communication in itself is very condensed and covers areas such as the medium of communication with hints towards the accessible record in electronic format.\textsuperscript{554} This definition provides for the information which, once sent, is required for certain purposes to be retrieved, stored and presented as evidence of the transaction to ensure its legal character.\textsuperscript{555} Despite earlier observation that the legal and non-business minds are still marred with the paper-based interpretation of law in their domains, and irrespective of the utility of a particular transaction, therefore, this legacy and the characteristics displayed by the electronic record, provides a functional equivalence of electronic communication similar to

\begin{footnotesize}
\begin{enumerate}
\item \textsuperscript{553} Rotterdam Rules, art 1 para 17.
\item \textsuperscript{554} American Bar Association (n 544) 1645–1656.
\item \textsuperscript{555} ibid.
\end{enumerate}
\end{footnotesize}
paper-based communication. Parties are free to communicate their declarations, contracts and the changes thereof through the use of “electronic, optical, digital, or similar means” in light of this rule to determine the rights and responsibilities of the parties of a particular transaction. These rules require the communication of the information to be included in the transport document or the change of destination to the carrier in light of new facts, communicates the change of receiver at the destination due to the change in ownership, or any other change in the directions under the contract for the carriage of goods. Any information issued initially or during the period when the goods were in transit forms part of the electronic transportation record which is, again, regaled by the Rules. They provide that the electronic transportation record is the information contained in one or more messages issued under the contract of carriage of goods by a carrier and issued by electronic communication medium. This information, which is related to the electronic transport record, evidences the contract of carriage and the receipt of goods by the carrier or the performing party under that contract. This rule is again based on the functional equivalence approach. The characteristics of a paper transport record are attempted to be replicated to ensure the performing of all functions which a paper transport record performs in the traditional setting. A traditional bill of lading records all the changes of quantity, its value and change in value, change in destination and receivers at the destination and lien, if any, so this rule requires the recording of all the details of this information in the electronic format, too, without immediately referring to the mode of recording except by messages issued by the electronic communication method under the

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557 Rotterdam Rules, art 1 para 17.
558 ibid, art 3 & 24.
559 ibid, art 3, 36, 46 & 60.
560 ibid, art 1, para 18.
contract of carriage of goods.\textsuperscript{561} This media neutrality and functional compatibility was deliberate on the part of the drafters of the Conventions as any other assumptions to this fact were bound to attract national differences in practice, whereas this general assumption provided a mirror image rule within the electronic communication framework.\textsuperscript{562} The purpose of introducing this clause was to ensure certainty, and the Rules, therefore, often speak differently about paper documents and electronic documents without hampering media neutrality and without causing any disadvantage to the follower of any particular form of transport record.

3.2.6.3 \textit{Consent of Parties for Electronic Mode of Transportation of Documents:}

The use of the electronic commerce mode is, however, not automatic, but under these rules, it does require prior consent of the parties. The basic principle of introducing the requirement of consent of the parties is the same as discussed in the Electronics Communications Convention of 2005; that the parties should neither be burdened unnecessarily nor be burdened without their proper knowledge.\textsuperscript{563} Consent can be express or implied under the other electronic commerce regimes, such as in the case of the Electronics Communications Convention, 2005,\textsuperscript{564} but in the case of Rotterdam Rules, the consent must be express, otherwise there are chances that the parties may be exposed to an unnecessary risk without knowledge.\textsuperscript{565} The communication of this consent is also required to be made to all the concerned parties as the bill of lading is a negotiable document beyond the involvement of many parties in the transportation process from door to door.\textsuperscript{566} The important parties in such a case could be the

\begin{footnotesize}
\textsuperscript{561} ibid, art 1, para 14.
\textsuperscript{563} Gabriel (n 422) 322.
\textsuperscript{564} UNECC, art 8.
\textsuperscript{565} Rotterdam Rules, art 35.
\textsuperscript{566} Rotterdam Rules, art 3 & 8.
\end{footnotesize}
shipper, consignees, endorsee, controlling parties and agents of the carriers and, therefore, the
Rules provide for the consent of both the parties making and receiving such information over
the electronic media.\textsuperscript{567}

3.2.6.4 \textit{Electronic Signatures under Rotterdam Rules:}

The importance of the signature in documents of various purposes has been very much
established over a period of time through the intention of the legislation as well as the case
laws.\textsuperscript{568} Article 38 of the Rotterdam Rules refers to the electronic signature and provides that
“signature” includes the electronic signature of the carrier or a person on his behalf. Such a
signature is the identification of the signatory and is a proof of the authorisation of the
electronic transport record.\textsuperscript{569} This provision, however, requires a standard for compliance in
the case of electronic signatures and to keep it at par with the paper document.\textsuperscript{570} The need for
an electronic record and signature has very much been on the cards for a quite a long time and
this provision is said to have its roots in the electronic signature provisions of UNECE with
the difference in scope only.\textsuperscript{571} Article 38 is itself indicative of the functions of the electronic
signatures. The function of indication and identification of the carrier appears to be stringent
in isolation, but signatures have the prime function of identification and authentication on the
paper counterparts and, therefore, in order to find an electronic equivalent, this provision is

\textsuperscript{567} ibid.
\textsuperscript{568} Proctor (n 26) 17–22.
\textsuperscript{569} Rotterdam Rules, art 38(2).
\textsuperscript{570} ibid, art 40.
\textsuperscript{571} Article 9 of UNECE (The United Nations Economic Commission for Europe (UNECE)) read with Article 40,
Rotterdam Rules.
purposefully inserted. The signatory in that way assumes all the liabilities arising out of that document.

It may, however, be noted that these rules have not touched upon the issue of the agency problem that most of the electronic transactions are facing. While the Rules provide for the issuance of electronic documents by the carrier or any other person acting on his behalf, most of the available services for the electronic document transfer and transactions are being provided by a third party and are working within the agency relationship with most of the parties. Efforts made by the private parties to introduce electronic registries and databases have also faced this agency problem and this issue has also been recognised by individual states and other stakeholders in the carriage of goods by sea.

3.2.6.5 Transfer of Negotiable Rights under these Rules:

Unlike earlier rules, the Rotterdam Rules have, for the first time, applied the innovation of the transfer of negotiable rights through electronic mode to provide equivalence to the paper documents. In Article 49, these rules provide for the mechanism of the transfer of non-negotiable rights through electronic mode and, in chapter 10, the Rules provide the details about the holding and transfer of negotiable rights. The term “holder” of a negotiable electronic transport record under the Rotterdam Rules is defined as ‘the person to which a negotiable electronic transport record has been issued or transferred in accordance with the procedures referred to in article 9, paragraph 1’, which covers both the original holder of a bill of lading as the drawer of the bill, as well as all the subsequent holders through the process.

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572 ibid.
575 Rotterdam Rules, art 49, read with the Provisions in Chapter 10.
576 Rotterdam Rules, art 9(1).
of endorsement/negotiability. It also provides for the function of negotiability. Similarly, the term “negotiable electronic transport record” is defined in the Rules as any transport record;

“(a) That indicates, by statements such as ‘to order’, or ‘negotiable’, or other appropriate statements recognized as having the same effect by the law applicable to the record, that the goods have been consigned to the order of the shipper or to the order of the consignee, and is not explicitly stated as being ‘non-negotiable’ or ‘not negotiable’.”

The purpose of such a negotiable document is stated as the transfer record and rights that implies that this information has its recipients as well as some evidentiary value in the determination of rights and liabilities; the purpose its paper counterpart serves otherwise. The counterpart to the possession of the bill of lading issued under these rules, the provision of exclusive control over the information, has been introduced. Deep analysis of provisions related to electronic transport in the Rotterdam Rules indicates that these Rules still refrained from providing any technical way out of the problem and that it confines itself to the generalities that might be able to accommodate business sensitivities as well as their closed and registry systems prevailing within their own sphere of interests. At the same time, these rules established the conditions that they were minimally required to fulfil in order to replicate the negotiability function in any electronic system for a traditional bill of lading. One of these conditions was the exclusive control over the negotiable document that should not be available to more than one person at any given point in time. Therefore, the holder of an electronic

577 ibid, art 1(19).
579 Rotterdam Rules, art 8(b).
580 ibid, art 1(21), 1(22) & 8(b).
bill of lading or negotiable document must also have control over the information, and the
capability to transfer this control to the endorsee with the full privileges he enjoys.\textsuperscript{581}

3.3 UK Electronic Communication Act, 2000 and UK Electronic Signatures Regulations 2002:

In the first decade of the 21\textsuperscript{st} century, some legal enactments were seen on the UK national
scene. On the issue of the introduction of electronic communication, as the part of the
European Union, the UK has adopted and implemented the EU Directive on electronic
communication in the Electronic Communication Act, 2000 and recognised the electronic
signature as a valid source of authentication of an electronic document, as already discussed
above. Furthermore, Section 9(1) of this EU Directive provides for electronic contracts
between the parties if they so agree.\textsuperscript{582} The first UK Electronic Communication Act was
promulgated in 2000 in order to facilitate the use of electronic communication and electronic
data storage in commercial activities as defined in the preamble of the Act.\textsuperscript{583} The
admissibility of the electronic record in the court of law was discussed in Section 7 of the Act
that provides for the admissibility of “electronic signatures incorporated into or logically
associated with the particular electronic communication and electronic data”. Such
signatures may also be admissible as evidence of the same if they are certified by the author,
thus the signature authenticates the data and communication contained in the document or
transaction.\textsuperscript{584} The major shortfall in the Act, however, is the role of the effectiveness of the
electronic signature. In the case of any dispute or denial of signature by the party, the
effectiveness of the electronic signature cannot be go beyond mere admissibility of the

\textsuperscript{581} ibid, art 1 (11) & 10 (1)(a).
\textsuperscript{582} Electronic Communication Act, 2000 and Section, 9 (1); and EU Directive on Electronic Commerce No. 2000/ 31/ EC.
\textsuperscript{583} Preamble, UK Electronic Communication Act, 2000 (UK).
\textsuperscript{584} ibid, section 7.
electronic record in the court as evidence and, furthermore, it is for the court to decide whether the use of electronic signature is correct or otherwise, or if any weight should be assigned to the electronic signatures or not. 585 The court may even prohibit parties from using electronic signatures under special circumstances. 586 This leads to an impression that this Act does not mandate the use of e-signatures in commercial transactions and, therefore, it is an attempt that did not create much difference in the situation that prevailed early on in the legal corridors. 587 Furthermore, the implementation of the EU Directive was only partial, as it required the introduction of a certified agency. The definitions of “simple” or “advanced” electronic signature are too loose to be applicable for either general or advanced electronic signature. 588 This was the same case with the regulation issued in pursuance of the Act of 2000 in 2002 and no substantial change was found in the legal regime, although it has introduced the concept of advanced electronic signature with a working definition as;

“(a) which is uniquely linked to the signatory, (b) which is capable of identifying the signatory, (c) which is created using means that the signatory can maintain under his sole control, and (d) which is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable”. 589

588 ibid, 11.
589 Section 2, UK Electronic Signatures Regulations 2002.
This definition has brought the certified service providers into the network of the evidence for the certification of digital signatures and these are required to provide qualified certificates of authenticity of signatures, although the discretion of court is intact.\textsuperscript{590}

3.4 Australian Efforts on Electronic Commerce: The Australian Sea-Carriage Documents Act 1996:

Similar to the USA and the UK, Australia is a signatory to the Hague Rules and has adopted these rules in its Carriage of Goods Act, 1991 that is based on the amended Hague-Visby Rules.\textsuperscript{591} However, the Australian Sea-Carriage Documents Act, 1996 is the legal document presented to provide the legal regime for the contract of carriage of goods by sea. In Australia, efforts were made to legislate on the acceptability of electronic documents in maritime transactions through the introduction of the Australian Sea-Carriage Documents Act, 1996. It further tried to reconcile the practices in the business world with the legal provisions existing around the world and, through these efforts; it followed the UNCITRAL Model Law on Electronic Commerce. In Section 6 of the Act, 1996, it provides for a general cover to all transactions otherwise covered in international models like UNCITRAL as follows:

\textit{Section 6 (2) This Act applies, with necessary changes, in relation to the communication of a sea-carriage document by means of a data message in the same way as it applies in relation to the communication of a sea-carriage document by other means} \textsuperscript{592}

\textsuperscript{590} Kalofolia (n 12) 45–54.
\textsuperscript{591} The Carriage of Goods by Sea Act 1991, Australia.
\textsuperscript{592} ibid, section 6.
Unlike the others, this Act has attempted to bring the electronic regime into practice by proposing the elimination of the legal problems in the acceptance of the e-bill of lading, although this bill was never passed by the Australian parliament. During the discussion on the bill, the use of UNCITRAL equivalence was proposed to render the bill on par with international trends.

3.5 United States and Electronic Commerce Legislation:
As in the UK, in the USA, the basic document governing the carriage of goods by sea is based on The Hague Rules that provide no indication of electronic commerce or the electronic bill of lading. However, over a period of time, new legal documents were presented, both at the state level and the federal level, to recognise electronic commerce within their overall jurisdiction.

Later on, suit was later followed by the other states and this law served as the model for many other countries such as India and Bangladesh for their electronic digital laws. The Utah Act provided for the use of public key and PKI Cryptography technology to produce legally binding electronic documents. However, a document under this Act was legal if the electronic signature met the requirements of a digital signature in the entirety of the message and the digital signatures were verifiable by public key. That was the start of adopting and using the

593 J Livermore and K Euarjai, ‘Electronic bills of lading and functional equivalence’ (1998) JILT 2 1, revised Discussion Paper, note 10. To date the Bill has not yet been enacted and none of the States or Territories have moved to adopt it in their own bills of lading legislation.

594 ibid.


596 Blythe (n 595) 66–67.
third party databases and the public key function to secure the parties from any fraud and loss.\footnote{Utah Digital Signature Act, Utah Code Annotated Title 46, Chapter 3 (1996) Part 1. The Act was adopted in February 1995 and took effect on May 1, 1995. The Act’s drafting history and general operation are further described in Kennedy & Davids, 1996, at S4, and Semerad, 1995, at D1. Similar laws can now be found in a number of other states, including California, Florida, and Washington. However, this Act was repealed with the introduction of the Uniform Electronic Transaction Act in 2000.}

It may be noted, however, that this Act did not provide for the bill of lading expressly but it is about the legal value of the digital signature in case of a valid contract.\footnote{Utah Digital Signature Act, Utah Code Annotated Title 46, Chapter 3 (1996) Part 4, ‘Effect of a Digital Signature’.} In the case of its predecessor, the spirit of this Act was not maintained and, in Uniform Electronic Transactions Act, 2000, the government officers instead focused on e-services provision.\footnote{Blythe (n 595) 68.}

At the federal level, the federal Electronic Signature in Global and National Commerce Act (ESIGN) and Uniform Commercial Codes, as revised in 2003, provides the base for the electronic equivalence of paper contracts and this equivalence is being created on the basis of closed systems of electronic documents that are far removed from the open systems required to ensure the global success of electronic commerce.\footnote{M Goldby (2011) Legislating to facilitate the Use of Electronic Transferable Records: A Case Study (UNCITRAL Colloquium on Electronic Commerce 2011) 3.}

3.6 The Uniform Electronic Transactions Act:

Most of the national efforts to accommodate electronic commerce in their jurisdictions are found to align with the international efforts to bring about paradigm changes. However, in the case of the USA, the issue of interaction is of interest in relation to both national and international domains. Interaction between the national legal efforts and the international efforts to synchronise legal regimes within electronic commerce, including replication of the
paper bill of lading with an electronic bill of lading, is very active. Therefore, research into the domestic laws of the EU, UK and USA on electronic commerce is of great interest. In response to the general acceptance of the influence of international efforts to introduce a uniform regime for electronic commerce, in 1996, the Committee on Electronic Communications in Contractual Transactions was established, which was later renamed as the Drafting Committee on the Uniform Electronic Transactions Act (UETA). The committee was assigned the task to revise the existing contract laws in such a way so as to accommodate pressing trends in electronic commerce. This occurred at a time when federal efforts to integrate laws about electronic commerce and digital signature that prevailed in different states were not bearing fruit. The efforts in this regard were made at the same time as when there were efforts made by UNCITRAL at the international level in relation to digital signatures, but the scope defined by the Drafting Committee was limited and hence these initial efforts were subject to setbacks. The Drafting Committee on UTEA was assigned the task to revise the laws, focusing on contractual aspects, whereas the international efforts were focused on commerce. Latterly, this problem was sorted and as a result of these efforts, in 1999 the Act was enacted.

The broader scope of the Act is extensive and applies to all the electronic records and electronic signatures that relate to any transaction subject to the limitations of the American Uniform Commercial Code that covers independent electronic transactions. This law does not require any person or party to change its mode of transaction to electronic mode as it is aimed at facilitating and not to force. Therefore, this Act does not require compulsive use of digital signatures and methods of transactions, but gives the parties this right if they are willing to use an electronic mode of transaction. This aspect of the Act may be traced from the Reporter’s Notes which report that the “medium in which a record, signature, or contract is created, presented or retained does not affect its legal significance of the Act.” This Act overrules other laws on the requirements for non-electronic records or signatures and a contract cannot be denied legal effect or validity on the grounds that an electronic record was used in the formation of that contract. At the same time, the application of the Act does not mean the automatic acceptance of the electronic record, but instead, all electronic records and signatures are subject to all necessary requirements under the prevailing evidence law. Similarly, the other requirements as to the mode of electronic transactions and recovery of the record for the reproduction in the court of law are still valid and this Act does not waive any such legal requirement in any case. This Act is concerned with the attribution factor and acknowledges that if an action of a person can be traced in an electronic transaction, it is

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605 The Uniform Electronic Transactions Act (UETA) (1999), Section 3(a).
606 Ibid, section 3.
607 Ibid, section 5(b).
609 UETA (1999), section 7(b).
610 Ibid, Reporter’s Notes to Section 7.
611 Ibid, section 8.
attributable to that person provided the security procedures remained intact throughout.\textsuperscript{612} On the issue of new presumptions related to the particular nature of the electronic transactions, two situations are added. One, the parties have agreed to a security procedure, and second, some automated medium such as the internet is relied upon.\textsuperscript{613} In case of an agreed protocol, the parties must adhere. But if a party has reservations about it, in case of any error or change, a conforming party may avoid the effects of that change in the medium.\textsuperscript{614} The impacts of an automated medium are beyond the control of either party and hence cannot be avoided,\textsuperscript{615} except when that error or change was made by the electronic agent that has not provided an opportunity to avoid or to correct that error with the justification of the necessity of the electronic system.\textsuperscript{616} This Act has retained the function and need for notarisation of signatures, but in the electronic setting, and does not waive this requirement under the notary laws.\textsuperscript{617} On the issue of the retention of the paper record, it is required by law that it is retained. In the course of business it might be the situation that the paper record may be destroyed after the recording of the electronic copies, but the third party is required to retain the record for accessibility for future reference as the record of rights creation and the record to assure the accuracy of the electronic record.\textsuperscript{618}

The provision for negotiability in the Act provides potential application for an electronic bill of lading. UETA covers negotiable instruments and accepts the negotiability of electronic documents, however, it also provides for the retention of paper documents.\textsuperscript{619} It uses the term

\begin{itemize}
\item \textsuperscript{612} ibid, section 9(a).
\item \textsuperscript{613} ibid section 10.
\item \textsuperscript{614} ibid section 10(1).
\item \textsuperscript{615} ibid section 10(2).
\item \textsuperscript{616} ibid.
\item \textsuperscript{617} ibid section 12(a).
\item \textsuperscript{618} ibid, section 12.
\item \textsuperscript{619} ibid, section 12(e).
\end{itemize}
“transferable record”, defined under the Act as, ‘an electronic record that would be a note under the law of negotiable instruments or a document under the law of negotiable documents if the electronic record were in writing’. This is subject to the agreement of parties to electronic record.\textsuperscript{620} However, it is not the same as the negotiable instrument that provides for transactions involving more than two parties.\textsuperscript{621} Overall, this Act covers all the aspects required to manage electronic transaction in the USA.

3.7 Summary of Chapter Three:

This chapter was primarily concerned with the various national and international efforts made to bring different national and regional practices under one legal regime and to use this document as a document of universal uniformity. This chapter has explored two major regimes of the last century in The Hague and Hague-Visby Rules, and the subsequent Hamburg Rules, which were introduced to regulate trade made by sea routes. Both these regimes primarily governed the maritime trade through the authority of paper documents. However, with the growing increase in electronic trade and the use of technology to facilitate it, the need for an electronic mode of sea trade was stressed and, in the Rotterdam Rules, this aspect was considered. However, this effort is rather limited to certain aspects of electronic trade only and has not covered the whole idea of the electronic bill of lading as later efforts have, such as SeaDocs or Bolero. In the national scenario, different states, though not directly relating to the introduction of electronic bill of lading, have tried to introduce laws facilitating the promotion of electronic commerce and, again, these efforts are not directly focused on facilitating the electronic bill of lading, but were made in order to promote the electronic documents in the

\textsuperscript{620} ibid, section 16(a) (1)-(2).
\textsuperscript{621} ibid.
place of paper documents by allowing the eligibility of an electronic record and signatures in the court of law as evidence or like measures. In the next chapters, business efforts directed at the introduction of an electronic bill of lading in the commercial world within their own limited spheres and the impacts of these upon global efforts for the introduction of an electronic bill of lading will be reviewed.
CHAPTER FOUR: REVIEW OF NEED AND EFFORTS MADE BY THE BUSINESS COMMUNITY TO ADOPT AN E-BILL OF LADING

The process of dematerialisation has resulted in the need for new and electronically supported modes of data transfer among the various international commercial concerns within real time at a comparatively low cost of functioning and with less risk of fraud as compared to paper-based documentation. All these efforts are also desired in the shipping business, too. To the extent of seaway bills and non-negotiable documents, the application has, however, been seen as a success with few problems of adjustment due to an absence of negotiability. In the case of the bill of lading, however, it has experienced some serious difficulties as discussed separately in this thesis. In the previous chapters different legal aspects of bill of lading over period of time have been reviewed that has provided a legal perspective and in this chapter, technical aspects are explored and the possible modes with which to digitalise the traditional bill of lading are discussed, and afterwards, the efforts made to date in this regard will be explored.

4.1 Essential requirements of an Electronic Bill Of Lading:

At the first level of investigation into the hurdles and impediments to the acceptance of an electronic equivalent of the bill of lading, it is imperative to determine what constitutes an electronic bill of lading. For this purpose, the electronic bill of lading must fulfil these essential requirements:

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622 Pejovic, ‘Documents of Title in Carriage of Goods By Sea: Present Status and Possible Future Directions’ (n 6) 461–467.
4.1.1 Negotiability of electronic bill of lading:

a: Identification of the final parties: The bill of lading is a negotiable instrument and governing the change of ownership has comprised the crux of its affectivity in the past. As such, it forms the attraction for business people in the present-day global trade where the market fluctuates on an hourly basis. Therefore, in order to stand on the same footings of the paper bill of lading, an electronic document must be able to indicate the identity of the carrier, shipper and the ultimate receiver at the port of discharge. However, at the same time, such identification must be timely, accurate and verifiable to avoid the chances of fraud and misrepresentations at the time of delivery at the final destination of the goods. Furthermore, this identification should be independent of any paper verification or presentation for the purpose of the delivery of goods shipped on board against that document.\textsuperscript{624}

b: Identification of the rights and liabilities of the parties: A paper bill of lading, as a legal document, provides the rights and liabilities of the parties as per the terms and conditions set therein. A bill of lading in electronic format should be able to spell out the same rights and liabilities of the parties as normally set out in the terms and conditions given in the paper bill of lading. This function is directly related to contractual language, in fact, with the use of technology in the case of an electronic bill of lading, and if the information available on the electronic bill of lading is correct and secure, this function will not be difficult to replicate and sustain.

c: Openness and availability: Keeping in view the fast pace of present-day businesses and the transactions that have prompted the need for this electronic mode, online availability round-the-clock to all the people who have stakes in the transactions must be secured. The

\textsuperscript{624} ibid.
parties include outside financial institutions that have provided financial support besides the endorser, endorsees and carrier.\textsuperscript{625}

d: Security against fraud: The online transactions are often termed as unsecure in the traditional literature. To annul this perception and to ensure the confidence of users of the system, it must be secure enough to protect parties from innocent mistakes to online fraud.\textsuperscript{626}

4.1.2: Function as to the receipt:
It was seen in the historical review of this document that the receipt function is the first and the prime purpose of the bill of lading which was further developed over a period of time. It is the function that is also performed by many other documents of trade such as the sea waybill and non-negotiable trade documents. Therefore, the bill of lading performs the receipt function without any disagreement and this function should also be exhibited functionally and legally by the electronic document in order to qualify as a bill of lading to this extent.\textsuperscript{627}

4.1.3 Contractual and evidentiary role replica:
Among many roles, a bill of lading is found to be a contract in itself as the minority opinion and as evidence of the contract of carriage in the majority opinion. This contractual role of a bill of lading has been discussed in detail previously.\textsuperscript{628} By all means, as either evidence of the contract or the contract itself, an electronic bill of lading must perform all the evidentiary roles such as evidence of shipment of goods, evidence of the conditions of the goods at the time of shipment, etc. Importantly, this function, again, should not be dependent upon any paper support. Such an electronic bill of lading must also be accepted as evidence in the court of law

\textsuperscript{625} Discussion in chapter two is referred.  
\textsuperscript{626} Chapters Three and Four have discussed technology- and security-related aspects in detail.  
\textsuperscript{627} McGowan (p 623) 68–78.  
\textsuperscript{628} Chapter Two covers this aspect in detail.
in the respective jurisdictions in the same way that the paper document has been accepted over
the last two centuries without any major complication, despite differences of opinion.629

4.2 Technical Solutions and Approaches towards the Non-Negotiable Electronic Bill
of Lading: Function of Receipt is replicated:

In the past, various technical approaches towards the electronic bill of lading were proposed as
the solution to provide an electronic environment for the legal regime to consider. Within
these approaches, some old and some new are discussed, with the section below relating to
technical solutions that are available in this regard. It may, however, be noted that these are
the approaches put forward at certain times to facilitate trade and were not directly aimed at
introducing negotiable electronic bill of lading, although some of these may be particularly
helpful in achieving the goal of replacement of paper bill of lading for non-negotiable
purposes. These technical issues are however, further attempted to link with the legal issues
discussed above.

4.2.1 Data Alignment:

The technical solution to data alignment originated as the result of the UN/ECE deliberations
on the topic. Most of the documents available in the trade are not unique as these include
similar information, such as the price, and the nature and quantity, of the goods, etc.630 This
similarity is used in the data alignment documentation process that is based on the master
document principle. In the master document, all or the maximum information is entered as the
mater’s document and all subsequent electronic documents are derived from the same,
comprising the same information, although the outlook of the various documents so generated

629 Discussion in chapter two is referred.
630 AE Branch, Elements of Shipping (7th edn Routledge 1996) 453.
may be entirely different from each other. This technical solution was promoted by many
organisations, including SITPRO, in the UK. The use of this technical approach offers a
reduction in manual work in terms of inputs and the same data input for the master document
forms the basis for all the subsequent documents. It further reduces the time and cost of the
documentation. However, this technical solution further requires a distance data transfer
technology such as the internet. This solution can be seen as first step in the direction of the
technology adoption in electronic data transfer instead of paper transactions but this aspect
was devoid of any legal principles at that time and the security of the data was yet to be
defined. Being a technical solution it was later introduced in all form of legal-electronic
transactions in business attempts. Among the functions of a negotiable bill of lading, this
attempt is silent about any of its characteristic directly. It was neither able to replace the
documentary form and substance, rather relied on the master document to derive data. It is at
best serves as the short receipt of the original transaction.

4.2.2 Short Form Bills of Lading:

The technical solution and approach of the short form bill of lading was introduced by the
Swedish Broström Group in 1975 at a time when the technology was not yet sophisticated
enough and the use of printable single-sided bill of lading documents that were easy to be
copied was considered a new innovation. However, this method neither gained any importance
nor proved to be a true technical solution in the promotion of the bill of lading in electronic

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631 ibid.
632 ibid.
633 ibid.
format. Like Data Alignment, this was a mere facilitation in the use of paper bill than replacing the same.\footnote{Wilson (n 125) 138.}

\subsection*{4.2.3 Internet Bills of Lading:}

The Internet bill of lading is an improvement designed to facilitate the traders’ access to a standardised bill of lading form at their workplace and to have it completed. Orient Overseas Container Line provided the opportunity to its clients to download its standard forms and upload bills of lading completed by the traders, but still the carrier is required to obtain the paper documents in order to have them signed. This process is still not the same as a true electronic bill of lading and, more precisely, it served merely as a facilitation of technology that saved time.\footnote{Official website of Orient Overseas Container Line, <http://www.00cl.com> accessed on 2 December 2014.} As an online bill of lading, instead of electronic bill of lading having all features of its paper counterpart in respect of legal force, it was of very limited use.\footnote{ibid.}

\subsection*{4.2.4 Chip Bill of Lading:}

This technology was promoted at a time when the idea of plastic chips and computer-readable cards had been introduced in the market and were already in use in the financial market. In this concept the carrier was required to enter detailed information about the shipment from the paper bill of lading on a programmed chip. The paper bill of lading would be retained with the shipment and the programmed chip would be handed over to the shipper’s bank for issuance of the letter of credit and other financial details. The bank would have access to the data through networked computers and its acceptability would result in the issuance of bank documents by the issuance of another programmed chip that could be used for the function of taking possession of the goods from the carrier at the port of destination. This idea was
convincing as it reduced the need for the transportation of paper documents, but at the same time it was considered too costly for the parties involved, both at the technology development and as well as in the running cost of the system. In contrast to the banking system, where plastic cards have gained popularity in the present age, those who actually employ the bill of lading are limited and diverse and in the absence of an adequate number of users, such an investment cost, was not supported by the international community.  

At the end of this part, it may however, be pointed out all these approaches failed to fulfil the requirement of negotiability of bill of lading because they deals with Non-negotiable bill of lading but could achieve the rest of legal functions of bill of lading. The major focus of these attempts was to defeat technical hurdles in the way of paperless transaction than to replicate the functions of a bill of lading in the sea trade. These solutions however can still serve the rest of bill of lading functions including receipt of goods and evidential values with the use of authenticated logs of transactions made from secured networks using password protecting connections that authenticates the contents and transactions both. The more precise and directed efforts to introduce an electronic bill of lading were introduced after the introduction of electronic data interchange. These elements are discussed in the coming sections of this chapter.

4.3 **Electronic Data Interchange (EDI) and Internet: An Option to Achieve Security of Data in Electronic Bill of Lading:**

In order to match the characteristics of a negotiable bill of lading, different business efforts and approaches focused on either or more at a time. EDI and use of internet option were able to focus more on the data security in the electronic format using encrypted information and

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password / private key protected transactions as this technology is very much prevalent in present day electronic banking transactions including use of credit and debit cards.

Electronic Data Interchange (EDI) is defined as, ‘the replacement of the paper documents relative to an administrative, commercial, transport or other business transaction, by an electronic message structured to an agreed standard and passed from one computer to another without manual intervention’.  

EDI is an integral part of present-day electronic commerce. EDI provides the necessary electronic information interchange among the computers on a system in a much cheaper and faster way than previous methods. In this way, EDI comprises that part of the electronic commerce which relates to business information exchange in electronic format as defined by the standards of a given system. However, this data must be structured, as, otherwise, it will not be considered as business information and therefore, e-mail is not considered EDI data due to its unstructured nature.  

The use of the EDI option in an electronic bill of lading involves legal as well as technological aspects. One of the technological requirements is the security of the system applied. For the success of this system in an economic setting, it is essential to have a security feature intact; even in the case of the negotiable instruments of banking, this protection is fully ensured. Therefore, for the replication of the paper bill of lading into EDI format, this aspect would be a prima facie demand of the traders and other parties involved in the process. Furthermore, any legal acceptance of this mode also depends upon this security feature. The system to be

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640 ibid.
applied to protect the data is another aspect to examine. The legal requirements will be to place a flawless security network to protect the data as it is transferred through a system where access to the data must be restricted to authorised users only and the provision of any such advanced security system, either central at one stage or independent for many groups of parties, is a high-cost option. This necessitates a detailed technical audit of this option in combination with a discussion between all the stakeholders who hold financial viability, otherwise, the security of the system and the data therein will be compromised.  

The other aspect to consider is the one of the integrity of the messages sent from the system itself. In the present-day electronic setting, the available security features for data protection are encryption, password protection, the use of PIN code, and electronic signatures. However, each has its own strengths and weaknesses and no single solution provides the best option at the moment for the electronic bill of lading. In relation to the issue of encryption, the message is encrypted at the time of sending the message and decrypted at the port of destination, which protects the contents of data from being understood if they are intercepted by any unauthorised user. On the other hand, in recent years, successful spy attacks on different national databases across the globe have raised question marks about the integrity of this security. Similarly, encryption is not legally allowed in all countries and therefore may pose legal questions in certain legal jurisdictions. On the issue of cost, the EDI option involves a very high initial outlay with further moderate licensing and maintenance costs, which is another reason for any agreement to fail to be adopted among those parties considering it. The cost of maintaining the

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641 S Ni, Y Yang, Q Gong and D Yu, ‘Application of EDI Information System Based on XML in the Container Multi-Model Transportation’ (Fourth International Conference on Transportation Engineering, Chengdu, China 19–20 October 2013).
security of the system as well as the insurance of the goods would also be liable to be increased as an indirect impact of EDI.  

Another security option is the use of digital signatures on the electronic document. The signature secures the ownership of a document and its contents by the author. However, in order to provide the security of the data and to maintain the sanctity of the electronic signatures, a trusted third party’s assurance will be required and such an involvement cannot take place without an explicit agreement between the parties of that nominated third party as well as the cost involved.

4.3.1 Encryption Method: Another Option to achieve Data Security:

On the technical side, the introduction of EDI and later EDI based business solutions as discussed in previous chapter like SeaDocs, Bolero etc., as a technical solution offers certain advantages as well as some shortcomings of its own. On the advantages side, this solution provides the speed to match that of the pace of the present-day business world. Elimination or reduction of the role of the paper-based document helps in the timely transfer of documents and avoids delays due to the physical hurdles of working with paper. Even incidences of a smooth delivery process at the port of delivery, the presentation of the bill of lading may be further eased with the adoption of electronic data interchange messages.

The use of the encryption method in these efforts ensures the authenticity of the origin of the message and only an authorised person can generate a message under the encryption security. Therefore, it provides a safeguard against the denial of the origin of the message and hence

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642 Muthow (n 284).
643 ibid.
644 ibid.
ensures authenticity. EDI is a cost-effective measure; although it will have the high initial cost of installing the system, in the later stages of the business, additional cost will be negligible. An effective security system and the accuracy of the data is a prerequisite of a secure system. EDI is a solution based on secured software and hardware with a format agreed by all the parties. The information contained in a message is verifiable with the use of electronic signatures or the private key of the parties. The chances of fraud are hence reduced in this secured digital system by using encryption techniques designed to protect the security of the data.\textsuperscript{645}

4.4 Evidential Value of Bill of Lading and EDI Based Business Efforts:

Among the characteristics of a bill of lading, it serves as an evidence of the contract as well as the contract itself depending upon different jurisdiction as discussed in chapter two and three. An electronic substitute is therefore required to substitute this function, too.\textsuperscript{646}

The evidential value of the EDI-supported electronic message has already been established in the case of banking transactions and the use of the SWIFT code across borders. Todd has also indicated towards this aspect of the EDI-enabled electronic messages as it evidences the contract of carriage between the parties if applied in bill of lading contracts. EDI helps in the pre-acceptance inspection of documents and their physical verification at the terminals by the shipper as well as the banks, providing the opportunity for the parties to check these documents, including the electronic bill of lading for the issuance of a letter of credit.\textsuperscript{647} The

\textsuperscript{645} A Elentably, ‘The Advantage of Activating the Role of the EDI-Bill of Lading And its Role to Achieve Possible Fullest’ (2012) 6 TransNav, the International Journal on Marine Navigation and Safety of Sea Transportation 4.

\textsuperscript{646} KC Hinge, Electronic Data Interchange – From Understanding to Implementation (AMA Membership Publication Division 1988).

\textsuperscript{647} P Todd, Bills of Lading and Bankers’ Documentary Credit (3rd edn LLP 1998) section 4.5.2.
availability to view the documents online for inspection purposes by all the prospective users, including future holders, also facilitates the business transactions during transit.\textsuperscript{648}

The role of EDI can also be seen in investigating instances of fraud as the result of breach of data security. This aspect has already been discussed in certain legal cases such as \textit{The Saudi Crown VIII and Rudolf A Oetker}, where it was found that the EDI log has a good resource in the form of an audit trail to trace fraudulent entries and these results are admissible as evidence in the identification of the culprits.\textsuperscript{649} The chances of fraud are further minimised due to the absence of the issuance of a bill of lading in sets, and having only one available copy with limited authority to amend the same document limits opportunities to defraud. The availability of the same information to all the users at any given point in time is in itself a unique feature that holds the EDI-enabled bill of lading higher than its paper counterpart.\textsuperscript{650} The electronic record also helps in the identification of lapses and inconsistencies on the part of parties that leads towards the resolution of responsibilities at the time of disputes.\textsuperscript{651}

\textbf{4.5 Business Efforts Made to Introduce Electronic Bill of Lading: Focus to replicate Negotiability Function:}

On the one hand, the official response among most nations is slow in coming, but the trade itself has tried different options to introduce the EDI with the function of negotiability in the shipping business. Among these attempts are major initiatives ranging from Chase Manhattan Bank’s Seaborne Trade Documentation System (SeaDocs) Project and the Comité Maritime International (CMI) model to the Bolero Project. In the coming paragraphs, these initiatives


\textsuperscript{649} \textit{The Saudi Crown VIII and Rudolf A Oetker} (1986) 1 Lloyd’s Rep 261.

\textsuperscript{650} Stephen C Chukwuma, ‘Can the Functions of a Paper Bill of Lading be Replicated by Electronic Bill Of Lading?’(2013) 3 Public Policy and Administration Research 8 101–108.

\textsuperscript{651} \textit{Rudolf A Oetker v IFA International Frachagentur AG (The Almak)} (1985) 1 Lloyd’s Rep 557.
will be discussed. Prior to that, however, it is essential to discuss the introduction of EDI in the straight bill of lading as the base for future launching of these projects in terms of the electronic bill of lading to include the function of negotiability.

In the straight bill of lading, the function of negotiability is absent; however, it performs two other functions adequately, that is, to provide evidence of the contract of the carriage of goods, and receipt of the goods. In comparison, this document is not considered as a document of title and hence the goods in transit cannot be put forward as security to secure a loan from a bank against them. For the purpose of non-negotiable electronic data transfer and its acceptability within business circles, the development of the Cargo Key Receipt (CKR) has proved to be a milestone in which all the basic features of a non-negotiable sea document were maintained along with a condition of the non-selling of the goods in transit. This adoption has encouraged banks to accept this bill for credit purposes if these are in line with the other requirements of the credit agreement. Generally, however, the introduction of this document has resulted in less delay in shipping, cost benefits and risk-free transaction on the accompanying ‘Automated Data Processing’ system, which today is known as EDI.

Nevertheless, in practice, there remain a number of issues in the replacement of the negotiable bill of lading with this straight bill of lading. Banks are still unwilling to consider the electronic bill of lading as a reliable transaction and have insisted on the surrender of the original set of copies of the bill to secure credit against the goods in transit. Furthermore, the rules governing these transactions are framed under different business organisations, such as UCP, CMI and Incoterms in the legal courts to support this function. Despite this fact, this

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652 Prof. Kurt Grönfors of Gothenburg University designed it in cooperation with Swedish shipping companies and SWEPRO; and see also Delmedico (n 11) 95–100.

653 ibid.
effort has been put forward as the groundwork which has prompted the business organisations to work on projects such as SeaDocs, CMI and others.\textsuperscript{654} However, these efforts are grouped as individual efforts as against the efforts to introduced rules of use of electronic bill of lading. First the individual projects are listed and then rules like CMI and Bolero are given discussed, irrespective of their time of initiation.

4.5.1 SeaDocs System, 1986:

Among the many attempts to apply EDI in the cargo business, the first important project was initiated in a joint venture of the Chase Manhattan Bank and the International Association of Independent Tanker Owners (INTERTANKO) who managed SeaDocs Registry Ltd, a corporation, based in London to support electronic data transfer with the negotiability function. The basic purpose of the introduction of the SeaDocs Project was to promote the growing international oil trade in that particular era,\textsuperscript{655} where the huge investments of the traders were at stake due to the slow response of the traditional bill of lading and, in the largest cases of cargo oil transportation, these oil companies had to receive their shipments on the authority of a letter of indemnity, which meant paying additional fees to the financial institutions.\textsuperscript{656} The historical perspective of this idea indicates that these two abovementioned institutions moved to develop this SeaDocs Registry in order to save time, funds and energy in the oil trade where the oil in transit was changing hands on a day-to-day basis and INTERTANKO took the lead to realise this idea.\textsuperscript{657}

\begin{footnotesize}
\begin{itemize}
  \item \textsuperscript{654} ibid.
  \item \textsuperscript{655} K Love, ‘SeaDocs: The Lessons Learned’ (1992) 2 Oil and Gas Law Taxation Review 53, 54.
  \item \textsuperscript{656} B Kozolchyk, ‘The Paperless Letter of Credit and Related Documents of Title’ (1992) 55 L & Contemp Prob 39, 89.
  \item \textsuperscript{657} ibid 89–90.
\end{itemize}
\end{footnotesize}
4.5.1.1 SeaDocs and Negotiability Function:

This project was, therefore, initiated primarily to secure the shippers and carriers, especially those who were in the oil cargo business, from the emerging frauds in the paper-based transactions made through alteration and tampering. However, this initial attempt did not exclude the issuance of the paper bill of lading and it was supposed to be deposited in the central registry maintained by the joint venture as an agent of the parties. The parties were given unique PIN codes for their identification and for all future transactions. This indicates that this attempt was lacking an absolute electronic character. However, the electronic form was created with the introduction of this central registry which attempted to ensure the security of that electronic data by the use of test keys. Under this system, a party who had registered his original documents with the central registry, having the guarantee of the Chase Manhattan Bank, may transfer his rights to a third party after paying a fee prescribed through negotiations and to update the record in such a case was the responsibility of SeaDocs Ltd. In such a situation, the shipper would issue a portion of the code to the buyer and the information of this change to the SeaDocs Ltd through electronic data interchange. However, SeaDocs Ltd updated the record only when it received the request from the holder of the bill accompanied with the authorized PIN code after verifying all the credentials and the validity of the data transferred under the transaction. After this process was complete, the new holder of a new electronic bill of lading generated by the registry enabled him to collect the goods at the destination.

659 ibid.
660 ibid.
661 ibid.
This attempt, although it was able to introduce a workable system for a negotiable bill of lading through electronic means of communication, could not last long, and after only one-and-a-half years, this project was closed. Because it was not able to attract a sizeable business community to keep it going, and because the legal and functional authorities were inclined to only endorse this initiative if it were to operate at the universal level, after the withdrawal of support from Chase, the project was wound up while still in its very pilot phase.

4.5.1.2 Receipt function and SeaDocs:

Receipt function was evident. Although receipt and evidentiary contractual functions were able to be transformed, the issuance of the traditional paper bill of lading was still deemed to be mandatory in the project. For all practical purposes, the PIN key generated message was a valid evidence of the transaction as well as the use of PIN by the receiver was a valid proof of its acknowledgement; hence this function was established, too.

4.5.1.3 Transfer of Title:

Transfer of title through negotiation was not tested to the full. It is clear that the paper bill of lading was not going to be presented at the time of receipt of the goods at the port of discharge, and therefore, because the absence of this function is considered detrimental to all practical purposes, the reliance had to be placed on the electronic transaction record of the registry.

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663 Love (n 655) 54-59.
664 P Todd, Bills of Lading and Bankers’ Documentary Credits (3rd edn, LLP 1998) para. 4.6.8.
665 Wilson (n 125).
4.5.1.4 Identification of Parties:

The identification of the parties in this system was proposed on the basis of the electronic key and not on the paper bill of lading therefore, the need of physical presence of holder was not enforced and the possessor of the electronic information was entitled to take possession for all practical purposes. The possibility of this agreement could not be explored as the project had to be closed in its infancy.

Among the major reasons for its failure, however, can be listed as follows:

**Legal implications:**

i. This initiative was a business project which neither had a legal cover nor its acceptance in the court of law. No national or international legislation covered its functions and, therefore, the business community was slightly apprehensive of using this set of new initiatives due to the fear of their loss in the case of a legal dispute. The rights and liabilities of the parties were also undefined and required clarifications beyond the interpretations made by the bank or the registry itself. The issues as to the wrong delivery of the goods and the use of electronic data by the registry or any unauthorised person were debated prior to its wind-up.

ii. SeaDocs system offered a solution to save time and avoid paper transaction usefully but the basic functions as to the contractual and evidentiary value of the bill of lading was not tested in the full. The person taking the delivery at the port

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667 ibid.
668 ibid.
669 Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 163, 177.
670 ibid.
must not be the owner of the good, i.e. the party in the contract in the carriage of the good but might be an agent holding that key on behalf of his principle or even a wrong party. Therefore, the sanctity attached to the bill of lading was in jeopardy and if applied would result in new sort of legal proceedings at that time.\textsuperscript{671} However, it may not be sufficient to conclude that SeaDocs project was unable to improve the shortcomings as it was abandoned mainly on the reluctance of the traders to register their information in single registry than on legal and technical grounds.\textsuperscript{672}

**Technical Implications:**

iii. On the technology side, the process suggested the total technological replacement of the traditional bill of lading. This Project tried to provide a mixed solution of adopting an electronic solution while still retaining the paper legacy. At that time, a complete shift was also not available as a solution in the mind of the proposers of the project and it did not prove a solution to the immediate situation, either.\textsuperscript{673}

iv. The introduction of the central registry had increased the cost of financial transactions. On each negotiation or transaction, this registry charged a fee ranging from $300–500 over and above the normal cost.

v. This project was a joint venture between two large institutions and was considered as a step towards a monopoly by the others in the business and hence, it had created a sense of repulsion for many who were either in competition or opposed to the idea. The rights of expulsion and the decision of users’ breach was the sole

\textsuperscript{671} Delmedico (n 11) 95–100.
jurisdiction of the SeaDocs Project management and they were authorised to change procedures without notice.\textsuperscript{674} This monopolistic intention resulted in further repulsion from the project and made it unacceptable to organisations outside the project’s core corporations.\textsuperscript{675} This non-aligned attitude within the business community ultimately resulted in the failure of this project.\textsuperscript{676}

vi. The recording of all information of all transactions at one central place and under the control of one registry had created data security concerns among the users and its misuse also hampered the growth of the idea.\textsuperscript{677}

vii. The other problem was convincing banks to provide financing for the project. There was provision to include financial institutions as the temporary holders of the bill in case of their financing and pledge, but the terms and conditions were rather unattractive for these institutions. Initially, the banks were not allowed to scrutinise the original bill of lading placed in the central registry, but later on in the project, banks were provided limited access with a number of exceptions and a liability of 150\% of the market value of the goods.\textsuperscript{678}


\textsuperscript{675} Love (n 655) 54–59.

\textsuperscript{676} Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 163, 177.

\textsuperscript{677} Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 256–266.

\textsuperscript{678} Love (n 655) 54–59.
4.5.2 Reinskou’s Method:

Reinskou’s proposal for the replacement of the paper bill of lading by an electronic format was part of his research work published in 1981.\textsuperscript{679}

4.5.2.1 Receipt and Negotiability Function and Reinskou’s Method:

From the functional approach, this model proposed another way to replace the paper bill with electronic messages with such a connectivity that may promote the up-dating of change in ownership of the goods on board while keeping the carrier in the loop with all the necessary information. In order to ensure both data security and negotiability, he proposed that a central registry should be maintained by the carrier or the shipping company itself using a notification-confirmation system, that is, every message would have to be confirmed before it could be acted upon instead of by a third person at a neutral place.\textsuperscript{680}

The carrier acting as the registry of the bill of lading information would be required to feed the data into his system on board in accordance with the details contained in the paper bill of lading and this is how the original owner of the goods would be recorded as the shipper of the goods. All the subsequent changes in ownership would be required to be communicated to the carrier through electronic data messages who would then be bound to confirm receipt and the change in name of ownership of the goods in his custody on the ship. The system would also be required to communicate a system-generated confirmation of the change of ownership to


\textsuperscript{680} ibid.
the new buyer, automatically. This confirmation notice would contain the quantity and description of the goods.\textsuperscript{681}

From the legal features of a bill of lading, the carrier in these transactions is bound by the terms included in the original contract of carriage to issue a confirmation message. This confirmation message would not affect the original defences available to the carrier against the original shipper against all the future buyers. The effects of such a confirmation would bind the carrier to deliver the goods to the last notified shipper/owner of the goods as per the information contained in the system and in this process the carrier would have indemnity against any delivery made to persons in good faith.\textsuperscript{682}

This proposal had an option to the change of ownership during the transit of the goods through the change in the information of the parties by the authorised person that indicates the negotiability function available in the proposed system. Furthermore, Reinskou’s method also allowed for the possibility of pledging the goods in transit in the same way and in that case, the pledgee would be included in the information already in the system and the contents of the contract transmitted from the shipper and its confirmation to the pledgee as well as to the pledger.\textsuperscript{683}

In order to ensure the security of the messages, Reinskou had proposed the encrypted system trapdoor of providing only one-way functions and these would be the responsibility of the carrier. This indicates a technical and functional approach to assimilate the functions of a bill of lading in both an electronic and symbolic way.

\textsuperscript{681} ibid.
\textsuperscript{682} ibid.
\textsuperscript{683} HY Lee (2013) A Study on the Adoption and Impediment about Electronic Bill of Loading of Major Shipping Companies. 15(3), 431-451
This method provides a cost-effective and data secured solution to the problem. In this situation, the transaction is limited between the shipper and the carrier and in the case of sale of pledge of the goods; new players will be introduced in place of the shipper as the owners/receivers of the goods at the port of destination. This method has an inherent characteristic to identify the bearer of the bill of lading at the outset and hence reduces the chances of sea trade fraud.684

On the other hand, this system could not make its mark. The following areas were identified as contributing towards its non-acceptance.

**Legal Issues:**

i. This proposed model was the functional solution of the problem but not the legal. It was not a model law to be considered by the sovereign regimes. As the bill of lading might be subject to a number of jurisdictions during its travel, agreement on any legal regime would be a necessary requirement for any alternate to the traditional bill of lading acceptable in the court of law in case of dispute.685

ii. To an extent, the contracts between the parties may cover the legal aspects but this system does not cover all the necessary parties and, therefore, many parties remain out of the system that are not bound by the provisions of an independent contract of carriage. This gives rise to the opportunity to sue the carrier for any action under tort.686

684 ibid.
Functional Issues:

i. The introduction of additional liability and responsibility on the shoulder of the carrier to protect the data and to ensure its authenticity from any outside electronic fraud makes this proposal unacceptable for the carriers, especially those who operate at smaller levels. In this regard, it had been noted by the proposer himself that in order to cover the expenditure for the new system, the carrier would need to charge higher freight rates. It may be noted that this system would not replace the issuance of the paper bill of lading and the issuance of paper bill of lading comes with its own cost that would not be waived.  

ii. On the banking side, the banks were also not comfortable with dealing with the carriers as the registry and the recorders of their transactions, especially in containerized, transport, were financed by the bank.

4.5.3 Henriksen’s Proposal for an Electronic Bill of Lading:

In 1982, another fully technical option, ignoring the functional aspects for the electronic bill of lading, was proposed by Henriksen. He proposed to place the electronic bill of lading in the same position as its counterpart paper bill of lading was being treated under the prevailing laws.

4.5.3.1 Legal-Technical Assimilation to facilitate Negotiability:

From legal perspective, he proposed the use of an electronic system based on public key cryptography that could enable the user to generate an electronic bill of lading in the same way

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687 ibid.
688 Henriksen (n 685) 24–128
689 Henriksen’s method was a general one that could apply to all documents, although he did discuss the special problems of the bill of lading (n 685) 131.
as paper would be used for the generation of a traditional bill of lading. Written equivalent was the electronic message and the requirement of the signature was equated with the use of universal electronic key assigned to the owner of the document only. For this purpose, he had proposed a closed system where specially programmed computers were proposed to be used in which the required features were required to be incorporated.\textsuperscript{690}

In order to ensure transferability of the document as a negotiable document that a bill of lading is, this system has its own innovation as to transfer of original document. In the features proposed for these internal computers, the important thing was to enable the parties to add clauses in the bill of lading along with its identification whereas upon the transfer of the bill of lading to a new buyer, the data from the sender’s computer would be deleted as soon as the acknowledgment was received and the “original” copy of the electronic bill of lading would only be available to the last legal holder of the bill. Being a closed system, it was said that this system would provide complete security to the communications made and any alteration would be traceable on the system. Finally, the holder of the bill in due course would not be able to claim possession of the goods unless a copy of the original bill is sent to the carrier for the identification of other information. In this way, all the parties, from the initiation of the bill of lading to all holders through each negotiation, would be registered on the system and would have access to the specially-configured computers.

On the point of the holding of the bill as the possession of the goods, Henriksen was able to ensure that the receiver should be able to hold the goods only upon sending the original copy of the electronic bill of lading to the carrier. This ensured the parity of the paper bill of lading with the electronic format to this extent. The carrier would also be the part of the system. On

\textsuperscript{690} ibid, 121–131.
the point of the use of this system in terms of the legal regime, Henriksen was certain, in his background of Danish legal experience, that his proposed new system was compatible with the present legal system and hence was able to present simple legal-technical assimilation.\(^{691}\)

This proposal could not implement and gain popularity as a true solution to introduce electronic bill of lading because:

- While evaluating the system proposed by Henriksen, it was felt that without the involvement of a central registry, disputes arising out of negotiation might be complicated, especially when the role of the Cargo Key Receipt was limited. Furthermore, this system would involve the standardisation of hardware and software for uniformity across the globe. This may require registry at later stages.\(^{692}\)
- Henriksen’s method was based on an over-simplification of the legal aspects when he assumed that the old laws prevailing in the world could be applied universally for the electronic bill of lading. All the critics doubted the assumption of the acceptance of a record held in a personal computer as a valid record in the legal course of action and this again pointed towards the need for a central and secure registry.\(^{693}\)
- He either did not care for the transfer of contractual and proprietary rights arising out of these transactions or ignored the importance of this factor.
- To some extent, Henriksen ignored the attitudes of the shippers as well as the carriers in the sea trade who remained traditional in their approach and concerns about risk.

\(^{691}\) ibid.
\(^{692}\) ibid.
\(^{693}\) Kiat (n 686) 180.
adversity. In other attempts, such as CMI and Bolero, this attitude also thwarted efforts to promote an electronic form of the bill of lading.694

4.5.4 The @GlobalTrade System:

There is a feeling among a number of traders and theorists that the document of title function of the bill of lading is unnecessary and the rest of the functions may be performed by the non-negotiable sea waybills. In order to remove the document of title function, the @GlobalTrade system introduced a non-negotiable waybill subject to CMI rules in the form of a sea waybill that includes particular clauses that functionally replace the negotiable bill of lading.695 In 2000, CCEWeb Corp, an international concern in financial services, initiated this project, which involved some other stakeholders within the relevant industries as well as shipping merchants in the project. Among the more notable partners from overseas are China Systems, SITPRO, and Danzas, who joined this project within one year of its launch.696 In the @GlobalTrade System, all the parties in a trade transaction, such as buyers, sellers, shippers and carriers on one hand, and the insurer, bankers, and freight forwarders on the other, have access to the system through an internet-based interactive Documentary Clearance Centre on a real-time basis. This Documentary Clearance Centre performs functions of a credit-issuing bank, advising bank and reimbursing bank, which places it in a unique position as compared to the interventions proposed in earlier attempts.697 The System provides that ‘Upon acceptance of this waybill by a bank against a letter of credit transaction (which acceptance the bank confirms to the carrier) the shipper irrevocably renounces any right to vary the identity of the

694 ibid.
695 Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 256-266.
696 ibid.
697 ibid.
consignee of these goods during transit'. In the @GlobalTrade System the rights and liabilities of the parties are regulated in the same way as it was in a negotiable bill of lading. The @GlobalTrade System provides that if a consignee had to sell his goods in transit, the process might be to approach a carrier with identification and it might be allowed within the conditions to deliver the goods to the destination of the cargo.

The salient features of this system may be listed as follows:

i. Unlike earlier systems, the @GlobalTrade system is an open system having no requirements for registration with the System. It encourages any party to avail themselves of the benefits of the system. However, parties such as buyer-applicants and issuers of electronic letters of credit are required to be registered.

ii. The Electronic Sea Waybill (ESW) is the prime document for transactions processed under this system. Therefore, instead of bill of lading holding the rights and liabilities of the parties, these are defined and regulated under the relevant applicable laws.

iii. The @GlobalTrade System applied CMI Rules of Sea Waybill by adopting those particular clauses that functionally replaced the negotiable bill of lading.

iv. The @GlobalTrade system uses encryption and digital signatures to uphold the security of the system.

The efficacy of this system is again yet to be defined fully as a new system and has yet to achieve global appeal.

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698 Richardson, *The Merchants Guide* (n 303).
699 Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 1–11.
4.5.5 The TradeCard System:

The TradeCard system is an American intervention designed to resolve the issue of bottlenecks in the electronic-based transaction system. It was attempted in 1994 by the World Trade Centre Association when international traders were facilitated through an electronic and internet-based system that allowed parties to adopt/incorporate International Commercial Terms (INCOTERMS) and provisions in their agreements. It was aimed at allowing merchants and traders to work globally within a paperless documentation environment by way of a complex electronic service platform. Its horizon was, however, not confined to any single sort of the transaction, the system offered instead the facilities for all types of sales and purchase agreements in commodities and goods and enabled all users of the system as seller, buyers and service providers to complete their transactions, settle payment and adjust their accounts online through the use of the internet. Its prime focus was, however, on banking services, and it did provide an overall replacement of the letter of credit services. It launched its formal services in 1997 and in 2000 it was available on the web for official transactions. This new system, however, faced initial hurdles in being accepted by the financial institutions, which considered it a competitor in a market that has taken a lot of time to settle, but eventually, the TradeCard system was able to establish deals with many renowned financial institutions such as Coface as payment insurer, and financial hubs such as Ernst and Young, Cap Gemini and MasterCard.

700 Dubovec (n 99), 437–466, 452.
702 Dubovec (n 99), 437–466.
Functional Approach by Trade Card:

Functionally, transactions made in this electronic mode require the creation of an electronic purchase order from the buyer that would be notified to the seller by the TradeCard service providers. The system offered online interaction between the parties and negotiation on all the terms and conditions of their deal and the formation of an electronic agreement, bearing digital signatures, secured by the system. The role of the system is more than merely to document service providers. In the transition of goods, the system secures an assurance of payment from the buyer against the goods shipped and conveys it to the seller. The TradeCard system is responsible for tallying the goods and their characteristics with the received goods and to provide an opportunity online to settle any differences between the parties. Upon completion of all requirements only, the funds are supposed to be transferred electronically to the seller. Fund transfer is a function of allied financial service providers, but these institutions are independent in their operations as these financial institutions neither owe any liability nor are responsible to the TradeCard system.

The applicable rules in this case are not national or international rules but the International Commercial Terms (INCOTERMS) that operate for all purposes, including insurance cover. These rules are facilitating in terms of electronic transactions and documentation in international transactions subject to an agreement between the parties to this extent and cover transactions including the negotiable bill of lading.

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704 Annan (n 703) 1–275.
705 Dubovec (n 99) 437–466.
706 ibid.
Upon review of this electronic system, it becomes apparent that TradeCard has gathered much more reliability than earlier attempts. It is considered to be the most successful model among all others, but still it was found lacking in supporting functions such as the electronic document of title that is crucial for an electronic bill of lading function. Unlike @GlobalTrade, TradeCard was able to offer its client an automated engine that is more reliable and user-friendly than those which operate under the control of the service providers.

4.5.6 Mandate:

Among the numerous projects designed to replicate the negotiability function in electronic form, another successful model is Mandate. This concept was introduced in 1994 as the result of the European Commission TEDIS programme where this concept was developed by Marinade Limited from the UK and Cryptomathic from Denmark. The purpose of this project was to provide a generic method of achieving negotiability in an electronic environment. In the progression of Mandate I, another private project, named Mandate II, was sponsored by the European Commission Electronic Trusted Services (ETS) programme in 1997, which used the concept of the electronic cheque, made during its first phase, and was initially applied successfully in the private sector in European banks without the need for any intervention of a central registry as required under CMI Rules or Bolero. It is, however, important to realise that, primarily, this project was not designed to replicate the functions of

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707 ibid.
the bill of lading, but was introduced as a new intervention for negotiable instruments in the banking sector.\textsuperscript{711}

Negotiability of an electronic document is a function of confidence upon some title registries or third party to ensure a clean transfer of title without fear of fraud or errors. In the case of CMI and Bolero, a third party provides confidence in the Private Key System and Title Registry. But in the case of Mandate, the third party is responsible for producing Mandate, the generation of a public-private key pair, issuance of the corresponding certificate, provision of directory services to check the validity of certificates issued, and to store copies of Mandate and other information mentioned above.\textsuperscript{712}

In the Mandate project for the banking sector,\textsuperscript{713} it is, however, important to reiterate that Mandate II works without any introduction of a registry. It uses instead a hardware known as Doc-Carrier or Mandate™, implemented in a smart card device. This Doc-Carrier is the storage place for electronic cheques and public/private key pairs used to sign and encrypt the digital cheque at the time of issue and clearance. This electronic cheque, once signed by the issuer, is sent via e-mail to the endorsee or recipient without the use of any central place for recording or registry. The recipient may send this cheque for clearance to the bank or may endorse it to the next recipient while exercising the same process. In order to ensure privacy, the bank issuing the Mandate is responsible to certify the public key of a user.\textsuperscript{714}

The application of Mandate in the case of an electronic bill of lading is yet to be seen. The Mandate process, as applied in the case of electronic cheques, can also be adopted in an

\textsuperscript{712} ibid.
\textsuperscript{713} Royal Bank of Scotland, UK; ING Bank, The Netherlands; and Nordvestbank, Denmark pioneered the project.
\textsuperscript{714} Mandate Final Report, ibid (n 710).
electronic bill of lading to ensure its negotiability function while using the issuance of a cheque, receiving of cheque and the electronic key pair with the Doc-Carrier without any substantial change in the procedure.\textsuperscript{715}

On the one hand, where there is no registry, the Doc-Carrier can still hold money in the form of a bill of lading, although each bill of lading can only be negotiated once and independently against one receipt, to ensure the uniqueness of each document and its negotiability for all further references.\textsuperscript{716} Mandate II therefore offers the negotiability function in an electronic format at an even lower cost than before, or that in the CMI Rules, where a permanent establishment is required to manage a central registry. But the technology employed in administrating Mandate II in the form of a smart card is costly.\textsuperscript{717} The backing data in the case of lot of the Doc-Carrier will be available to the issuer and can be retrieved on verification to avoid misuse as well as loss to the parties.\textsuperscript{718}

4.5.7 The CargoDocs EBL through ESS-Databridge System:

Among the latest attempts to introduce electronic commerce in the sea trade is the ESS-Databridge System. Similar to all earlier attempts, it is a business initiative that has no known support of any formal government backing. It was a venture developed by the ESS Company in 2003, operating in Malta and dealing in the most sophisticated electronic business documents that had been introduced for quite a long time.\textsuperscript{719} The major parties of the company include BP Oil, Morgan Stanley, Maersk Tankers, the Noble Group, Fortis, UBS, JP Morgan, etc. This company was incorporated with the intention to bridge gaps in the efficiency of paper

\textsuperscript{715} ibid.
\textsuperscript{716} Low (n 711).
\textsuperscript{717} ibid.
\textsuperscript{718} ibid.
\textsuperscript{719} Information obtained from <www.essdocs.com> accessed 22 April 2014.
documents to allow the documentation of transactions to catch up with the increasing speed of business across the borders within the multimodal transportation mode.\textsuperscript{720} As the result of an investigation into the market practices in the tanker businesses, the ESS development project was launched and its major products were made available on the market under the brands CargoDocs, ESDS and CustomsDocs.\textsuperscript{721}

ESS exchange operates via the internet and users can access this exchange through this medium. It operates using the eDoc Exchange where paper documents are replaced by secured eDocs that are equipped with secured keys in favour of the owners; hence ownership has now been transferred from the paper documents to the ownership as represented by their electronic format. Similar to earlier projects, this project has combined the characteristics of both the legal and technological aspects of ownership with security in the transfer of ownership.\textsuperscript{722} The owner of the paper document, in surrendering that ownership, obtains ownership via the e-Doc, and is thereafter only able to transfer this ownership by passing the original e-Docs to the new endorsee by using the e-Doc Exchange.\textsuperscript{723} This process has further enabled the ESS to initiate an Electronic Bill of Lading (EBL). The aim of this venture was to further strengthen electronic transactions across those areas that were still uncovered under this electronic regime. The CargoDocs EBL is more like the BBL where the legal functions of the paper bill of lading have been transcribed in electronic format using the ESS Databridge mechanism. However, despite this similarity, this attempt differs in one basic aspect, that is to say, the role designation of the parties in the system. In this system, the controlling rights are available to

\textsuperscript{720} ibid.
\textsuperscript{722} ibid.
\textsuperscript{723} ibid.
only one party at any given time, and no one else can amend the properties of the record in the
registry, which provides security and integrity to the whole system.\footnote{724} The process in ESS resembles earlier attempts in that the transfer of ownership is possible
with the use of novation, endorsement and amendment techniques and making any of these
changes is only possible through the ESS Exchange. It is important to note here that the
purpose of all of these business initiatives in this regard have been introduced to smoothen
only the business aspects of this realm and not to resolve all the legal aspects of the matter.
Therefore, in the first instance, it is important for the carriers to agree to the amendments in
the electronic documents issued by the Exchange. However, in practice, the resistance to
accept the electronic format of such documentation still persists, and the carriers are hesitant
to accept these late changes in terms of the destination and ownership of the receivers at the
port of destination. On the technical side, the process is more akin to the Bolero project in that
it ensures the security of the information and any changes in ownership by the use of private
and public keys only accessible through the ESS Exchange.\footnote{725}

It has been mentioned that the electronic bill of lading introduced by the ESS project is the
first to identify the practices prevailing in the sea trade and then map the same within the
electronic format. Therefore, the operation and processes of the CargoDocs E-Bill of Lading
can be further examined to understand if this system has the same resilience as its counterpart
paper bill of lading or whether it has deviated in some respects. In the first place, the shipping
request or the draft bill contains all the information about the goods shipped, their destination,
the name of the receiver at the end of the journey, etc., as required in a paper bill of lading in

\footnote{724} Liang Zhao, ‘Legislative Comment Control of goods carried by sea and practice in e-commerce’ (2013) 6 JBL 1, 585–597.
\footnote{725} ibid.
the normal circumstances. This document is further sent to the carrier for initial information and to be recorded electronically. These data are made available to all other concerned parties instantly for their verification and the carrier terminals are placed immediately in the position of being able to check the particulars and to issue an electronic bill of lading to the shipper with the same information available on the portal without the need to re-feed the same. The total time required from the raising of the shipping request to the final issuance of an electronic bill of lading through this system is only one hour, which is much less than the time that it takes for a traditional paper bill of lading to be raised in the practical world.\textsuperscript{726} This bill must be issued in the name of the consignee and, if there is a need to change the consignee during the process in the wake of the sale of goods in transit, the original consignee has the authority to change the information available on the portal using an amendment process via the process of novation adopted by the system. This ensures that there should be only one consignee at any given time and hence only one single authority to amend the data. The consignee must certify any changes made on the particulars each time ownership changes by means of producing an electronic certificate that becomes the record for the future verification and for determining evidence of any fraudulent activity in the system.\textsuperscript{727} Such changes are allowed at any time until the actual delivery of the goods at the port of destination to final consignee as per the record and the signing off of the document by the carrier by placing electronic signatures on the e-bill of lading.\textsuperscript{728}

On the legal side, the governing jurisdiction for this project is English law with the US exception where the transfer of title is governed under their state laws and by the central level...
United States Uniform Electronic Transactions Act, 1999. In the USA, for the purpose of the transfer of title under the prevailing laws, novation is not required as such. The parties are free to select either of the jurisdictions in order to resolve their future disputes, including where the arbitration is adopted as the alternate dispute resolution mode in the electronic bill of lading.\textsuperscript{729}

In the sea trade, the importance of the bill of lading had been felt after the advent of the bulk trade of wheat and oil and, as the result of their in-transit sale, the involvement of banks was increased. In the latter part of the last century, however, this trend was seen to lose its value in the eye of the bankers and the significance of credit encompassed in this paper bill of lading is now uncertain. It is essential for any electronic replica of the paper bill of lading to keep the attraction of banks in this regard. In the case of bank credits, the banks have a right to access to the original documents presented under a letter of credit as the measure of security and the banks, after verification, may or may not accept the same. This system is well integrated within the other financial protocols that provide the bank with the facilities to use SWIFT messaging for their financial transactions. Furthermore, the ESS has relied upon the Rotterdam Rules to the extent of their right of control of the goods in transit through sea transportation modes.\textsuperscript{730}

In light of this discussion, it is clear that this project has attempted to utilise the available resources in the best possible way and to present a replica of the existing paper bill of lading without an attempt to improvise but instead to sustain what the significance of the bill of lading is to its users. This effort presented the industry with a slight change in perspective and demonstrated how an electronic database might be used for convenience, security and

\textsuperscript{729} Zhao (n 724) 585–597.
efficiency in the processes. Therefore, it may be said that it is an attempt to replicate the paper
bill of lading with all its characteristics, however, in legal and practical terms; the previously
identified problems remain intact.

4.5.8 Korea Trade Network (KTNET): An Effort by a National Government and
Private Parties:

Among the national level efforts to introduce and apply paperless payment models, perhaps
KTNET is the only successful model. It was started in 1991 under the Korea International
Trade Association (KITA), an innovation by The Ministry of Commerce, Industry & Energy
(MOCIE) and the Republic of Korea Customs Service (KCS) which has private stakeholders
as partners in the forum to promote electronic transactions and commercial activities, both
inside the country as well as with international trade partners. In 1992, KTNET was launched
as an automation agency and by 1994 a single-window paperless environment/EDI was
established to cover most of their governmental transitions. The other element of this initiative
was Cyber Trade World, which catered for establishing international trade as the future
platform of the country to achieve new milestones in a paperless, electronic and fully-
automated economy.731

It may be interesting to know that this single-window system was designed to be made
compatible with existing efforts towards automation and, in the first instance it was integrated
with the banks and other stakeholders such as Customs to facilitate the generation of
Electronic Letters of Credit and other documents. Later on it progressed to become the face of
an automated Korea and a number of online transactions were supported by the government,

731 J Yang, ‘Small and medium enterprises (SME) adjustments to information technology (IT) in trade facilitation:
the South Korean experience’ (no 61 2009) Asia-Pacific Research and Training Network on Trade Working
Paper Series.
including online procurement and payments, registration, global networking, banking, consultancy, etc.\textsuperscript{732}

In the preceding sections of this chapter, the focus has remained on the business attempts made in regard to the adoption of an electronic bill of lading. Although there have been no wholesome efforts seen on the part of any national government to back up an electronic bill of lading or to introduce an electronic bill of lading within their jurisdictions, some efforts have been made to introduce electronic commerce within their own scope. These efforts have been fully discussed in the preceding sections of this chapter. The following sections will now explore the limited legal attempts and organisational initiatives to adopt an e-commerce framework.

\textbf{4.6 Business Initiatives to provide Parallel Rules to introduce e- Bill of Lading:}

In this part, efforts focused to provide the legal rules to introduce legal-functional approach than the projects to implement. This part is distinct in the sense that both these rules are still available and under constant change to accommodate the ever changing nature of functional approaches in legal situation.

\textbf{4.6.1 Comité Maritime International (CMI) Rules:}

The Comité Maritime International (CMI) is a historical institution, established formally in 1897, which strived for the “universal” codification of standard principles extracted from the various mediaeval maritime codes.

\textsuperscript{732} ibid.
In the course of its efforts to dematerialise the shipping documents with the use of electronic data interchange, in 1990, it introduced CMI Rules for Electronic Bills of Lading as an early attempt to facilitate the use of electronic bills of lading within the business community. Its scope was, however, defined for parties who agree to adopt these rules independently in Rule 1 of the CMI Rules. In this way, it neither tries to substitute existing laws governing the paper bill of lading, such as the Hamburg Rules, the Hague-Visby Rules or any other law in force, nor did it attempt to introduce a central computerised registry as proposed in the case of SeaDocs. It attempted to provide a voluntary regime to the maritime business community in which they were free to take advantage of the benefits of dematerialisation. The CMI Rules are not backed by any legal framework under any national or international body and therefore their scope is voluntary without any force of law. Therefore, it is provided under Rule 6 that, ‘The Contract of Carriage shall be subject to any international convention or national law which would have been compulsorily applicable if a paper bill of lading had been issued’. It may, however, be noticed that these rules were drafted in support of the United Nations Rules for Electronic Data Interchange (UN/EDIFACT), covering all the aspects of a bill of lading in paper form. In this way, while remaining within the existing laws on the paper bill of lading, the CMI Rules encouraged the use of EDI with the consent of the parties with the encouragement to apply UN/EDIFACT as a standard protocol.

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CMI provided a legal framework in which all the characteristics of a paper bill of lading were introduced in its electronic counterpart. It provides certain efficiencies. CMI Rule adoption waives the requirement of a signature and the written document, replacing it with the electronic transmission. Furthermore, the parties who voluntarily adopt these rules waive their right to defence based on the absence of a written document. For the conclusion of a contract, advanced electronic modes were permissible.

**Legal-functional equivalence in CMI Rules:**

CMI rules considered legal-functional equivalence in the following ways:

- In order to achieve the equivalence of the paper bill of lading in an electronic form, electronic data were considered to be as good as the writing on the paper unless otherwise agreed. It helped the CMI to satisfy the basic requirement of writing for a bill of lading.

- As observed in the case of the paper bill of lading, it has to perform certain functions. Out of these, three basic functions, that is to say, the function as to the receipt for goods, as evidence of the contract of carriage of goods, and as a negotiable document of title to the goods, were sufficiently performed by the CMI electronic bill of lading. Under the CMI Rules, similar to the paper bill of lading, the carrier issues a receipt message to the shipper having included all the information as is necessary on

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739 ibid.
741 Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369), 284.
742 Kamlang (n 733) 1–117.
the paper bill of lading with the same force under rules as its paper counterpart.\textsuperscript{743} The framers of the rules were cognisant of the problems in implementation of these rules through the courts and, therefore, the voluntary acceptance of these rules by the parties or parties’ intention provided the enforceability of these rules in the court of law.\textsuperscript{744}

- Similarly, in the function as evidence of a contract of carriage, the electronic message contains all the terms and conditions of the contract as contained in the paper format in terms of Article 4 and 5 of the Rules, and voluntary acceptance of the electronic data as a written document helped in securing its validity.\textsuperscript{745}

- The function of negotiability was achieved with the introduction of the Private Key. Instead of introducing any central registry, as introduced in the SeaDocs Project, the parties are required to agree on the electronic protocol for reference. In this case, the parties are assigned a Private Key, alphanumeric in character, for all future communication. This Private Key is defined in Rule 8 as, 'The Private Key is unique to each successive Holder. It is not transferable by the Holder. The carrier and the Holder shall each maintain the security of the Private Key.'\textsuperscript{746} In the case of any change in the title of the goods, the holder of the key transfers its rights to the other person under intimation to the shipper, who acts in this case as the registry or the guarantor. The shipper, in response, sends a confirmation message to the party under title after negotiation to validate his claim to enable the collection of the goods at the destination.\textsuperscript{747} This message has the same effect as the endorsement on paper and it contains more or less the same information which is otherwise required in the case of a

\textsuperscript{743} CMI Rules for Electronic Bill of Lading, 1990, art 4 (d).
\textsuperscript{744} Low (n 711) 175–177.
\textsuperscript{745} CMI Rules for Electronic Bill of Lading, 1990, art 4 and 5.
\textsuperscript{746} CMI Rules for Electronic Bill of Lading, 1990, rule 8.
\textsuperscript{747} ibid.
paper bill of lading for endorsement. The list of that required information is provided in Rule 4 of the CMI Rules, which is exhaustive.\textsuperscript{748}

The idea of free will engagement of the traders in the dematerialisation effort gained popularity to a certain degree. The whole scheme was based on the agreed procedure without eliminating or suppressing the role of existing laws and hence, unlike SeaDocs, there was hardly any legal battle. The fears raised by the business community in the earlier efforts in relation to the breach of privity of contract or access of competitors to their core information was addressed by introducing the carrier as the registry, who even otherwise holds the knowledge of the basic information about the bill of lading.

Although the CMI Rules are still available, its regime could never be progressed as a universal procedure. This restricted role again can be attributed to a number of factors, as follows:

i. The process of the transfer of title was complicated in the case of CMI as compared to the traditional bill of lading where the transfer is simply made by the negotiation of the document and handing it over to the new holder. But under the CMI Rules, no transfer can be completed unless it is notified to the carrier through the Private Key and the carrier sends in reply a confirmation by cancelling the older key and creating new key for the new holder of the document. This resulted in undue delay in the process.\textsuperscript{749}

ii. CMI is criticised for placing too much responsibility on the carrier of the goods. He is responsible for cancelling, issuing and reissuing, sending and resending the Private Key, which contains all the information for current and subsequent holders. His

\begin{footnotesize}
\begin{enumerate}
\item ibid, rule 4.
\item Todd (n 623).
\end{enumerate}
\end{footnotesize}
designation as the central registry caused not only undue burden but also increased the chances of mistakes being made by a person and not the system.\textsuperscript{750}

iii. The CMI Rules do not explicitly provide for how contractual rights and liabilities can be transferred with the endorsement of the bill. Contractual obligations of the carrier may be varied under these rules, which place the holder in due course in a disadvantageous position and open to unfair treatment. On the other hand, the carrier has the chance of the absence of prosecution in the case of any default.\textsuperscript{751}

iv. The CMI bill of lading was neither a true bill of lading under The Hague or Hague-Visby Rules and hence these Rules do not cover a CMI bill of lading as it was described under CMI rules.

v. Rule 7 (4) (d) of the CMI Rules provides, ‘The transfer of the Right of Control and Transfer in the manner described above shall have the same effects as the transfer of such rights under a paper bill of lading’. The conflicts with mandatory national laws were also criticised as these laws cannot be discarded by an agreement of the parties which fall within the different national jurisdictions.\textsuperscript{752}

vi. The CMI Rules never attained the sanctity of law as they were neither adopted by any national legislation nor considered at any international forum, including the United Nations Rules for Electronic Data Interchange (UN/EDIFACT).\textsuperscript{753} The burden was placed in these rules more on the shipper along with the security concerns of the

\textsuperscript{750} ibid.

\textsuperscript{751} ibid, Todd, ‘Dematerialisation of Shipping Documents’ (n 623); and Low (n 711) 175-177.

\textsuperscript{752} AN Yiannopoulos, \textit{Ocean bill of Lading: Traditional forms, Substitutes and EDI Systems} (Martinus Nijhoff Publishers 1995) 38.

\textsuperscript{753} UNECE, ‘Report of the Committee on the Development of Trade of the UN Economic Commission for Europe: Implementation of ECE/FAL Recommendation No. 12, Measures To Facilitate Maritime Transport Documents Procedures’ (ECE 53\textsuperscript{rd} session 20 March 1996).
parties, and the undefined nature of parties in the absence of binding nature, etc., and these hurdles proved cumbersome for the user to adopt.754

vii. The involvement of the shipper in the confirmation of endorsement was again considered as breach of *privity* of contract. On the business side, the merchants were apprehensive about this involvement as breach of their business information. On the other hand, the involvement of shipper in the endorsement process was an innovation over the established principles of law.755

4.6.2 The Bill of Lading Electronic Registry Organization (Bolero) Project:

The Bolero initiative was backed by the European Commission in order to resolve the issue of dematerialisation across the sea trade. In order to achieve the purpose, an association with the name and style of Bolero Association was created and its formation was a joint venture between SWIFT and TT Club, formed in 1996. This association was represented by the interested organisations and the mandate of this association was to gather information as to how the task of the dematerialisation of the bill of lading might be successfully made and how an electronic bill of lading may be introduced into the international sea business.756 This association, after due deliberations and discussion with all the stakeholders, was able to offer its own system of Bolero in late 1996. Among its potential users and stakeholders are importers, exporters, freight forwarders, cargo insurers, banks, carriers, terminal operators, port authorities and customs and other governmental authorities.757

754 Laryea, *Paperless Trade: Opportunities, Challenges and Solutions* (n 672) 88.
756 Ivarsson (n 721).
757 Bolero official website (n 709).
The failure of CMI project, however, did not stop the efforts to introduce the electronic bill of lading in the shipping industry. The Bolero initiative, the latest initiative supported by any international concern, was funded by the European Commission by committing half of the £2.7 million total cost of the project. The balance of the cost was sponsored by the Association.\footnote{ibid.}

**Operational framework of Bolero:**

After the successful completion of the Bolero Project, Bolero Operation, a limited company was launched to provide two types of the services, that is, core messaging services, and cross-industry services. Its mission statement provides that the company will *provide guaranteed and secure delivery, in electronic form, of trade documentation globally, based on a binding legal environment and common procedures; and to provide a platform for provision of neutral cross-industry services*.\footnote{ibid.} In its messaging service, Bolero provides for the secure sharing of the transfer and exchange of business information between the parties through the use of a central registry. Its functions are to validate the information contained in an EDI message after verifying its authenticity against the database, including the maintenance of system logs, and to provide delivery reports.\footnote{Bolero Requirements Specification version 2.0 (9 January 1998) 26; and A Nilson, ‘Bolero - an innovative legal concept’ (1995) 2 Computer and Law 6.} Among the cross-industry services available to the users are Rulebook, Responsibility and Liability, User Registration, Title Registry Services, Standards, and Customer Support.\footnote{Bolero Requirements Specification.} However, for the purpose of the negotiability provided by the bill of lading in the EDI mode, the Registry Function of Bolero is the most important.
Legal Aspects covered under Bolero: Rule Book:

By definition, a Bolero Bill of Lading, or BBL, is somewhat different from a bill of lading often defined in the legal parlance. It may be called a functional equivalent to a traditional bill of lading, but while its essence is its electronic form, it does not rely on the statutes and conventions prevailing for these traditional bills of lading.\footnote{JCT Chuah, ‘The Bolero Project – the International Chamber of Commerce’s electronic bill of lading project’ [2000] Student Law Review 30, 233–249.}

The Bolero Rule book is the code of conduct for Bolero Operations. In the absence of any clear and agreed national and international rule to govern the EDI transactions, as well as the negotiability of the electronic document, it was required that Bolero, as a new arrangement, should define all the important aspects of the trade and the governing framework must be elaborated enough to cater for future needs, too. In the legal parlance, this Rulebook has a definite significance in the present-day situation. In order to achieve this coherence and uniformity, Bolero conducted a detailed survey and question sessions with the stakeholders and finally it was able to present a multi-lateral contract involving all the parties in agreement on the application of all forms of EDI communication as a valid mode of communication within the Bolero framework.\footnote{Low (n 711) 175–177.} This Rulebook furthermore provides for detailed definitions of parties and their roles in the system.\footnote{ibid.} In order to make the interpretation of these rules uniform, it provides that English law and jurisdiction is final.\footnote{Bolero Rulebook, rule 2.5.} In order to cater for the needs of international commerce, the Hague-Visby Rules are incorporated in this Rulebook as a mandatory international convention applicable to all the parties and contract under Bolero.
Operations.\textsuperscript{766} However, it does not bar the parties to include their own terms and conditions in their bill of lading under the Bolero Operation.\textsuperscript{767}

Bolero has used the concept of functional equality of written document and the electronic information as applied in the CMI and the requirements of the signature on the paper bill of lading with the private keys issued by different registries. Bolero, therefore, acted more as the body of rules like CMI than projects like SeaDocs and had a wider range than these projects.\textsuperscript{768}

In order to ensure negotiability of the Bolero Bill of Lading, all forms of EDI communication are accepted by means of attornment and novation. In its simple legal definition, attornment means the acceptance of change of ownership by the tenant once it is sold.\textsuperscript{769} In simpler words, for a bill of lading it is the acceptance of change of ownership by the carrier through negotiation and it serves the purpose of securing the rights and liabilities of the new holder of a Bolero Bill of Lading against the shipper who is acting as the bailee of the goods on ship under the original contract between the shipper and the carrier. The carrier, by attornment, agrees to hand over the possession of the shipped goods to the new holder as he was otherwise obliged to do to the original holder in the case of a negotiable bill of lading in the traditional format or BBL.\textsuperscript{770} However, the identity of the new holder is defined through the production of the Key, which is the bill of lading in paper format, but in BBL, the bill of lading is the text

\textsuperscript{766} ibid, rule 3.2.4.
\textsuperscript{767} ibid, rule 3.2.1.
\textsuperscript{768} Bolero Rulebook.
message generated by the carrier under attornment. Novation under these rules is made through the acceptance of the new holder to order or the consignee holder to order or acceptance of any of aforesaid changes of the bill after the expiry of time allowed for the refusal of such transfer, originally allowed under the bill. These changes are altering the parties in a contract and hence novates. This will raise a new contract of carriage between the parties, that is to say, the carrier and the new holder to order or consignee. The parties, however, can either adhere to the original terms and reference of the contract contained in the original EDI message, or they may revise these terms by incorporating new terms in the BBL text message. In this process, the Core Messaging Platform acts as the agent of the carrier to ensure the security of the information as third party. Furthermore, in this way, singularity of the claim is achieved and there is only one holder at the end to claim the goods.

Another aspect that these rules cover is the privity of contract between the parties. Under section 3.4.1, after conclusion of a new contract of carriage by any of the processes mentioned above, this Rulebook provides that the carrier is to be notified by the transferer about the change of ownership without details of the new holder of the document. At the same time, the transferee obtains his rights and liabilities in a new contractual relationship with the carrier as novation, while the information is transferred and retained in the Title Registry. This results in the conclusion of a separate contract between the carrier and the transferee and hence the need for exception of privity of contract under English Law or as provided in COGSA (UK) in

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771 Schaal (n 769).
773 Laryea, ‘Bolero Electronic Trade System – An Australian Perspective’ (n 737) 1-11.
774 Rule 3.2.5 Bolero Rulebook.
776 Schaal (n 769).
section 2 (1) and section 3 (1).\textsuperscript{777} In order to do so, Bolero Operations includes the carrier in the loop of BBL text messages.\textsuperscript{778} The contents of these messages are as good as the written document, especially in the case of information relating to the quantity of the goods shipped, and their condition and description.\textsuperscript{779}

Similar to CMI Rules, the Bolero Operation also provides for a central registry, but, unlike CMI, it consists of the Core Messaging Platform and the Title Registry. In the case of the Core Messaging Platform, users are facilitated to communicate with each other, and in the case of the Title Registry; a collective database is maintained, in regard to all transactions between BBL holders and subsequent changes in the holders of these BBLs with accruing rights and liabilities.\textsuperscript{780} The establishment of Title Registry is an important requirement to provide functional equivalence to the traditional bill of lading as a document of title. As mentioned in the Rulebook, the document of title in the BBL is the \textit{Key} in the form of an electronic message and, in the absence of this valid Key; the carrier is not bound to handover property of the goods on board.\textsuperscript{781}

To ensure the reliability of the system, the Core Messaging Platform and the Title Registry are both maintained by a Trusted Third Party which also acts as the arbitrator in case of any dispute. Parties are not allowed to dispute the validity of a document encrypted by the system or the details contained therein.\textsuperscript{782}

\textsuperscript{777} Sec 2 (1) and sec 3 (1), of the COGSA (UK) 1992 ‘provides the statutory framework to circumvent the problems of privity of contract to enable an assignee to stand in the shoes of the shipper and to sue the carrier for any damage to the goods as if he had all the rights of the original contracting party’.
\textsuperscript{778} Bolero Rulebook, rule 3.4.2.
\textsuperscript{779} ibid, rule 2.1.1(1).
\textsuperscript{780} Delmedico (n 11) 95–100.
\textsuperscript{781} Caplehorn (n 775) 423–441.
\textsuperscript{782} Bolero Rulebook, rule 3.1.3.
In the BBL, the intention is to promote the electronic bill of lading but still, the option to switch to a paper bill of lading is not ruled out. The Rulebook provides that a current Holder, Holder-to-order, Pledgee Holder or Bearer Holder can demand a paper bill of lading at any time before the goods have been delivered by the carrier at the destination.\textsuperscript{783} Similarly, such a paper bill of lading shall contain all the requisite information and terms and conditions set out in the original BBL Text message, the date of issuance of BBL and its paper form, etc.,\textsuperscript{784} however, by no reason can information contained in the encrypted form be challenged, and in case of any discrepancy between the information on the paper bill of lading issued under this clause and the original BBL, the information in the electronic form shall prevail.\textsuperscript{785}

Bolero Operations is still underway and despite all the odds there is an effort on the part of the association to bridge its legal and operational gaps to achieve its purpose. As the result of discussions about the reliability of the system, it was found that the Bolero Rules are more reliable and secure than efforts made earlier, such as CMI, etc.\textsuperscript{786} Countries such as Australia have adopted the Bolero Rules in their national jurisdiction,\textsuperscript{787} and many other laws, such as SCOnga (Sea-Carriage Documents Act 1996), are in close consonance with the Bolero Rulebook, hence it opens the possibility to adopt these rules in other national jurisdictions, too.\textsuperscript{788} At the end of 2012, the total volume of transactions through Bolero Operations was raised to 400,000 per month with 20 new go-live interactions in the international trade, with

\begin{thebibliography}{9}
\bibitem{783} ibid, rule 3.7.
\bibitem{784} ibid, rule 3.7.2.
\bibitem{785} ibid, rule 3.7.3.
\end{thebibliography}
the latest being the People's Republic of China. However, the future of the operation is yet to be defined. Like many other efforts made towards the digitisation of the bill of lading, this effort has also attracted criticism on different legal and practical grounds. These may be listed as follows:

i. A major criticism is on the uncertainty of the Bolero System, because the reaction of the courts is yet to be framed in an international scenario as still only English jurisdiction is invoked in some cases. It is still not sure whether the rules framed under the Bolero system will be upheld in other courts around the world or not, especially in the absence of acceptability of electronic data as a court record.

ii. The cost of joining the system is too high, which forces the smaller organisations and carriers to remain out of the system and their only option is to join as a group of organisations or in the form of a merger of firms to reduce the per organisation cost. The other alternative is to provide support to the smaller organisations through the sponsorship of an Enterprise or Premier Customer.

iii. The issue of the provision of securities for creditors under the system is not trusted by many and needs evaluation. Bolero operations lack openness and there is an absence of coherence with existing standards of personal property registries in most of the jurisdictions, which has resulted in the uncertainty of the banks about their respective rights and liabilities and this has hampered the approval of the process by the banks.

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790 Kamlang (n 733) 1–117.
791 McGowan (n 623) 68–78.
792 Dubovec (n 99) 452–453.
iv. In most of the developing countries, for the purpose of customs and other legal requirements, the BBL is still not a valid document. 793

v. Retaining the option to switch to or demand a paper bill of lading under the Bolero Rules indicates a hangover of the traditional bill of lading and this has affected the BBL’s popularity as it raises legal questions of applicability of the relevant conventions in relation to the Bolero Rules. 794

vi. Multiplication of contracts and the voluminous rules are a hindrance for traders looking for ease in developing an electronic mode to adopt this system. 795

vii. The system is complicated and the terms used are sometimes unconventional, which hampers understanding and discourages the users to join the Project. 796 At the same time, over the course of time, it is feared that this system will lose most of its smaller members as a result of the tendency towards monopolisation within the system. This tendency is evident from the categorisation of the membership which will force the members to enter into mergers in order to occupy the most privileged slots and therefore, cartelisation is on the cards. 797

4.7 Legal Attempts to Adopt Electronic Commerce at EU Levels:

Besides the business attempts to replicate the negotiability function of bill of lading in an electronic form, limited legal attempts were introduced in recent years to support the use of an electronic bill of lading. These attempts, which are not universal, are important in the sense that there are nations that attempted to legislate upon the electronic business in general. In the

795 Dubovec (n 99) 452–453; Wilson (n 793) 171.
796 ibid.
797 McGowan (n 623) 68–78.
following sections, these attempts are reviewed insofar as the foundation for the future recognition of electronic bill of lading in the EU has been covered.

4.7.1 **European Union Directives on Digital Signatures:**

Similar to national and international players, there are some regional players that have authority over the constituent countries to align their national legislations with the policy of the region to which they belong. One example of this arrangement is the European Union (EU).

In the recent past, there has been some momentum gained within these regions, especially in the EU. The E-signature Directive from the EU was issued in 1999, mandating its entire membership to implement that directive in two years’ time, that is to say, by July 2001. In this directive, member states were asked to enact legislation about the legal recognition of electronic signatures; liability technology neutrality and the defining scope of the acceptance of electronic signatures within their respective jurisdictions. The main postulates of this directive are as follows:

1. The EU Directive of 1999 defines the electronic signature for its adoption. However, it distinguishes between the simple electronic signature and an advance electronic signature for this purpose. A simple electronic signature is defined as, ‘*data in electronic form which are attached to or logically associated with other electronic data and which serve as method of authentication*’. At the same time, an advanced electronic signature means:

   “*an electronic signature which meets the following requirements:*
(a) it is uniquely linked to the signatory;

(b) it is capable of identifying the signatory;

(c) it is created using means that the signatory can maintain under his sole control;

(d) it is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable”.

The purpose of separating these individual forms of electronic signature into two parts was to cover the use of all modes of signing a document electronically. In case of simple electronic signatures, most employ un-encrypted modes of electronic signatures, whereas for the advanced electronic signature, the definition caters for the encrypted mode which is only achieved by using advanced technology.

2. The evidentiary value of simple electronic signatures was provided whereas the evidentiary value of the advanced signature was left to the member states to state their individual desire to equate the handwritten signature on paper documents with its electronic form as early as possible, for which it was required that such a signature must be created and certified by a secure-signature-creation device.

3. This directive was technology-neutral as it does not require any specific technology for the creation of an electronic signature, although it emphasises that secure and sophisticated technology is a pre-requisite for avoiding fraudulent attempts.

The impacts and scope of this directive are, however, different for each member state. Some of the members applied this directive as part of their national legislation and some have adopted it with amendments and with more neutrality of technology in their evidence laws. But in the
wider perspective, this directive and the resultant legislations in the respective member states is partial and ineffective as this neither affected the nature of the contract or their formation laws in these countries and still, the decision as to the evidentiary value of electronic signatures resides with the courts. This has watered down the affectivity of the directive on the whole.805

4.8 Organisational Initiatives on Electronic Commerce:

In addition to those of private parties and national governments, there were some other initiatives taken to promote electronic commerce by international organisations. Among these, one developed by the International Chamber of Commerce and the United Nations is worth discussing here, although these were not specifically designed for the promotion of the electronic bill of lading but for the promotion of electronic commerce in general which, in turn has a practical utility for the promotion of the electronic bill of lading too:

4.8.1 International Chamber of Commerce (ICC) on Electronic Commerce – E-100:

As earlier described, the International Chamber of Commerce (ICC) initiated a project of its own to promote electronic commercial transactions across the globe which has played a major part in dealing with the bill of lading as the major trade document in sea transportation. The E-100 project was started in 1995 by the ICC and covered the areas of electronic credits, e-terms and signatures, e-documents, e-transaction and trading, and incorporating legal and regulatory coverage in the project. However, in 1997, it was renamed as the Electronic Commerce Project (ECP) with three working groups assigned the task of completing the legal and

technical requirements needed to support the system. By 1999, the working groups were able to conclude the Uniform Rules on Electronic Trade and Settlement (URETS) as a set of rules that can be voluntarily incorporated into the agreement through reference by the parties on contracts concluded via electronic transaction, irrespective of the medium applied. However, these rules were not able to attract any backing from national legislations and remained a private part of the contract between the parties. This effort was applauded by the international business community in the first instance, but since then, there has been little adoption of these rules in relation to the issuing of a bill of lading or when seeking credits from the banks.

4.8.2 Uniform Rules on Electronic Trade and Settlement (URETS):

URETS, as a general set of rules, has twelve articles covering areas of contract formation, formation of electronic messages, evidentiary values and the processing and acknowledgement of the receipt of these electronic messages. In the first area, the parties were free to ‘waive any right(s) to contest the validity of contract affected by electronic message on the plea of its effectiveness by that particular means of communication’. These rules must be made compatible with the respective local legal framework of the parties to avoid conflict and the parties are required to inform the degree of conflict, if any, to the other party in the content or application of an Electronic Message for the necessary action. Conclusion of the contract or communication of acceptance of an offer to make its agreement binding between the parties through the use of electronic message shall be completed only once the message enters into the information system of the parties to whom this consent is sent in a form capable of being

807 ibid.
808 Uniform Rules on Electronic Trade and Settlement (URETS), 2000 (Issued by ICC), art 4.1.
809 ibid, art 4.2.
processed by that system. The system applied in the electronic transaction by the parties, in the agreed terms, is required to be authenticable and parties must be recognised by the system and the communication readable by the other party. The processing of the electronic message is required within a couple of days of receiving such a message, however; an acknowledgment is not required unless otherwise agreed by the parties. If acknowledgement is required, it must be conveyed by the end of the next trading day, but mere acknowledgement of the receipt of an electronic message does not mean the acknowledgment of the contents therein.

These rules however, were not very comprehensive and, despite being technology-neutral, left many areas open to debate by the later interpretations due to further advancements in technology. In the present age, the implementation of these rules will not be able to attract any useful purpose, but this effort is more or less applauded as the first ever attempt from a reputed international organisation to tackle the legal issues surrounding the electronic bill of lading, despite its inability to resolve uncertainty.

4.8.3 General Usage in International Digitally Ensured Commerce (GUIDEC):

In addition to URETS, the International Chamber of Commerce was also able to provide a general framework for electronic commerce in the form of the General Usage in International Digitally ensured commerce (GUIDEC) guidance, the product of a sub-working group under commission to the ICC. This project provided the definitions and functions of concepts such

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810 ibid, art 4.3.
811 ibid, art 5.1.
812 ibid, art 5.2.
813 ibid, art 6.1 & 6.2.
814 ibid.
as the public key, cryptography for digital signatures and the role of trusted third parties. However, on the technical side, this proposal was not able to recommend any cost-effective solution to its adoption and, additionally, on the issue of the legal authority of the electronic bill of lading, this effort also remained silent.

4.9 Summary of Chapter Four:

In this chapter, a review of the efforts made by the business community to keep the beneficial functions of a traditional bill of lading in electronic form has been made. It was observed that major and serious attempts were made by the business communities, although with the intention to promote their own business interests, and there was little effort that may be attributed to its promotion in the official legal circles at any level. Therefore, despite a lack of absolute intention on the part of any international organisation or regional body, the business community itself stepped forward to present some solution to the community. However, all the known efforts were made by the business concerns with the purpose of serving their own interests and such projects remained in isolation and hence could not present some universal solution acceptable to all the parties concerned. On the one hand, these efforts were devoid of any legal backing under international conventions or national adoption of rules framed by these projects and the enforceability of these rules was questioned in the courts’ decisions. On the other hand, the mistrust of the business community itself on these moves has resulted in the absence of a consolidated and workable replacement of the traditional bill of lading in an electronic form.

CHAPTER FIVE: CONSIDERATION OF DIFFERENT HURDLES AND ISSUES IN THE ACCEPTANCE OF AN ELECTRONIC BILL OF LADING IN PLACE OF ITS PAPER FORMAT

It has been observed that, in the recent past, the bill of lading was popular among the sea traders and sea merchants as a complete document fulfilling all the necessary requirements that are necessary for the transportation of goods by sea as compared to all other prevailing documents. In the advent of electronic protocols and with the increasing pace of present-day business transactions within all sectors, the electronic format of the bill of lading is still lacking in its acceptance by business stakeholders as well as in its authority as a legal document, as the paper format bill of lading used to be. In the coming paragraphs, the major hurdles to achieving equity in the electronic format of the document will be summarised so that these barriers may be discussed on their own merits and, furthermore, possible solutions may be discussed.

First of all, the need for an EDI-enabled mode of documentation must be reviewed. On the side of business, the major reason for the recent changes in maritime e-commerce is the introduction of containerization, which has acted as a catalyst for the need to provide an electronic mode of data transaction.\footnote{Faber (n 143) 232.} In present-day commerce, bulk transportation is carried out by sea in which one carrier vessel is employed for composite transactions. This strategy offered cost and time benefits to the business with less paperwork and more efficient data transmission across the globe to facilitate international business transactions.\footnote{Noor Ghani Osnin Sr, ‘EDI in Transportation’ (Report) (2003) Centre for Ocean Law and Policy Maritime Institute of Malaysia, 5–6.} In this competitive world, the pace of business along with the constant updating of the status of the
client, has initiated the need for a speedier mode of communication than that offered by the traditional paper-based documents. This need to match the pace of the business world is due to advancements in information technology and its related modes of communication and the solution for adapting to this change is also found in the use of that same information technology.\textsuperscript{819} This paradigm shift has made the traditional modes of business and documents redundant and has created a new species of documents of title.\textsuperscript{820} One of the user groups, Shipping Lines and Container Terminals (SMDG) based in London, developed standard formats that have been used in the shipping industry since 1987 which have been accepted as one of the most prevalent protocols in use in the present day.\textsuperscript{821} Similarly, UNCEFACT was introduced by the United Nations for the standardisation of formats for EDI in detailed processes and procedures that helped in the promotion of EDI use from global business perspectives.\textsuperscript{822} Similarly, there has been a definite impact made by the use of sea waybills, multimodal transportation documents and others, such as non-transferable bills that have found their place within the electronic mode without much need to address the legal requirements and which are easily adopted by the traders as well as the carriers. Traders have opted for the safe mode, which combines the speed of the new e-commerce practices with the older, reliable and slower methods of trade in the global environment.\textsuperscript{823}

Conversely, the use of technology has its own limitations. The uses of information technology and internet protocols have also attracted certain security aspects that must be addressed prior

\textsuperscript{819} Muthow (n 284).
\textsuperscript{820} Yiannopoulos (n 752) 13.
\textsuperscript{821} Osnin Sr (n 818) 5–6.
\textsuperscript{823} Schmitz (n 95).
to its successful adoption within the business sectors. The most important aspect, however, is legal recognition of the electronic bill of lading as a legal document and that the rights and liabilities arising out of this document can be enforced in the court of law. In the case of the traditional bill of lading, issues related to these legal requirements have already been discussed in previous chapters.

5.1 Legal Impediments in Recognition of Electronic Bill of Lading:

After this review of the requirements of an electronic bill of lading, legal impediments must also be reviewed. Legal complications of the adoption of an electronic bill of lading are manifold resulting from the application of a number of legal principles such as contract, bailment, assignment, negotiability and tort. However, for this work, there is need for a primary discussion on its very nature as a document in electronic format and the same demands immediate attention to explore equivalences between the paper bill of lading and the electronic bill of lading.

Similarly, the applications of a bill of lading are versatile. It is a contract document, a document of evidence of title, a document of evidence of affreightment and a document of record of rights. This is itself a reason for its legal complication which has hampered its

825 Dubovec (n 99) 440–443.
827 Pejovic, ‘Documents of Title in Carriage of Goods By Sea: Present Status and Possible Future Directions’ (n 6) 461–467.
replication in electronic format. This fact may be seen in case of the treatment of the bill of lading in the Hamburg Rules, 1978 as a paper bill and its characteristics.

5.2 Evidentiary Value of the Bill of Lading:

The consideration or requirement of a bill of lading as a paper-based document is more due to its evidentiary value. It is therefore imperative to discuss the evidentiary value of an electronic document within different judicial systems. The law in the different jurisdictions has already been aware of the influence of change in the application of technology and a number of legal instruments are recognising the authority of electronic documents/non-paper-bound documents as evidence, such as the UK Companies Act, 2006, where the Registrar is allowed to frame rules for admissibility of evidence including electronic evidence, whereas the Secretary of State is allowed to frame the rules for admissibility of evidence and admissibility of electronic communication under this Act.

In the case of its application in common law, most of the jurisdictions have taken a similar approach. In the common law applications, documents and computer records fall under the category of hearsay. There are exclusions from the principle of lex fori, such as hearsay, which provide an opportunity for similar treatment of electronic transactions to determine their evidentiary value on the determination of its status as a document. In the English system, the admissibility of electronic documents in evidence is governed subject to the conditions

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828 Sun and Roark (n 826) 5–6.
829 Gliniecki and Ogada (n 435) 124.
830 Giermann (n 89) 16–17.
832 Sections 71, 333 & 1115, Companies Act 2006 (UK).
834 I Walden, EDI and the Law (Blenheim Online Publishing 1989).
given under Section 13 of the Civil Evidence Act (UK) of 1995. These conditions broadly relate to the use of the computer containing the information and its production/reproduction of the information in the ordinary course of activities, leaving a number of discussion points as to the security of data held on the computers and the interpretation of the term “document” in regular use and in the ordinary course of business. In the case of Australia, the common law is often modified by introducing legislation to that effect. In Section 48 of the Evidence Act, 1955, litigants are allowed to present documents in support of their case as evidence, which includes electronic documents. Similarly, in the provinces of Queensland, South Australia and Victoria, the Civil Evidence Act, 1968 of the UK is adopted and its Section 5 hints upon the admissibility of this documentary evidence. Section 95 of the Queensland’s Evidence Act, 1977 allows admissibility of computer documents subject to conditions contained therein. For the admissibility of electronic documents as evidence, the US has also applied the exclusion under the Federal Rules of Evidence, 2011, in the scope of the rules relating to electronically stored information, in Rules 101 and 1001. It appears that the law in the US is more in favour of electronic/computer-based evidence than any other judicial system in common law countries.

In the civil law jurisdiction countries, in the absence of any adversarial system of evidence, all material evidences are admissible to establish the material truth in a case before the court for adjudication. Therefore, admissibility of computer-based evidence is not an issue and hence an

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835 Section 13, The Civil Evidence Act 1995 (UK).
837 Section 48, Evidence Act 1995, Commonwealth and South Wales, Australia.
838 Section 5, Civil Evidence Act 1968, UK.
839 Section 95, Evidence Act 1977 (Queensland, Australia).
electronic bill of lading may be recognised and accepted as a document with evidentiary value in the civil law judicial systems.841

In the business efforts to introduce in the previous chapter, introduction of central registry and the application of pins / authorised key as introduce to ensure the authenticity of the database on the one hand and to establish any change in a particular document by the authorised person only. The software applied in SeaDocs had the capacity to generate alerts before any change in the data to the original owner and upon verification code, the authentication was possible. The system thus generates log for the activity that can be viewed at some later stage for verification purposes too.842

Similarly, in case of private key introduced in CMI serves the purpose of authentication of record as well as its changes. Like SeaDocs, the system generated log can be presented in the court of law as the proof of a particular transaction by an authorised person or otherwise, subject to admissibility of such evidence within that jurisdiction as discussed above.843

TeleCard presents the data through the internet transaction and the data message including orders online as the proof of written communication secured by digital signatures. This option has introduced an advance option than earlier technical solution to equate legal requirements.844

5.3 Authentication of Document and Requirement of Signature:

The other legal requirement for the admission of a document as proof of an agreement between the parties in the court of law is that it must be authenticated by the parties, in the

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842 Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 1–11.
843 Todd, ‘Dematerialisation of Shipping Documents’ (n 623).
844 Dubovec (n 99) 437–466.
normal course of working through signing it by the parties. The signatures are indicative of the acceptance by the parties of the rights and liabilities mentioned in that document and in case of any discrepancy, this document will provide the basis for adjudication to the court of law. Signature may be the “name of a person (or significant mark), “written by his hand put at the end of a letter, a contract or any document whatever in order to certify it, to confirm it, to make it valid.” Likewise, United Nations Convention on International Bill of Exchange and International Promissory Notes, 1988 provides that signature ‘means hand written signatures, its fax or an equivalent authentication affected by other means’. Signatures are required to be inked. In the customary world of legal transactions, a signature, besides authenticating the document, is a carrier of some other functions related to it. It identifies the source of the document, confirms the information and provides proof of the responsibilities of the parties in case of future dispute in the court of law. Authentication of the document through an inked signature over a faxed document or the fax of signed document is also disputed in the legal corridors. In the case of Twynam Pastoral Co Pty Ltd v Anburn Pty Ltd, it was considered that a fax does not fulfil the requirements of both signature and writing, but in NM Superannuation Pty Ltd v Baker and Others, faxed signatures were disregarded as representations of the original signature in ink and declared inadequate while considering the written character of the document to be in accordance with law. In this regard, in the case of

846 Oxford English Dictionary. 1892.
849 Electronic Rentals Pty Ltd v Anderson (1971) 124 CLR 27.
851 Twynam Pastoral Co Pty Ltd v Anburn Pty Ltd (1989) 6 BPR 13,448; see also Brinkibon Ltd v Stahag Stahl und Stahlwarenhandelsgesellschaft [1982] 2 WLR 264.
*NM Superannuation Pty Ltd v Baker and Others*, which is an English case, it was suggested by the court that a faxed signature was not the original signature and so might not be adequate where a signature was required. In this case the issue did not require a decision as there was no signature required in the matter at issue.\(^8\)\(^5\)\(^3\) Similarly, the debate on the acceptability of electronic signature is still on.

Unlike traditional documents, these transactions involving international trade require the transfer of documents with the shipment in the form of a commercial invoice or proof of the quantity and quality of the shipment and hence authentication is often emphasised.\(^8\)\(^5\)\(^4\) The bill of lading in the customary world is a document that provides the rights and liabilities of the parties in an arrangement of the carriage of goods by sea. Moreover, in the applicable international rules to date, this requirement still exists, such as in the Hamburg Rules, that require, for signature ‘*in writing, printed in facsimile, perforated, stamped, in symbols, or made by any other mechanical or electronic means, if not inconsistent with the law of the country where the bill of lading is issued*’.\(^8\)\(^5\)\(^5\) however, these rules are not universally acceptable and hence this reference is subjective. This establishes the fact that those particular goods described in the document have been loaded on the ship with the conditions mentioned therein and now it is the responsibility of the carrier to deliver the same to the agreed destination in the manner agreed upon without any material change in the condition of goods.\(^8\)\(^5\)\(^6\) This document is authenticated once it has been signed by all of the parties or their representatives.

\(^8\)\(^5\)\(^3\) ibid.
\(^8\)\(^5\)\(^4\) ibid, recommendation 14.
\(^8\)\(^5\)\(^5\) Hamburg Rules, art 14, rule 3.
\(^8\)\(^5\)\(^6\) ibid, art 14 (3).
Attempts on the part of the international community have been made to replace the regime of ink signatures with digital signatures in line with the requirements of the present-day commercial world. The issue of definition of electronic signature is an open debate and it cannot be confined to any particular technique or software. It may take the form of electronic signs, digital images of inked signature, or biometric scans of the iris or finger prints.\textsuperscript{857} Although the model law is yet to be adopted as an internationally-accepted law, the definition of electronic signatures under the UNCITRAL Model Law on Electronic Commerce may be presented as reference. This law was deliberated upon to come to some accepted rules for electronic commerce and attempted to reach consensus on the validity of electronic documents and the authentication by electronic signature based on a technology-neutral approach with a focus on functional equivalency.\textsuperscript{858} Hence this law was focused on equating the legal functions of ink signatures in an electronic form. It provides that an electronic signature is ‘\textit{data in electronic form in, affixed to or logically associated with, a data message, which may be used to identify the signatory in relation to the data message and to indicate the signatory’s approval of the information contained in the data message}’.\textsuperscript{859} Article 6 of this Model Law also provides for the essentials required to make the electronic signature acceptable for the purpose of this bill of lading where the method of providing the security of the data is ensured.\textsuperscript{860} It may also be pointed out again that this Model law is still not accepted by the community of nations and hence is devoid of any force of law in itself.

\textsuperscript{859} UNCITRAL Model Law on Electronic Commerce, 2000, art 2.
\textsuperscript{860} ibid, art 6 & 7.
On the part of individual regions and countries, numerous efforts have been made to acknowledge electronic signatures in the commercial world. EU directives are the legal instruments to convey the will of the EU parliament to its member countries. The preamble of the Electronic Signature Directives provides that “the purpose of this Directive is to facilitate the use of electronic signatures and to contribute to their legal recognition”. This Directive has impacted upon the efforts for the legal recognition of electronic signatures as well as advanced electronic signatures while adopting a technologically-neutral approach, as provided in the UNICITRAL Model Law discussed above. However, its adoption process has remained slow in terms of its voluntary adoption clause and permission to the member states to provide explanation for their non-compliance of the directive is not enforceable at the national level.

In the case of UK national laws, the Electronic Communications Acts, 2000 have implemented the above said EU directive to the extent of the Electronic Signature only and have provided for the acceptability of electronic signature in the court of law with the same functionalities of traditional/ink signatures.

The introduction of the Sea Carriage Document Act, 1996 in the UK, subsequently adopted by Australia, has ensured the acceptance of a digital signature for authentication as opposed to the traditional legal requirement. This Act has broadened the scope of word “signed” to include

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864 Section 7(1) and (2) of the Electronic Communications Act 2000.
any other mode of authentication that constitutes signing under this law as this Act recognises electronic documents.\textsuperscript{865}

The USA has provided legal cover to electronic signatures with the adoption of the Model Law; vide its Uniform Electronic Transactions Act of 1999,\textsuperscript{866} as well as the ESIGN Act of 2000,\textsuperscript{867} subject to the security of the data. The first Act was adopted in 22 US states as the result of the National Conference of Commissioners of Uniform State Laws in 1999,\textsuperscript{868} whereas the other was a federal Act enacted to pre-empt state law.\textsuperscript{869} The ESIGN Act of 2000 has its value in its clarification of legal status of e-signatures, e-contracts and e-records by stating that these may not be denied legal validity, enforceability or effect merely on the grounds of its electronic form or electronic signature or electronic record being used.\textsuperscript{870} But it neither forces the legal status of e-signatures nor discusses the liability for non-enforceability. It keeps these aspects open by mere suggesting; hence it is a weak law.\textsuperscript{871} The aspect of the security of data has also been deliberated upon. Different methods have been suggested, such as the use of PIN codes, more complex systems of public key cryptography, digital signatures, encryption techniques and the scanning of the iris for identification and authentication.\textsuperscript{872} Furthermore, this Act does not address the role of electronic signatures specifically and is general in nature.

\textsuperscript{865} Sea Carriage Documents Act 1996 (Queensland, Australia), s 4(4).
\textsuperscript{866} Uniform Electronic Transactions Act, 1999.
\textsuperscript{867} Electronic Signatures in Global and National Commerce Act (E-SIGN Act) Act of 2000.
\textsuperscript{870} ibid.
\textsuperscript{871} ibid.
In Asian counties, too, the reaction to the legal status of the electronic signature is mixed. The Electronic Transaction Ordinance in Hong Kong was introduced to provide a clear legal framework on the use of electronic signatures. However, it remains limited to secured digital signatures only, while ignoring the other forms and hence is limited in its scope and was based on a voluntary basis. Similarly, Malaysia’s Digital Signature Act of 1998 provides for the recognition of digital signatures which provides ease to the business community to rely on e-papers, but it is limited in that it is only available under license. The security of the signature is obtained through Public Key Infrastructure. Both laws discussed above are, however, restricted and are silent about their application in contracts of transportation and the carriage of goods. Furthermore, both of these laws are still far from the spirit of the Model Law. However, in contrast, Singapore’s Electronic Transaction Act of 2010 and the Indian Information Technology Act, 2000 have adopted the Model Law and, as such, have since been in line with the aspirations of the international community and are applicable in the case of an electronic bill of lading on the issues relating to legal Recognition of Electronic Document and legal Recognition of Digital Signatures.

There are some private initiatives of this recognition, too. The American Bar Association has also proposed a set of guiding principles for the recognition of digital signatures across the

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873 Electronic Transactions Ordinance 2000 (Hong Kong).
875 Malaysia’s Digital Signature Act of 1998.
country. The International Chamber of Commerce (ICC), in its working party report, ‘General Usage in International Digitally Ensured Commerce (GUIDEC)’, has defined the aim of electronic commerce as “to draw together the key elements involved in electronic commerce, to serve as an indicator of terms and an exposition of the general background to the issue”.

This discussion is clearly indicative of the fact that the law still lags far behind in the requirements of the business community within all international, regional and national levels for the adoption and acceptance of an electronic signature equivalent to its traditional counterpart. The acceptance of an electronic bill of lading will not be possible unless all the national and international jurisdictions are agreed and are in line with the concept of electronic signatures in its broader terms and when the courts are ready to recognise electronically-signed documents and contracts in evidence.

However, at the same time, this part may further be substantiated with the efforts of the business community to overcome this hurdle. Generally speaking in EDI signature or other authentication can be done in many ways like the use of secret digital codes / PIN numbers, by using public keys cryptography, using digital signature and / or by using a specific computer software such as ‘PenOp’.

Authentication of document and reliability was secured in Bolero by introducing third parties like the Core Messaging Platform and the Title Registry and the appointment of arbitrators in

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881 Livermore and Euarjai, ‘Electronic Bills of Lading and Functional Equivalence’ (n 593).
case of dispute in case of dispute over the validity and authentication of legal document.\textsuperscript{882} The Bolero does not provides for digital signature or inked signature on the paper document, but recognises the use of encrypted public key by an authorised person as validation of transaction.\textsuperscript{883} CMI Rules too, rely on the private key as defined in Rule 8 of the CMI Rules for both authentication and signature on the document by a concerned party.\textsuperscript{884}

In the most recent time, at national and official level, as an operational model, KTNET is a document exchange service where the main clients are trading companies including government in some sectors. In order to facilitate these services, J2EE Architecture and 4GL (Generation Language) and Text UI (User Interface) have been applied with a variety of Messaging Protocols, such as FTP, HTTP, SMTP and JMS. It promotes the EDI function by promoting the KTNET Data base or the Trade Document Repository (TDR) that was initiated in 2007 to support electronic document transfer through a customer-friendly web-based applications ASP (Application Server Protocol).\textsuperscript{885} This TDR is the key to the future role of the electronic bill of lading as its platform supports functions such as the creation, distribution, storage and disposal of electronic documents supported by such South Korean National legislation as the e-Trade Facilitation Act, 2006. This law provided authenticity to the digital documents and signatures for admission in the court of law and changed the legal requirement from that of possession of the paper record to one of proof of exclusive control of the electronic record.\textsuperscript{886}

\textsuperscript{882} Bolero Rulebook, rule 3.1.3.
\textsuperscript{883} ibid.
\textsuperscript{884} CMI Rules for Electronic Bill of Lading, 1990, rule 8.
5.4 Negotiability of Electronic Bill of Lading:

A major characteristic for the popularity of the bill of lading as opposed to sea waybills and other such instruments is its negotiability, although these can be drawn up as non-negotiable. Negotiable instruments are issued in order. The negotiability of the bill of lading may be carried out by mere endorsement to a third person, both in full and in blank. Negotiability is a function of the physical possession of the bill of lading where the goods in transit are inaccessible and where physical possession is described as “the cornerstone to transmissibility of rights and compelling delivery by the carrier of the named goods”. Negotiability of a document is important because of its two major characteristics. One, the rights and liabilities mentioned in a negotiable document are intact until the time of delivery of goods at the destination and during this period these rights may be transferred to a third person by mere endorsement in ink or by in blank by delivering it to a third person. Possession of a bill constitutes legal possession unless otherwise proven. Second, the holder of a negotiable document for value in good faith holds it well and acquires its complete title as opposed to all others, even if the transferee had any defect in his title or had no title at all. This negotiability in the case of the bill of lading ensures the marketability of goods in transit while they are still on the high seas. This flexibility facilitated the documentary sale of goods in transit.

888 UNCTAD (1971) (n 499).
890 Cowen (n 322).
891 Schmitthoff, Schmitthoff’s Export Trade: The Law and Practice of International Trade (n 149) 275–277.
893 Tettborn (n 335).
physical existence of the bill and these rights exist only in electronic form. The form of the bill in itself is a hindrance in the negotiability function of the electronic bill of lading as it cannot be presented at the time of the delivery to the carrier in hard copy format, which is distinct from the originality of the document and its authentication by the way of signature. Despite all the other efforts made, as discussed above, towards the acceptance of electronic bill of lading as a valid document through legal interventions, there are gaps in clearing the way to make it as accepted as its counterpart of a paper bill of lading. It is often argued that it is the information and not the document which is important and that can be communicated even in the electronic form subject to the security of the same. However, in most of the discussions on this issue, it is found that the negotiability of the electronic bill of lading cannot be secured until such time as confidence in the medium is achieved. The mirror of this confidence lies perhaps not in the legal solution but in the financial market, and it is the banks which defines acceptable security in the medium of an electronic document as collateral.

While analysing the business efforts discussed in previous chapter read with the legal requirements discussed above, it appears that many of the initiators of those business projects were aware about the importance of negotiability function in a bill of lading. In case of CMI Rules, the Private Key is assigned to the holder of the bill to secure the contents of the document as well as facilitate him to sell his goods while in transit by transferring the title to the new holder using the key. The shipper, in response, sends a confirmation message to the

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894 Ash (n 889).
896 Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 284; and Chandler (n 662) 466-451.
898 Dubovec (n 99) 437-466.
party under title after negotiation to validate his claim to enable the collection of the goods at the destination.\textsuperscript{899} The system will generate a new private key for the new holder while the public key remains the same.\textsuperscript{900}

In Bolero project, the change of ownership through negotiability is recognised that further provides for the rights of new holder against the shipper and the carrier. The holder remits the attornment message to the central registry whereupon the identity of the new holder is to be determined from the key provided with the original paper bill of lading provided to the registry from the new holder.\textsuperscript{901} The corresponding changes will result in novation of the existing contract between the parties and will bind all the parties under novated contract.\textsuperscript{902} Security of the transaction and authenticity of the document including novation is the responsibility of third party i.e. Core Messaging Platform.\textsuperscript{903}

The @GlobalTrade System provides for revocation of negotiability option only upon the acceptance of documents by a bank for issuance of a letter of credit against the goods in transit.\textsuperscript{904} Otherwise, this system fully recognises the rights and liabilities of parties in negotiability transactions. The system requires that the consignee willing to sell his goods in transit is required to intimate carrier, performing the functions of registry too, with the new identification and the change in ownership will be recorded.\textsuperscript{905} Similar was the case with Mandate which was launched as banking solution for negotiable documents in electronic format and later on was applied in bill of lading transaction on basis of Public-Private Key pair

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{899} CMI Rules for Electronic Bill of Lading, 1990, rule 8.
\item \textsuperscript{900} ibid.
\item \textsuperscript{901} Schaal (n 769).
\item \textsuperscript{902} Clarke, ‘A Black Letter Lawyer Looks at Bolero’ (n 772) 365; also read Laryea, ‘Bolero Electronic Trade System – An Australian Perspective’ (n 737) 11.
\item \textsuperscript{903} Caplehorn (n 775) 423-441.
\item \textsuperscript{904} Richardson, \textit{The Merchants Guide} (n 303).
\item \textsuperscript{905} Laryea, ‘Paperless Shipping Documents: An Australian Perspective’ (n 369) 1–12.
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generation to support the negotiability function.\textsuperscript{906} In TradeCard, the system provides a step further and offers online negotiation facility between the parties, and record the transaction as electronic agreement electronically signed between the parties on the system.\textsuperscript{907}

### 5.5 Electronic Bill of lading and its Contractual Aspects:

In market practice, there are few written contracts on the transportation of goods and often the terms and conditions of transportation are mentioned on the document of title exhibiting other details about the goods shipped on the vessel.\textsuperscript{908} A bill of lading in a commercial transaction is considered as the mere receipt of the contract rather than the contract itself which implies that, in case of any dispute over the rights and liabilities between parties to a contract of affreightment, the terms of charter are superior to the bill of lading.\textsuperscript{909} The common aspect in all these instances is the note containing the terms and conditions. The use of a bill of lading is, therefore, considered as being restricted to the evidential purposes regarding the actual terms and conditions in the contract or at the time of receiving of goods at the port of destination, the details of the goods on board etc.,\textsuperscript{910} however, for the receiving of the goods mentioned in the bill of lading, the presentation of the original bill of lading is considered to be a universally accepted rule.\textsuperscript{911} Furthermore, the actual contract between shipper and the carrier is considered

\textsuperscript{906} ibid.
\textsuperscript{907} Dubovec (n 99) 437–466.
\textsuperscript{908} Treitel et al (n 47) 23–89.
\textsuperscript{910} This assertion is made from the reading of Hague-Visby Rules 1968, art III-4, e.g. to prove that goods of a certain description were received for carriage or loaded on a vessel: Hamburg Rules, art 16–3 (a); Rotterdam Rules, art 41.
\textsuperscript{911} The Rafaela S, [2005] 1 Lloyd’s Rep 347 for common law countries and for the United States (see art 80104 and 80110 (a) Pomerene Bills of Lading Act, 1916) had paved the way for its acceptability in the major terms.
on the basis of an offer and acceptance that is made much prior to the drafting of the bill of lading itself.\textsuperscript{912}

The importance of this document lies much more in its general understanding and may be traced in legal precedents. In English law, it performs three distinct functions which are essential to understand the possibility of its replication in electronic form. Two of these functions are related to its contractual roles, while the other is its negotiability, discussed separately in this thesis. The contractual roles depend upon the relationship of the parties involved in the transaction. If the parties involved are the original shipper and the carrier, the bill of lading amounts to mere evidence of the contract. However, if the parties involved in the relationship are the carrier and subsequent endorsee, the bill is considered to be the contract in itself.\textsuperscript{913} This situation arises out of reading different enactments in this regard. Section 5(1) of the Carriage of Goods Act, 1992,\textsuperscript{914} defines the contract of carriage of goods as, \textit{“the contract contained in or evidenced by the bill of lading”} and is subsequently interpreted accordingly by jurists in both senses.\textsuperscript{915} Similarly, a bill of lading has also been described as a contract, a receipt and a document of title.\textsuperscript{916} Both of these views are discussed in some leading cases under English law. In the case of \textit{Ardennes (Cargo Owners) v Ardennes (owners)}, it was held that in the case of a diversion of route, even when established from verbal evidence, this evidence is admissible in court over and above the bill of lading as the bill is nothing more than evidence of the contract between the original shipper and carrier. In this instance, the

\textsuperscript{912} Tetley, \textit{‘The Hamburg Rules – Good, Bad and Indifferent’} (n 468) 5.
\textsuperscript{914} Section 5 (1), The Carriage of Goods Act, 1992, UK.
\textsuperscript{916} Tetley, \textit{‘The Hamburg Rules – Good, Bad and Indifferent’} (n 468) 5–7.
verbal evidence was allowed to prove the case. Conversely, in the case of *Leduc & Co v Ward*, although it holds a minority view, when the parties are the carrier and the endorsee, the bill acts as the contract itself as the parties cannot change the situation against what is written in the bill of lading and hence the admissibility of verbal evidence is not allowed to prove any deviation from the terms and conditions mentioned in the bill of lading, and thus it is conclusive.

As discussed above, in the major view about bill of lading, is that it is evidence of contract, but in the case of the transfer of rights through endorsement, it poses similar questions as to the contract formation. There is no rule governing contract formation through EDI. In the traditional contract, rules for offer, acceptance and legal consideration are established. One aspect of confusion in the conclusion of contract is the completion of acceptance in EDI mode in the case where a “new” contract is raised between the carrier and the new holder. The mailbox rule provides that acceptance is completed by the acceptor as soon as it is out of control of the acceptor or by putting the acceptance letter into the mailbox. In the absence of any such rule, the question arises as to whether the completion of the acceptance of offer is considered as a negotiable document. While discussing this aspect, writers have identified the application of this rule in *Entores v Far East Corporation*, where it was held that the mailbox rule is not applicable to EDI contracts due to the instantaneous nature of communication acceptance; rather, such EDI contracts will be concluded upon the actual

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917 *Ardennes (Cargo Owners) v Ardennes (owners)* [1951] (n 243); the view is also confirmed in one of the recent cases such as *Cho Yang Shipping Co Ltd v Coral (UK) Ltd* [1997] 2 Lloyd’s rep 641.
918 *Leduc & Co v Ward* (n 231).
920 *Entores v Far East Corporation*, (1955) 2 QB 327.
communication of the offer by the offerer. However, this cannot be considered as universally applicable case law as there is also the possibility non-checking of the mailbox by the acceptor, thus, in spite of instant delivery of e-mail, this issue has also been raised. Furthermore, absence of any case law in the other jurisdictions on the same point restricts its utility, too.

In light of this discussion, it appears that, to the extent of English jurisdiction, a bill of lading has a dual contractual function according to the parties involved. Hence, to the extent of Common Law countries, an electronic bill of lading must be able to exhibit these characteristics in its very format. The discussion on the acceptability of the majority or minority view is beyond the premise of this thesis. However, the important thing to consider is the transformation of these functions to the electronic form as replicated in the Bolero bill of lading that acknowledges novation of contract of carriage due to endorsement. Furthermore, the use of technology has its own complications. The question as to the securing of liability in case of a failure in sending the message due to an error or system breakdown is still open and requires debate. No legislation or case law has covered this aspect with certainty.

5.6 Bailment Function of the Bill of Lading:

Another function that a bill of lading performs is the bailment function. It has been observed that the bill of lading has evolved from a bailment contract to its present-day form hence its primary function is the contract of bailment between the carrier and shipper. The bill of lading, which is a document of title on the one hand, also includes details about the quantity and

922 Brinkibon Ltd v Stahag Stahl GmbH (1983) 2 AC 34.
923 The Bolero Rule Book.
924 Low (n 711) 202.
925 UNCTAD (n 21) 23.
conditions of the goods shipped on the vessel. The carrier, as bailee, is responsible for handing
over these goods to the holder of the bill of lading or the endorsee without any material breach
in condition and to the quantity of the goods at destination.\textsuperscript{926} In Article IV of the Hague-
Visby Rules, the conditions of this bailment are provided in the details, and subject to these, a
bailee is responsible for indemnifying the bailer for any loss that occurs.\textsuperscript{927} For the satisfaction
of this function, a negotiable bill of lading provides three basic statements for the
determination of any dispute among shipper, consignee and all subsequent holders in due
course, and these are:\textsuperscript{928}

i. The statement of accuracy of loading tally of the goods shipped;

ii. Statement towards clean appearance of goods shipped as to the conditions; and

iii. Correctness of the date of shipping, the time of journey and the date of arrival at the
port of destination.

The position as to the bailment, however, is not confined to the bailee in the first instance.
There are situations where there are transhipments with or without the prior consent of the
shipper. In absence of any such consent, the shipper or the holder of the bill in due course has
a legal claim for the loss of any goods due to the negligence of the head bailee by assigning
his task to someone else.\textsuperscript{929} Even where there is consent given, the reliance shall be made on
the terms of the original bill for the determination of responsibilities unless the shipper has
allowed the sub-bailment of the goods on terms of the head bailee’s choice.\textsuperscript{930}

\begin{itemize}
\item \textsuperscript{926} ibid.
\item \textsuperscript{927} Hague-Visby Rules 1968, art IV, rule 2.
\item \textsuperscript{928} ibid, read with UNCTAD (n 21) 23.
\item \textsuperscript{929} Simon Baughen, \textit{Shipping Law} (3\textsuperscript{rd} edn Routledge 2004) 53–55.
\item \textsuperscript{930} \textit{New Zealand Shipping Co Ltd v AM Pioneer Container} [1994] 2 AC 324 (n 110).
\end{itemize}
Among the business projects discussed above, Bolero project was the one that has deliberated upon this aspect carefully and designed the rights and liabilities of a carrier as bailee, responsible to deliver the goods at the destination to the right person. As the result of novation and negotiation, the duties of the bailee / carrier would be changed and therefore, Bolero Operations requires due information with the carrier before making him responsible and therefore, the message from the registry is designed to be replicated to the carrier for information and further action, but does not bind the carrier to change the destination or port of delivery.

5.7 Security against Fraud:

An electronic system designed to support electronic transactions of any sort, including the bill of lading, must be secure against all chances of fraud. Instances of fraud that might occur in paper transactions are known and limited and, more importantly, it is time-consuming to commit fraud. In the case of electronic fraud, however, a level of sophistication has been rapidly achieved in the recent past. In most of the proposed electronic solutions, such as CMI, SeaDocs, etc., the use of a private key is presented as mode to transmit the identity of the new holder of the bill of lading between a shipper/endorser from land and the carrier at sea. However, the protocols in place to protect this transaction and the private key are not very secure and they can be intercepted and used by a third person. In CMI, the private key is proposed to be encrypted and only parties to the transaction should have access to the private and public keys for decryption. In the closed transaction between two parties, this system is ideal, but for the purposes of endorsement and during the course of transactions relating to the

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931 Schaal (n 769).
932 Ibid.
sale of the goods on ship, these keys are required to be made public, which opens up the possibility of fraud in the system, too. Improvements in this system have been proposed in the past, and, in future, with the improvements in the online transaction system, it is hoped that this security may be enhanced though a fully fool-proof system so that any attempts at fraud will not succeed.

5.8 Summary of Chapter Five:

As the result of this exploration of the bill of lading in the past, the present and its future perspectives, it has been found that the hurdles in the way of the adoption of the electronic bill of lading are both genuine and those that are superimposed. There are numerous impediments, mostly legal, preventing the full acceptance of the electronic bill of lading as a successor to the paper bill of lading while incorporating all the characteristics that have been discussed. It was found that the electronic bill of lading is yet to be recognised in legal parlance as a valid document hence its acceptability in the court of law as valid evidence of a contract as well as proof of existence of some other contract is hindered. Its validity is disputed in the court of law within different jurisdictions due to the absence of a signature in ink and legislative intervention is required to grant validity with conditions as to the security of the document in electronic form. Similarly, its value as a contract and proof of contact, its feature as a document of bailment, and its negotiability still require legislative and judicial approval, as well as procedural uniformity for its application around the globe. In this regard, the major role of responsibility lies with the legislatures in the different countries involved in the trade. Without the development of well-written and elaborate legislative pieces of work at both

934 Todd, ‘Dematerialisation of Shipping Documents’ (n 623).
935 McGowan (n 623) 68–78.
international and national levels, there are minimal chances for its acceptability. Although there is a role for the courts in this process through their interpretations of these legislations, because of the constraints of each area of jurisdiction, their contribution is limited. Similarly, efforts made in the business world have proven futile despite having no official and legal backing from the states concerned.

Ultimately, it may be framed that, in this case, in order for the bill of lading to reclaim its glorious position among trade documents, collaborative, coordinated and well-directed efforts are required from all the parties concerned, that is to say, the international business community, international organisations such as the UN, EU and ICC, and national governments, including the judiciary that makes up part of these national governments. Furthermore, there is a real need to ensure that the technological aspects support the legal framework and an urgent need for all stakeholders to agree on one common reality.
6.1 Findings:

The topic of this research is important enough and broad enough to cover many other related concepts. During this research work, literature related to the most basic aspects of the bill of lading, such as its definition, rise and scope, to the more technical aspects, such as the acceptability of the electronic record in sea trade transactions, has been reviewed. At the same time, debate and discussion on the national legal position on the electronic bill of lading, private rules and international regimes have been covered, along with their strengths and weaknesses. Furthermore, a thorough review of all known business efforts made to promote the introduction of an electronic bill of lading has also been made. This research work has also explored the need for the electronic bill of lading in the present age and the hurdles that are hampering the acceptance of electronic bill of lading in place of paper bill of lading despite the universal acceptance of the electronic sea waybill. In the introductory chapter of this thesis, the research objectives were framed to help structure the discussion within chapters and to provide an overview of the research focus. Now that thorough discussions on the most of these objectives have been made, it is appropriate to review the findings. In this chapter, based on the previous discussion in the thesis, these findings are presented.

6.1.1 Finding One: need for a bill of lading in the present international trade:

In order to achieve first objective set in the introductory chapter, the historical perspective of the bill of lading has been traced from the earliest possible time and its evolution from time to time has been analysed. This evaluation has helped in ascertaining the purpose and role, this
traditional document played in the past. This further led to the exploration of position of bill of lading in present day maritime trade. Among the features of the bill of lading, judicial interpretation of the contractual obligation characteristics of this document helped in the development of the supremacy of this document. The discussion on the characteristics of traditional bill of lading further helped in understanding the functional requirements for an effective bill of lading. The overall findings in this process are summarised in proceeding paragraphs.

In the first instance, in chapter one, the historical perspective and need of the bill of lading in the present-day commercial world was discussed. The review of this aspect indicates that the bill of lading is a historical trade document upon which the traders have instilled their confidence for centuries. This document, which has roots in age-old traditions, later gained great legal force behind its use. This trade document has its origins as the receipt of the shipper, who accompanied his goods aboard the ship, and, most of the time, this simple function was upheld in the courts and was subsequently accepted as the proof of the contract between the shipper and the carrier parties. This historical review provides the traces of the evolutionary nature of the bill of lading and the significance of its past functions that are still present, even today.

One important factor that has attracted attention is the universality of the use of the bill of lading in the trade, and it was found that this document is in use invariably among all nations involved in sea trade, either as the shipping nations or the shipper nations and this fact is evident from the individual pieces of legislation regarding the carriage of goods by sea at

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936 Treitel, ‘Bill of lading and third parties’ (n 17).
national and international level.\textsuperscript{937} However, the factors that were found to contribute to the active promotion and use of this trade document, unlike other similar documents, are encompassed in its unique features. It was found that the bill of lading is not the only document that is prevalent in the sea trade among nations and their traders and that the closest related document is the sea waybill, which offers many services akin to the historical or straight bill of lading. These similarities are its function as receipt, identification of the goods on board and the relevant parties. However, the sea waybill remains silent about the transferability of title or negotiability function that has often been quoted as a point of supremacy of the bill of lading over all other contemporary sea trade documents. Furthermore, these two documents, despite their similarities, were never covered under the same set of national and international rules due to the difference in scope related to the negotiability function and the constructive possession function of the bill of lading.\textsuperscript{938}

In the second chapter, this aspect was discussed in detail and it was observed that the bill of lading was viewed differently by the courts and jurists from the contractual nature of the document itself to the mere proof of contractual obligation between the parties, both in the USA and the UK. This debate and the views presented earlier had placed much force behind the negotiability of the document.\textsuperscript{939} The interpretation that a bill of lading is a contract between the shipper and the carrier opened the viability of more functions being attributed to this document. However, the key function as to the negotiability and endorsement of the bill of lading during the transit of the ship gained focus. This became the legal document that has

\textsuperscript{937} Bill of Lading Act, 1855 repealed and presently the Carriage of Goods by Sea Act, 1992 in UK as well as corresponding COGSA (USA), 1999 Act in the USA and European Countries are evidence of popularity of bill of lading. On the international level, the Hague-Visby Rules, Hamburg Rules and Rotterdam Rules have been discussed in detailed in the relevant chapter above.

\textsuperscript{938} Detailed discussion on this point may be seen in the Chapter One of this paper.

\textsuperscript{939} ibid.
more or less the same endorsement characteristics as the negotiable banking documents and hence it became the most secure way to trade goods that are in transit. For the endorsee, this leads to the right to file suit for specific performance in the name of the endorsee rather than inclusion of the original party to the contract\textsuperscript{940} without absolving the original party to the contract from his primary duty to take care and to inform about the dangerous nature of the goods at the time of shipment. Furthermore, the carrier was held entitled to sue the original shipper on the basis of the shipper liability principle even if the bill of lading was endorsed to a third party.\textsuperscript{941}

The other major factors identified as being responsible for the rise of the bill of lading is the confidence instilled in it by the financial/banking sector at that time. The original bill of lading was considered as security of the goods to provide collateral for the issuance of credit documents, such as the letter of credit. This function was promoted with the development of the banking sector and the need of credit facilities for the international transactions, particularly in the shipment of bulk cargo. In the initial stages, the banks accepted drafts drawn against the goods where the bill of lading covers the transaction in the first place and subsequently, drafts drawn on the buyer of goods are also accepted where the bill of lading covers the transaction and is attached as security to the note or credit of the bill. The role of the court in the development of this function was found to be paramount, where the right of the owner of the bill of lading to pledge his right under the bill as collateral security of the debts and the pledging of bill of lading are considered as being equivalent to the pledging of

\textsuperscript{940} The Giannis NK (n 266) 171.
\textsuperscript{941} ibid, 181.
the goods, although it does not give the pledgee title over the property that will remain with the pledger, which establishes the principle of constructive possession.\textsuperscript{942}

The features and characteristics reviewed above can be misleading when viewed in absence of the factors that pose challenges to the use of the bill of lading in the present-day business environment. The important part of the discussion is the presentation of incidences where a traditional bill of lading has failed to satisfy the sea traders and the shippers. In that section, in chapter one, several main reasons behind this failure of the traditional bill of lading and the arising of need for it to be replaced with the electronic bill of lading were discussed in detail. In summary, these points are:

- The failure of the traditional bill of lading to match the pace of international business transactions despite its favourable position against all rival business documents in the pre-internet era and the period of communication advancement. The paper requirements are too slow to ensure the issuance of timely bank guarantee and the completion of formalities of the transfer of title in case of endorsement before the goods reach the port of destination.\textsuperscript{943} The containerisation of the sea trade has already re-formed the whole sea cargo business into a design that requires swift and timely completion and transportation of the commercial documents without error, otherwise the goods may remain on the port for lengthy periods of time, making them unviable to trade due to clearance charges and demurrage costs to the transaction.\textsuperscript{944} Other risks, such as the non-enforceability of indemnity in certain jurisdictions, as well as the

\textsuperscript{942} Douglas, Receiver, etc v People’s Bank of Kentucky (n 356).
\textsuperscript{943} Detailed discussion is made in Chapter One.
\textsuperscript{944} The Sagona [1984] (n 115); it was established that most of the oil carriers have modified the requirement of original bill production with Letter of Indemnity.
potential for lengthy proceedings and ship arrest in the case of application from a holder in due course, have also reduced the affectivity of this commercial document.

- The other issue that has reduced the affectivity of the bill of lading lies in the increase of commercial transactions and the inclusion of new actors in the sea trade relationship between the carrier and shipper. This issue has appeared due to the sub-contracting of services that has raised different legal questions to be solved in due course as to the identification of contractual carrier under the bill of lading. In a practical situation this matter is more complex than its understanding in theoretical terms. The issuance of individual bills in the practice of cargo trade has also made the present issuance of paper documents a difficult task for the ship-owners/carriers. From the perspective of carriers of cargo, it is easier to issue a single bill or document for the whole container than many bills for one container, especially when the transported goods are homogeneous, such as wheat or oil.

- The absence of a single international legal regime has been identified as another hurdle in the evolution of this document in this new and transformed era. All the prevailing regimes, including the Hague Rules as well as the Hamburg Rules, 1978, have not been accepted as a single acceptable solution.

- The cost of engaging in the business is often high in the case of applying a paper bill of lading and the slow pace of paper transactions makes this cost even higher. The average cost of documentation is estimated to be 10%, which is relatively high compared to other similar documents and documentation within multimodal transport.

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945 China Shipping Development Co Ltd v State Bank of Saurashtra [2001] 2 Lloyd’s Rep 691 (n 118).
947 Kozolchyk, ‘Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective’ (n 42) 163, 177.
948 Hague Rules; Hamburg Rules, art 1(1) and (2); and Troy-Davies (n 129) 148–150.
transportation models.\textsuperscript{949} The other reason for this cost is the chance of fraud in the paper bill of lading, and the issuance of a letter of indemnity is not the real solution to the situation.\textsuperscript{950}

This discussion indicates and finds that, due to the special features that a bill of lading has, it has ruled the practices of international sea trade for centuries and it is the only document that more or less fulfils all the needs of the commercial world of today day, provided it has been revamped and modified to match the pace of the present-day commercial activities across the globe. The increased pace of these commercial activities of today is a direct result of technological advances communication modes, mainly the internet and wireless communication. Therefore, in order to match this pace, the bill of lading must be transformed into a wireless and paperless document that must be acceptable to all the parties in the trade including governments and international organisation governing the sea trade as well as parties to the bill of lading. The exploration of these issues may be summed up in the finding that a bill of lading is a vitally important sea trade document that as yet has not been replaced by any other suitable document and the reliance of the sea trade on its traditional attributes has created a vacuum.

\textbf{6.1.2 Finding Two and Three: the perspectives of jurists on the acceptability of an electronic bill of lading in place of traditional bill of lading and legal regimes governing the bill of lading:}

The second objective of this research thesis was to review the perspectives and approaches applied in order to introduce an electronic bill of lading in place of the traditional bill of lading to bridge the gap between the expectations of this document and the standing of this document

\textsuperscript{949} Myburgh (n 138) 324–25.
\textsuperscript{950} UNCTAD Secretariat, ‘Maritime Fraud: Prevention of documentary fraud associated with bills of lading. Use of sea waybills’ (n 141).
in the commercial world. In order to achieve these objectives, detailed enquiries into the legal position of different countries especially the USA and the UK have been made. In order to understand the position of international law on bill of lading, traditional as well as electronic discussion is made in third chapter that has been summarised as under:

In chapter three, the discussion remained focused on international efforts in the introduction of bill of lading as a universally acceptable document that must have similar understanding and application across the globe, both before the advent of electronic documents and after the rise of the need for an electronic bill of lading. Chapter four discussed the efforts made by the different businesses and international organisation to introduce an electronic bill of lading. Chapter five then partly covered the aspects that are relevant in the acceptance of electronic bill of lading in the court of law.\footnote{Discussion in Chapters Three and Four.}

As the first international effort to introduce a uniform legal regime, The Hague Conference on Private International Law (the Hague Conference) and the International Institute for unification of Private Law (UNIDROIT) made deliberate efforts to introduce the bill of lading as an agreed document in the sea trade. This effort resulted in the introduction of the Hague Rules in 1924 and later paved the way for the Hague-Visby Rules, 1968. However, neither of these two bodies of rules was able to ensure consensus between of all the nations involved in the sea trade as carriers or shippers. This inconsistency has led to a vacuum that has not yet been filled. Here, further discussion on these rules is not warranted, but it might be suggested that this effort has succeeded in attracting the attraction of the international community towards the need for international rules to regulate this important area of trade. These efforts
later resulted in the drafting of the Hamburg Rules and, more recently, the Rotterdam Rules on sea trade.\footnote{These legal regimes have been discussed in detail in Chapter Three.}

These efforts and the results of these efforts highlight some very important facts. First, the efforts made by international organisations and business communities to introduce a unanimous body of law were defeated in its purpose by the nations involved in this business, themselves. The division of the world into flag-carriers and client countries was wide enough to bridge in the first instance and this resulted in efforts in the form of The Hague and Hague-Visby Rules were criticised severely on these grounds. Second, the legal efforts remained far behind the pace of the business transactions taking place around the globe and this has resulted in non-comprehensive legal documents that lagged far behind the business requirements. At the same time, as the result of the ratification of international regimes, EU member states were required to adopt the rules in their national legal system and, barring a few, many major stakeholders failed to do so.

Despite the fact that the Hague, the Hague-Visby and the Hamburg Rules had serviced the needs of the comity of nations to a considerable extent, the need for detailed, comprehensive and universal rules to accommodate the present-day realities of the shipping trade was found lacking, and the UN’s effort to introduce UNCITRAL as the substitute regime was more effective, as outlined in the discussion in chapter three.\footnote{Please see discussion in Chapter Three.} This research found that this international attempt, which is yet to be ratified by the signing parties,\footnote{UNCITRAL, Working Group III (Transport Law), (n 547).} has certain characteristics that infuse the required potential in it to rule the sea trade world. First of all, this effort promises a scope that covers most of the sea trade area, both in terms of trade and
geographical boundaries. Second, its scope is wider than the earlier regimes that were restricted to sea trade and covered only port-to-port transaction. This is important in terms of the increase of multimodal transportation practices around the world.\textsuperscript{955} Third, and most important in terms of the electronic bill of lading, is the acknowledgement of electronic transactions.\textsuperscript{956} This aspect has been explored in this research work and it is encouraging to note that the UNCITRAL Rules provide for the functional equivalence of the electronic bill of lading, and upon the position of parties, electronic documents are made acceptable through functional equivalence without changing of the nature of the trade documents.\textsuperscript{957} These rules clearly define the term “electronic communication” in paragraph 17 of Article 1, which indicates a new beginning in light of the long debates in the background deliberations over the definition. There has been some criticism of the approach followed by the framers of the rules to avoid some direct and better approach as discussed in chapter three, but it must be acknowledged that these rules could be a major turning point in the acceptability of electronic and negotiable documents in future and, to a limited extent, some international agreement over these aspects is forging. At the same time, the aspect that is found under the most severe criticism in most of the jurisdictions, including the UK, is the acceptance that the electronic signature is on par with the ink signature. This promotes the use of electronic documents of trade. Article 38 of the Rotterdam Rules discussed electronic signatures and allows their use provided that the parties are agreed to this effect and subject to the fulfilment of standards.\textsuperscript{958} The criticism on the rules is, however, not unfounded, but pertains to areas which might require some other rounds of understanding among the interested parties. These rules have

\textsuperscript{955} Sturley, Fujita and van der Ziel (n 423).
\textsuperscript{956} Rotterdam Rules, art 38–40.
\textsuperscript{957} Faria and Angelo (n 378).
\textsuperscript{958} Rotterdam Rules, art 40.
provided the much required pedestal on which to proceed, and once these are ratified, the aspects raised in the third chapter may be improved, including the differences in major definitions. The gaps are clear in case of the Rotterdam Rules where the electronic bill of lading is acknowledged but the member states are still struggling to find ways to introduce laws related to electronic documentation and signatures. On these aspects, not all the maritime nations and their client states are united. This thesis, in its search of laws legislated at the national level and compatible with the Rotterdam Rules and other electronic transactions, found a few examples and determined that many are still dealing with the basic acceptance of the concept of electronic transactions and records with the exception of South Korea, which has made tremendous efforts in private-public collaboration.

The courts are the custodian of the law prevailing within national jurisdictions as well as the interpreter of the laws. In the case of electronic commerce and transactions, the courts have applied their interpretation in a more conventional and conservative manner that has discouraged the use of electronic documents and signatures in the trade transaction with the fear of inadmissibility in the court in the first instance. The national legal status of the bill of lading has already been discussed in this thesis, and it appears that there is an element of loss of vision in this regard, and only a handful of national laws are found to be promoting the practice of electronic transactions. Legal decisions and the interpretation of existing laws are rare in the promotion of evidentiary value of electronic documents, including the electronic bill of lading, and therefore lack visible juristic support.
6.1.3 Finding Four: Business efforts to introduce and implement electronic bill of lading and identification of gaps:

In order to achieve this objective, an enquiry into business efforts as functional-legal approach has been included and it was reviewed that how these business initiatives have tried to cover different legal features of traditional bill of lading including contractual nature and negotiability. In the next chapter, legal gaps are identified and business efforts are matched against these gaps. Summary of this analysis is as under:

The role of business organisations and private initiatives to promote the use of an electronic bill of lading, despite the trends and demands on the businesses, are commendable. Efforts made by this sector were well directed and offered as direct solutions to the needs of the business community, with or without attempting to provide legal rules as the force behind them. In the case of CMI, it was a rules-based initiative that covered both the technical and legal aspects of the introduction of the electronic bill of lading, although this regime was absolutely consensual. In the case of SeaDocs, the initiative was well directed, although the intention was to take control over the trade. This initiative proved that registry-based initiatives can be helpful in the introduction of electronic documents as valid transactions with the provision of security of the data and the benefit of time efficiency enjoyed by the parties. The involvement of banking sector organisations, for example, Chase Manhattan Bank, ensured the efficiency of this electronic document in ensuring financial credit against the goods in transit.\textsuperscript{959} Despite the fact that this initiative had no legal cover and the intention to introduce this attempt was more business-oriented, this effort encouraged a number of subsequent efforts. Similarly, Reinskou’s and Henriksen’s proposals to introduce the electronic bill of lading were equally appreciable attempts to test the possibilities of

\textsuperscript{959} Delmedico (n 11) 95–100.
international connectivity for increasing the pace of the business processes and to improve the
position of bill of lading from its stigma as low and obsolete document of trade.\textsuperscript{960} As
mentioned earlier, these were business proposals and therefore grossly neglected to address
the required legal details, but the major missing point was backing from the national
governments and international organisations such as the UN. At no point in time have the
efforts from these business quarters been supported by the relative governments, except in the
case of the Korea Trade Network (KTNET). This project, similar to those of Bolero, CMI, The
@GlobalTrade System and The TradeCard System, were successful in introducing alternate
technological solutions but not the legal body to support those alternatives. The efforts made
by the International Chamber of Commerce on Electronic Commerce (E-100) and The Project
of the United Nations Economic Commission for Europe were also deficient in providing the
offer of a comprehensive solution.\textsuperscript{961}

An overview of the efforts made by the business community to introduce an electronic bill of
lading without any attempt to introduce a legal body to the regime at national or international
level has already been made above. It may be added that, in the case of CMI, the drafting of
rules applicable to contracting bodies were attempted. These efforts, mostly, were found to be
commercially motivated and were aimed at using the introduction of the electronic bill of
lading within a central registry to gain control over the entire sea trade transportation regime
in combination with the banking sector. This strategy resulted in suspicion and lack of trust
from many competitive forces. The other major hurdle was that this proposal appeared to the
lack the appropriate technological collaboration to extend any of these projects to a wider level.
No evidence of national or governmental support for these business efforts was found. It might

\textsuperscript{960} ibid, read with original work of Henriksen (n 685) 24–128, 120; and Reinskou (n 679).
\textsuperscript{961} Overall, these efforts are presented in Chapter Four.
be suggested that if the respective governments has offered their support, there might have been a greater possibility of success beyond the applicable business efforts. The gaps / findings that have been found to have a direct influence on the progress of these initiatives at the end of this research may be summarised as follows:

- The business community is aware of the fact that business situations arise first and the legislations from the governments follow. But in their efforts they were seriously lacking the support of the government(s). The research could not find any evidence of whether the governments were approached to help the business community in this regard or otherwise, but the evidence does support the inference that these efforts were mostly directed towards immediate business gains.
- These efforts were all isolated and uncoordinated. The quarters that initiated such attempts tried to do so without collaboration with other stakeholders, and, as a result, at the time when support from the other players in the game was required, it was not available.
- The efforts were mainly aimed at favouring the shipping concerns at sea rather than the customers. As a result, the required support from the transporters was missing.
- Technical solutions were in one way or another lacking universal appeal and that forced the parties overseas to abstain from becoming involved and hence most of these business efforts lost momentum within their own national boundaries.
- Lack of interest by the financial institutions at a considerable level appeared to be one of the major hurdles. Chase Manhattan Bank’s inclusion was not widely encouraged and hence the lost initiative in SeaDocs.
6.2 Conclusion:

Historical antecedents are evidence of the importance of the bill of lading as the sea trade document that has risen to this glory from its roots as a receipt of goods shipped to eventually becoming a document of title (despite some differences of opinion among jurists). This is the document that has ruled the sea-bound trade for over a century and still plays a major role in present-day sea trade. In the case of the UK and other sea-bound nations, this document has helped in the promotion of trade and commercial transactions through its function of negotiability during the course of travel, a characteristic that is worth cherishing for these nations. It is, however, disappointing for a student of law that this glorified document that has proven its importance as an evolutionary legal document is losing its worth in the wake of intensified commercial activities, communication technology and the speed of travel. The containerisation of the sea trade and multimodal sea trade models have forced the traders, on one hand, to dispense with this important historical and legal document, and on the other, to think of ways to revive the bill of lading. The destination is clear. The bill of lading can only be revived if it can be made to be as competitive in this commercial world as all the other documents of trade, especially while retaining its salient features, that is to say, its negotiability and its recognition as a document of title. The best way that this has been accomplished so far, is in various business adventures such as Bolero, SeaDocs or KTNET, that is to say, the use of technology and using an electronic format of documentation and its transfer. However, these efforts have encountered a many hurdles including the incompatibility of these efforts with the legal provisions within the respective national and international laws.
This thesis has tried to explore both the technical and legal aspects that should be covered prior to the introduction of the bill of lading in electronic format. There is a convincing case from the technological point of view that supports the adoption of almost all of the salient features of a paper bill of lading in electronic format and the successful case of KTNET in South Korea provides evidence of how the adoption of an electronic mode of commerce can be effective, although not the bill of lading, specifically. It appears that the electronic bill of lading is a viable option from the technological aspect and improvements with the time will refine it. The other aspect is the legal support for the introduction of an electronic bill of lading. This aspect is found lacking in most of the instances. First of all, in most of the national jurisdictions, including the UK, the acceptability of electronic documents, records and signatures is still in its infancy and the major influence in bringing about this change of attitude is the EU regulations in Europe. This lack of acceptance, as witnessed in a review of national legal efforts in this regard, is more prevalent in sea port countries in Asia, Africa and Latin America, which make up a good part of the sea route, and it is a major challenge to bring all the sea-trading nations together to agree on a single set of rules. International efforts from the EU as well as from UN platforms are commendable and the Rotterdam Rules (that are applicable for all sea trade wholly or partially), have provided an opportunity to move forward to consolidate the sea trade rules and to adopt electronic communication as the accepted mode. This body of rules, although not perfectly drafted at the moment, is a promising start for all the interested parties and nations. It is hoped that this body of rules will be ratified soon by the intended parties to make these applicable and that the national legalisations will be modified to respect international commitments.
One other aspect is the juristic and judges’ attitudes towards technological advancement in general and the acceptability of electronic documents as evidence in particular. The review made in this paper indicates a resisting behaviour among the legal corridors, and this might not be changed by efforts made outside the bench. There is also a strong need of liberal interpretations and an acceptability of supporting technology in the civil and commercial matters that will help in both providing a line of action to the legislatures, positively, and the resolution of would-be conflicts in future.

In the light of the whole thesis and the conclusion made above, possible ways forward are discussed in the coming part of this work.

6.3 Possible Ways to Remove Legal Obstacles:

In the last leg of this thesis, it has been very clearly found that the grey areas that have proven to be hurdles in the acceptance of an electronic bill of lading in the sea trade regime are twofold. First is the technological area; it is essential that these issues are resolved in order to instil confidence in the medium. The discussion on the previous attempts, such as Bolero, CMI or TradeCard, is evidence of the possibility of technological coherence in this area.962 The private ventures were successful in their own spheres and some of these were able to be applied in the international trade at the global level, however, the major hurdle was the acceptability of those technical solutions at business as well as judicial levels. The apprehension towards the adoption of those ventures by the business sector was based on a lack of confidence, business rivalry, thrust of control over business and other similar motives behind the moves. However, the major hurdle in this regard was the absence of supporting and

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962 Discussion in Chapter Four above.
universally applicable rules along with acceptance of the electronic record in the court of law. On the grounds of international rules, UNCITRAL has provided a strong platform on which to provide support to the international business community and this legal framework document may be further improved to accommodate present-day realities. However, in order to obtain favourable judicial responses, some suggestions have been put forward, as discussed in the coming sections. There have been many attempts to bridge the gaps identified above and those are discussed in detail separately in this thesis. However, at this point in time, only the available solutions may be addressed. Possible modes and methods are:

1. Court’s liberal interpretation and acceptance of change
2. Change in legislation and amendments
3. Business efforts through contracts

6.3.1 Court’s Liberal Interpretation and Acceptance of Change:

The courts in the UK and other common law countries are overly rules-ridden and have avoided the endorsement of business practices in commercial transactions as acceptable precedents and this is in contrast to the growth of civil law in this part of the world. In the present day, where electronic transactions are part and parcel of everyone’s life, the courts are still reluctant to accept this method of transaction. Knowledge is growing and new technologies are demanding change in the behaviour of all people to meet with these new realities. In regards to the bill of lading, these changes are prevalent, and it is the increasingly rapid change in technology that has posed the biggest challenge about its acceptability in electronic form as a legal document. The courts, if they take cognisance of this fact, may play their part and apply liberal interpretations to find ways to promote the acceptability of an
electronic bill of lading. In the case of common law countries, the judges have often exercised this right.\textsuperscript{963} It is opined in this case that the best evidence rule is on its deathbed and that a new form of evidences are required to be accepted,\textsuperscript{964} whereas in the case of civil law countries, the interpretation of legislation is a prerogative of the courts.\textsuperscript{965}

It might be perceived that this solution is local and it may serve an individual country or limited jurisdictional areas, but it may be stated that when the problem is identical, the same solution may be the key to use in other parts of the world. The English courts are known for being conservative, and if these courts can be convinced to acknowledge and recognise electronic transactions and records, the suit may be followed in those countries having similar judicial systems, such as India, South Africa and other commonwealth countries. This will help in resolving disputes within the jurisdictional boundaries of a country as well as within the region as it is in line with the EU Directives on electronic commerce, too; however, this approach is not suitable for a proactive approach. Court must be able to give their judgments in case of a dispute arising before these.\textsuperscript{966} Similarly, the judgments would be scenario-based and hence may not be applied in uniformity. Universal uniformity is again not possible through this method.\textsuperscript{967}

\textbf{6.3.2 Change in Legislation and Amendments:}

Although the courts are conservative, the absence of binding legal provisions is another reason for the adoption of an electronic bill of lading to fail in the present era. It has been observed

\textsuperscript{963} Charles Arnold-Baker, ‘English Law’ in \textit{The Companion to British History} (Longcross Denholm Press 2008) 484.
\textsuperscript{964} \textit{Masquerade Music v Springsteen} [2001] EWCA Civ 563; \textit{Butera v DPP} (1987) 164 CLR 180, 188.
\textsuperscript{965} \textit{Erie Railroad Co v Tompkins} 304 US 64, 78; and \textit{Texas Industries v Radcliff}, 451 US 630.
\textsuperscript{966} Ivarsson (n 721).
\textsuperscript{967} ibid.
that there are a few countries that have visible legislations in favour of electronic commerce and the acceptance of electronic signatures that can bind the courts to not interpret the situation otherwise. Legislation is a better tool to achieve this certainty. It is appropriate to introduce desired legislations wherever the need exists. On the national levels there are a few laws where amendments may be introduced to achieve the uniformity of purpose and intention on electronic commerce.\(^\text{968}\) In this regard, it may be recommended that all nation states, those that are either shipper countries or the carrier countries, must revisit their electronic commerce laws and support the promotion of international transactions through electronic modes as it was seen in the case of South Korea, who has promoted official and private transactions online through public-private interaction and provided these efforts through national legislations.\(^\text{969}\)

However, progressing with this action in isolation will be counter-productive. UNCITRAL offers a universal solution to this situation. The UNCITRAL Model law, finalised in 1996, covers most of the aspects related to EDI and electronic commerce starting from the definition of EDI itself.\(^\text{970}\) This draft law may form the basis of universal consensus on the acceptability of the electronic bill of lading as a successor to the paper bill of lading. The encouraging thing in this regard is the readiness of many countries, including Europe, to respond to it and to adopt its major parts in their national and regional legislations to achieve this uniformity.\(^\text{971}\)

\(^{968}\) Delmedico (n 11) 95–100.

\(^{969}\) KTNET discussed in Chapter Four.


6.3.3 Business Efforts through Contracts:

Simultaneously, the efforts to achieve this purpose, EDI contractual arrangements may be brought in at the business level, also known as interchange agreement. An interchange agreement is a “private contract between commercial parties that provides a mutually acceptable structure of rules to assure the legal validity and enforceability of their electronic transactions and to govern their use of the technology for business communications”.

These regulations provide rules between trading partners on a range of matters which need clarification in order to give full legal effect to subsequent electronic transactions between the parties. On the basis of these interchange agreements, in the past, efforts have been made to devise rules such as the CMI Rules and the Bolero Rule Book, etc. These rules and other business efforts are discussed in detail in chapters three and four of this work.

This thesis has explored the features and functions of a traditional paper bill of lading and presented the legal and practical difficulties in replicating this important asset to the sea transport commerce in electronic form. The findings have revealed the numerous private business and legal efforts to retain the legislative functions of the traditional bill of lading, illustrating the challenges, criticisms and benefits of each, in turn. Within this exploration, the findings have exposed those which have great potential to address both the concerns of the shipping community and the conservative positioning of the jurists, and suggestions have been made in regards to which systems might best facilitate the universal acceptance of the electronic bill of lading. Crucially, to match the importance of the bill of lading with its need in the fast-paced global shipping industry, this acceptance must be made on an international level backed by some international regime such as the Rotterdam Rules and must be endorsed.

by all parties concerned; commerce must agree on one effective system that will meet the commercial requirements, and the courts must also recognise such systems of electronically-signed documents and contracts as legal documents in their own right.

6.4 Originality of the work:

It is important to point out that other doctoral research has been conducted on the issue of the future of the bill of lading in its electronic format, but most of these theses have ignored the history of the document and its logical flow; from its inception as a document of title, to the present-day efforts of the shipping industry. There is a limited amount of discussion on the practical application of the electronic bill of lading in independent research papers and journals, but these examples are scattered and disorganised and the research reported is flawed in some cases. The research undertaken in this thesis has ensured that the most pertinent literature has been gathered, reviewed and analysed and has been presented in accordance with the objectives of this research. Furthermore, this thesis is the first effort to examine the future of the bill of lading from both a national and international perspective (with particular emphasis on the significance of the UK and USA), which is an area that has never been as comprehensively scrutinised. Most importantly, this thesis is the first to incorporate a discussion about the legal implications of the development of an electronic bill of lading from an international perspective, business perspectives and national perspectives in relation to its use in practice.

6.5 Contribution to the literature:

This thesis has provided a cohesive and systematic investigation of the literature in relation to the most significant aspects of the issue of developing an electronic form of the bill of lading
with the aim of promoting a feasible solution to this issue. It has presented a comprehensive discussion on the role of national governments, justice systems, international bodies and business communities on the issues, challenges and barriers, as well as the benefits, of adopting an electronic format of the bill of lading. This thesis has provided a valuable contribution to the literature by presenting the research in such a way that it will be an important resource to jurists, policy-makers, legislatures and all members of the shipping industry as they move forward and find ways to adopt this important document within global electronic commerce practices.

6.6 Future Research:

This research has covered most of the legal and business aspects of the future electronic bill of lading; however, there is still room for further research into the possibility of developing it into a multimodal document, extending its operations to land and air carriage so that it may help the future of this trade in a more holistic way.
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