

## ***Electronic Bills of Lading – Are they Convenient? Shall we use them widely from a Technical Point View?***

### **Introduction**

Salam Aleykum, Ladies and Gentlemen. What a pleasure and a privilege it is to be in this fascinating city, which has been for many millennia, and continues to be, an important trading centre, and to be invited as a speaker here at this prestigious conference. In view both of Aqaba's ancient past, and its promising future (and I refer here to the Container Terminal, the new port and the Special Economic Zone, to name but three examples) it is apt that I should be asked to speak about bills of lading, and electronic bills of lading, today. They too are documents with a long and rich history, and, in their electronic form an obvious, I will argue, future.

As an English-qualified lawyer, I also have the very rare pleasure to talk to you about electronic documents on which *per se*, there is absolutely no reported English case law at all. Which is great, because that means I can basically just make it all up as I go along. I'm only joking.

#### **[SLIDE 3]**

But seriously, now, Bills of lading are amongst the first documents which enjoyed international legal status. Their use directly relates to the exponential increase in international trade and their form has always been correlated with technological developments. This is evident by even a superficial comparison of the 14<sup>th</sup> century Bill of Lading with an electronic bill of lading of the 21<sup>st</sup> century.

The structure of this talk is basically going to be three-fold. I aim to examine whether electronic bills of lading can be practically useful, and fail-safe, in modern-day commerce. In order to achieve this, I propose to take a brief look at traditional bills of lading and their legal context from an English-law perspective, examine the advantages and disadvantages of electronic bills of lading as they are today, and take you through practical features of the most dominantly used electronic bills of lading today.

The two electronic bills of lading I would like to look at are those of the Bill of Lading Electronic Registry Organisation, which is often known as "the Bolero system", and the Electronic Shipping Solutions system. These two systems are not an exhaustive list, but considering our time constraints, and the fact that they have between them gained the largest market share where e-bills are used, but also, perhaps most importantly, that they are the only electronic systems that have been endorsed by the International Group of P&I Clubs, I propose they are the most important to look at.

I would emphasise that International Group P&I Club endorsement was one of the most significant developments in this context because electronic bills of lading would be of no practical use if not recognised by P&I Club rules and therefore covered, from an insurance perspective. International Group P&I Club approval has been an important factor in increasing market confidence in a new, groundbreaking, but still technically challenging, area.

#### **[SLIDE 4]**

#### **Development of the Bill of Lading**

The Bill of lading as we know it today has existed since the 14<sup>th</sup> century. Its form has developed over the centuries and it has become a useful way to allow the performance of a shipment of goods given that it has a tri-partite function. As I'm sure you will all know, and as is always recited in any commentary on Bills of Lading, they act simultaneously as a receipt for the goods, a contract of carriage of the goods, and a document of title to the goods.

#### **[SLIDE 5]**

Bills of lading often throw up many issues, considerations and difficulties, including:

- who issues the bill – who has authority?
- who has title to sue?
- whose bills are these anyway?

- owners losing sight of the bills
- clausing of the bills of lading
- incorporation of terms
- dating
- splitting
- amending/reissuing
- late arrival

**[SLIDE 6]**

**Development of e-commerce**

The World Wide Web created the possibility of the production and use of legally-binding documents that did not need to be in paper form. As a result, the concept of e-commerce developed. It is this concept which establishes the theoretical, legal and commercial foundations on which all paperless trading is conducted.

The United Nations Commission on International Trade Law, UNCITRAL, has recently taken significant steps to establish a uniform set of legal principles, on an international level, intending for those principles to become the driving force behind the adaptation of anachronistic national legal systems, to technological developments. UNCITRAL has recognised that three key elements for the efficient conduct of electronic commerce are (i) the legal recognition of electronic data messages, (ii) the admissibility of data messages as evidence in legal proceedings, and (iii) the electronic signature of such documents.

**[SLIDE 7]**

In 1996, UNCITRAL adopted the Model Law on Electronic Commerce, which applied the principle of 'functional equivalence' to electronic bills of lading. Functional equivalence in this context is basically the equation of the function of a paper bill of lading, with that of an electronic document. As the commentary to the Model Law states, it was the "first legislative text to adopt the fundamental principles of non-discrimination, technological neutrality and functional equivalence that are widely regarded as the founding elements of modern electronic commerce law".

Furthermore, in 2001 and 2005, UNCITRAL adopted the Model Law on Electronic Signatures and the UN Convention on the Use of Electronic Communications in International Contracts which have been characterised as a "new global standard" of legal principles.

The European Union, as another major supervising stakeholder in this area, has taken the initiative to enact several legal instruments to facilitate the use of technology such as the E-Commerce Directive, amongst others.

Nowadays, electronic means of communication are widely used in international trade and the carriage of goods by sea. Common examples are data transmission as to the Vessel's position and the exchange of binding contractual terms.

**[SLIDE 8]**

**What is the position under English law?**

Under English law, the carriage of goods by sea is governed by the Carriage of Goods by Sea Act 1992 which incorporates the Hague/Visby Rules and has supplemented the previous version of the Act, Carriage of Goods by Sea Act 1971. Neither of the two statutes, however, extend to expressly cover electronic Bills of Lading. There is, however, scope for the relevant Secretary of State (what is more comprehensibly called a minister, in other jurisdictions) to issue certain regulations under the Act, which could obviously conceivably apply to electronic Bills of Lading.

No such regulations have in fact been issued to date, and none are expected to be issued in the near future. In consequence, there is a clear demand and a necessity for the legislature to take active steps to enact legislation which will cover all aspects of the use of electronic bills of lading. This takes me back to my joke at the beginning - there is no (English) law on this topic.

That does not however mean that English law cannot govern electronic bills of lading, in just the same way as it often governs paper bills. Electronic bills of lading can be governed by English law by virtue of the express incorporation of English law and jurisdiction, and by agreement between the parties that the electronic bills of lading are equivalent to paper based bills of lading. It is simply the case that English law and the relevant statutes I mentioned just now do not contain express provisions in relation to electronic bills of lading. Contrast that position, however, with the position in Australia, a commonwealth jurisdiction, but where the Carriage of Goods By Sea Act there (largely modelled on the English COGSA) was amended in 1997 by the Sea Carriage Documents Act 1997, providing, in section 6, that its provisions apply to "*data message or electronic versions of sea carriage documents*". I just mention this to reinforce the point that the legislative framework is still behind the times in many jurisdiction, and certainly in England, and I hope that the pertinence of this point will become clear in terms of what I say just a bit later.

**[SLIDE 9]**

**What are the major obstacles faced by users of electronic bills of lading?**

Since the inception of Electronic Bills of lading, in the mid-late-90s, really, their use has been faced with several problems, mostly relating to the fulfilment of legal requirements, rather than problems such as overcoming technical challenges. The legal complexities of Bills of Lading mostly arise out of the fact that they involve elements of contract law, bailment, assignment, negotiability and tort law.

A common theme among many national legal systems is that they impose requirements such as, for example, the existence of a written document to evidence a contract, they do not recognise electronic signatures, they are not clear as to what is meant by the requirement of holding an original document in the context of electronic commerce, and they are also at best unclear as to the evidential value of data messages, although this last parameter has certainly changed recently, in England, at least.

It is almost universally acknowledged that in order for electronic Bills of Lading to be practically useful, they need to replicate all the basic functions of traditional paper-based bills of lading. That takes me back to the tri-partite function point I made earlier, so their operation as (i) a receipt of the cargo, (ii) as evidence of the contract of carriage, and (iii) as a document of title.

**[SLIDE 10]**

Thus, the rationale is that electronic bills of lading are only able to successfully compete with paper bills of lading, if they are able to replicate these three functions. Initial attempts to create electronic bills of lading were able to replicate the first two functions (receipt and evidence of the contract of carriage) to a certain extent, but it was the third function - title - that created the most problems. It is also the third function that is of paramount importance in international trade, because of course bills of lading are traded worldwide on the basis of the principle that the holder of a bill of lading is also the party entitled to take delivery of the cargo. Moreover, electronic bills of lading must be able to be transferred to several parties across the transactional chain, such as banks, which will often use them as a guarantee for credit.

In light of the points I was making about the absence of express reference to electronic bills within, for example, the English legislative framework, another important problem is the lack of a unified set of universally-accepted rules. There are, effectively, two competing theories about this, stating on the one hand that the existing legislative framework for paper bills should simply be extended and thereby expressly applied to electronic bills of lading, and on the other hand that an entirely new framework should be developed, on an international level, as electronic Bills of Lading face no boundaries.

In this latter regard, I should point out that the Rotterdam Rules (the cargo convention which is the successor of the Hague Visby Rules, as you will know) have included provisions to cover electronic documents on the basis of the principle of 'functional equivalence' - i.e. on the basis of the UNCITRAL Model Law. Whilst this evidences the industry's clear trajectory towards using technology as a tool to decrease costs and increase efficiency, you will all know that there are not many jurisdictions, at least yet, that have incorporated the Rotterdam

Rules into their domestic legislation. Jordan, as I understand, has ratified and enacted the Hamburg Rules, which are again, silent on the issue of electronic bills of lading.

Conversely, the Rotterdam Rules have introduced into their main text, provisions relating to the use of electronic documents in general, provisions in relation to the negotiability of electronic documents and provisions relating to the rights of control that are required where an electronic document governs the carriage.

Major stakeholders of the maritime market have expressed their support for the provisions of the Rotterdam Rules in relation to electronic documents, even characterising them as a 'gateway' to the more widespread use of electronic bills of lading. However, nation states have demonstrated reluctance to ratify them, as a result, and to a certain extent, of the pressure exercised on governments by vested interest groups. This goes back to the point I was making before about how many states have ratified the Rotterdam Rules - only 25, with far fewer actually enacting them.

However, apart from the legal challenges and problems, the most important obstacle that electronic bills of lading faced and, to a certain extent, still face, is market confidence, especially, as far as I am aware, outside the container trade, and even then, only in certain areas of the world.

Initially, the industry was very sceptical about the use of central platforms, operated by third parties due, to a large extent, to privacy and liability concerns. The shipping industry depends largely on confidence, certainty, security and trust, and shipowners are reluctant to divulge sensitive information regarding their operations even to their contractual counterparts, let alone to a third-party service provider.

As several commentators have stated, without the development of a legal framework and case law that determines with a sufficient degree of clarity the rights and obligations that derive from their use, even paper bills of lading would not have instilled confidence in the market. Similarly, confidence in electronic bills of lading could be greatly increased, especially in terms of their negotiability, if the market exercised political pressure on governments and institutions to take active legislative steps to determine and secure the legal status of electronic bills of lading.

**[SLIDE 11]**

**What are the two most important electronic bills of lading by market share?**

As I have mentioned, in light of the time constraints and considering the industry's response to electronic bills of lading, I only propose to talk about the Bolero and the Electronic Shipping Solutions systems, today.

These are the two most important electronic bills of lading systems in terms of their use, and the only systems expressly endorsed by International Group P&I rules. In their current form, the systems are what I would describe as the corollary of a 'dialogue' between the shipping and commodities industries, insurance markets and financial institutions, and of the legal services industry.

**[SLIDE 12]**

**BOLERO**

The Bolero system was created in 1998 and described itself as a "*neutral, trusted third party to develop an open and secure platform to deliver paperless trading between buyers, sellers, financial institutions and logistics service providers anywhere in the world, delivering transaction visibility, predictability, speed, accuracy and security*". The Bolero system operates on the basis of the principles of novation and assignment in replicating the negotiability function of bills of lading, in order to surpass legal problems that might be encountered as to the legal status of such bills of lading by virtue of national laws.

Bolero solves the problem of the legal recognition of electronic bills of lading by introducing the Bolero Rulebook. Parties that wish to use Bolero's electronic bill of lading must agree to the Bolero Rulebook. This is effectively a tripartite agreement, which lays down the rules that

will govern the legal relationship of the parties involved. Furthermore, the Bolero Title Registry safeguards the title holder of the goods from attempts to create fraudulent electronic bills of lading. It is a repository and an application which manages the transfer of title of the electronic bill of lading. Finally, the Bolero Messaging platform allows parties to communicate with each other in a safe environment.

**[SLIDE 13]**

In terms of practicality, the steps are that the carrier first prepares a paper bill of lading, containing all the relevant information, as to, for example, the goods, the carrying vessel, any charterparty incorporated into the electronic bill of lading, and so on.

The carrier then scans the traditional bill of lading onto a PC, then logs into the Bolero platform and uploads the document. The paper bill of lading should then be destroyed. The Bolero system does not require an integrated system, just an internet connection, so as to be able to download a plug-in which will then allow the carrier to sign Bolero messages. Then the Carrier attaches to the document a Title Registry Instruction (TRI) by completing certain fields with information (such as the identity of the shipper, for example) ensuring that the information entered electronically on the system matches the information in the paper document that was scanned in. The carrier then electronically signs the electronic bill of lading, and sends it to Bolero. If the shipper wants to change the information it will need the consent of the carrier, before it is able to make the requisite amendment in the system. The Title Registry will record the TRI and will then send the electronic bill of lading to the first Holder. The electronic Bills of Lading are signed with digital certificates which are unique.

Although the only party that can create an electronic bill of lading is the carrier, the carrier may also authorise its agent to create an electronic bill of lading. However, for obvious security reasons, to do so, the carrier would have to provide its load port agent with a Login ID and a user certificate. Throughout, the carrier is of course able to supervise the actions of the agent online, during the entire process.

The electronic bill of lading that has been created, and the information it contains can then be sent, by virtue of the system, to Banks and other parties involved in the transactions. If the Carrier is at any moment unable to see who is the holder of the bill of lading, it may, by virtue of an electronic message sent through the system, ask from the other involved parties to keep it copied in all the messages between the parties, so as to keep track of the sale process of the goods.

An electronic bill of lading can also be created without the pre-requirement of a paper bill. It is possible to print the electronic bill of lading, just as it is possible to photocopy a paper bill of lading. However, should the holder require a printed version of the electronic bill of lading, there is a specific function on the system, if accepted by the carrier, which then cancels the electronic bill of lading, replacing it with the paper bill that is then printed. The system is created in such a way that it is not possible for an electronic bill of lading and a paper bill of lading to coexist, if used properly.

The carrier secures discharge of the goods to the lawful receiver under the electronic bill of lading by simply logging-in to the system. If the electronic bill of lading has been surrendered, then the carrier will be able to see this from the transaction folder on the system. Even if for some reason the carrier has no access to the transaction folder, it would have received, at the moment of surrender, an automated email from Bolero informing of this.

**[SLIDE 14]**

The important party in order for the Bolero system to work is the contractual carrier. If the contractual carrier is not the head owner then the head owner will have to enrol onto the Bolero system.

The two distinct advantages of the Bolero Messaging Platform are said to be that it allows the electronic bill of lading to replicate the traditional paper process, since it supports the 'sending' of the electronic bill from party to party. Secondly, it delivers to the holder of the electronic bill of lading the document, without the need for the holder to interact with the application. This also ensures ease of integration.

The practical benefits of the Bolero system are said to be that a Bolero electronic bill can only have one holder at any one time, there must be a named holder at all times, the title registry of the system records who the holder is, and holdership is the equivalent of possession of the physical paper bill of lading.

So paper bills as part of the trade process can be dispensed with, the electronic presentation of Letters of Credit under the e Uniform Customs and Practice for Documentary Credit provisions can be supported, the adoption of the new Bank Payment Obligation (BPO) can be facilitated, the risk of fraud can be reduced, and the requirement for Letters of Indemnity in certain scenarios, can be dispensed with. The Bolero electronic Bills of Lading have been designed in conjunction with the corporate and carrier communities' existing systems, rather than forcing all parties to converge on a single platform.

Large corporations such as Glencore, RBS, Citibank, BHP Billiton, ING have shown their confidence in the Bolero system by making use of it in the past.

**[SLIDE 15]**

**Electronic Shipping Solutions**

The Electronic Shipping Solutions system was created in 2003, to address the inefficiencies of the tanker business, and developed on the basis of the principle of one trade and route at a time. Now it has developed as a global industry standard in electronic bills of lading, used in 65 countries by over 2,300 customers across all shipping modes.

In its present form, it is not limited to providing only electronic bills of lading, but also provides in electronic format many of the documents required by financial institutions, commodities traders and by the shipping industry in international trade, such as electronic packing lists, cargo manifests, commercial invoices, bunker receipts, barge nominations, and so on.

**[SLIDE 16]**

Like the Bolero system, the basic principle behind the Electronic Shipping Solutions system is that all participants contractually agree to treat the electronic documents as equivalent to traditional paper-based bills of lading. Again, therefore, it adopts the 'functional equivalence' model, from a legal perspective. The system secures the uniqueness of the electronic bill of lading by the use of an electronic signature which is updated every time a holder transfers the bill of lading.

The Electronic Shipping Solutions system is said to have increased the standards of efficiency in international trade, a representative example being that in the space of just three minutes, an electronic bill of lading was sent across the entire trade chain.

**[SLIDE 17]**

Moreover, the market's acceptance, acknowledgment and endorsement of the Electronic Shipping Solutions system is evidenced by some statistics. In 2012, the CargoDocs network which is the system's flagship network grew by 500% and is expected to grow this year by 200%. In relation to the tanker market, 45% of the global Tanker Fleet signed on to CargoDocs, 22% of the Global Liner Fleet signed on to it, and 20% of Major global Banks signed on to it. This is expected to double, by the end of 2015.

Large corporations such as Bunge, ExxonMobil and Cargill have entered into agreements with Electronic Shipping Solutions. Again, this shows that the industry has started to experience the benefits of electronic bills of lading and any hesitations that were present at first, are now starting to subside.

It is also of note that on the 24<sup>th</sup> of April 2015, it was reported in the media that ANZ completed a four-cornered Bank Payment Obligation (BPO) transaction for an iron ore shipment from Australia to China. The parties involved were Cargill, Bhp Billiton and ANZ. This is the first use of a Bank Payment Obligation coupled with an electronic Bill of Lading and commercial invoices, where data flowed through all participants' corners with zero data re-entry. This was done using the Electronic Shipping Solutions system and I mention it as a representative example of the increasing importance and practical advantages of electronic Bills of Lading.

**[SLIDE 18]**

## **Who uses electronic bills today, and within which trades?**

Now I have to remind you that I'm a lawyer, so I'm not best qualified to talk about this and I'll need your help. Of the Owners / operators / Charterers in the room here today, who regularly sees the use of electronic bills of lading on a day-to-day basis? It's an interesting question given the existence of the significant container terminal here in Aqaba?

I also phoned a friend on this question, to get his input. He works with Venmar Shipmanagement, an Athens-based manager, and they represent the likes of Hanjin and DHL in Greece. His view was that the European market is still very immature in terms of the adoption of electronic bills, and Greek shipowners in particular are very wary of them. They are much more common in trans-pacific routes, in the container and liner trade routes in the far east, and in house-to-house routes (for example where DHL Asia ships to DHL Greece, or Hanjin Asia ships to Hanjin Greece). There has also been a rise in the use of electronic bills of lading in the US.

## **The Case for Change - advantages**

Having said all of that, the obvious first question to the average Owner, Charterer or trader not accustomed to the use of electronic bills of lading, and certainly in Europe and Greece, at least, there are still many, the first question that will come to mind is "Why Change? What will I gain? The answer is simple and based on the underlying principle of efficiency. You save time, you decrease your operating costs and it is more convenient and, arguably safe. Think of it in simple terms of the difference between traditional - snail mail, and e-mail.

The whole purpose of the development of electronic bills of lading was to address the deficiencies surrounding the use of traditional paper based bills of lading, by providing a better, more efficient alternative. The two systems can even be seen as complementary if we consider the fact that there is nothing preventing users from converting the electronic bill of lading to a paper bill of lading, if in the particular circumstances it proves more convenient.

By their nature, paper bills of lading operate at a slow pace, meaning that the goods may have arrived at the port of delivery, but the documents might not have. This typically results in the issue of a Letter of Indemnity by a Charterer and such Letters of Indemnity may, for example, lead to a loss of P&I cover in this respect.

Electronic bills of lading effectively remove the need for Letters of Indemnity in terms of releasing the goods, when the bills of lading have not reached the port. The associated costs, and legal and commercial risks, therefore go down. This is of particular importance in light of the practical - and legal - difficulties that often arise in an Owner seeking relief from a Charterer, which has either failed to provide a Letter of Indemnity, or has provided one, but there are problems either with the enforcement of its terms, or in terms of actual recovery from the Charterer.

Furthermore, the cost of the production and processing of paper documents for each transaction is significant, certainly compared to that associated with the production of an electronic document. Consider for example how important electronic bills of lading might become, if they have not already, in light of the fact that the cross border transaction of a single cargo can require up to 36 documents and 240 copies, with a significant amount of overlap of information between the documents. It has also been said that with electronic bills of lading, savings result in terms of agents' and port authority-fees.

Under electronic Bills of Lading systems, it is less likely for non-approved bills of lading to be issued, since the carrier or its agent will have to accept changes, before the document is further processed by the system, although the risk may remain in time charterparty situations if the time charterers' agents are given the ability to create the e-bill.

Electronic Bills of lading make changes easier since there is no need to reissue, return or cancel previous versions of paper bills of lading, and thus there is no risk of duplicate copies.

The use of electronic bills of lading may also avoid the situation where a Master is pressured to sign bills of lading, for example at the loadport, because the shore/office side will typically have more involvement in their issuance.

However, some things never change and here are some examples:

Electronic Bills of Lading do not resolve problems associated with the incorporation of charterparties, in the same way in which they emerge with paper bills of lading.

Problems in circumstances where the Master has claused the electronic bill of lading, but the shipper does not accept the clausing will also remain.

Also, uptake by the market at large, although constantly increasing, remains small overall.

Issues may also arise in certain local jurisdictions which have not enacted legislation relating to electronic documents, but which might assume jurisdiction in relation to a bill of lading dispute.

**[SLIDE 19]**

### **P&I Clubs and the Market**

P&I Clubs, as Owners' mutuals, are, arguably at least, traditionally cautious of new developments which may potentially prove inefficient and could expose their members to risks, thereby increasing their liabilities. P&I Clubs have therefore been carefully monitoring the position, and the market's response to electronic bills of lading, since December 1998. However, their response to the industry's growing need for efficiency has been instrumental in the growing popularity of the electronic bill of lading.

Until February 2010 the Rules of all the Clubs comprising the International Group of P&I Clubs, specifically excluded liabilities in respect of the carriage of goods by sea, covered by electronic bills of lading. However, after a period of consultation with their members, they expressly stated their approval and extended cover for electronic bills of lading.

The P&I Group accepted in principle the Bolero and the Electronic Shipping Solutions systems, as I have said. This was made public by a 2013 circular. As I have also said, the two systems are based on the concept of functional equivalence - surpassing the legal obstacles posed by the absence of a legislative framework, by requiring their clients to enter into an agreement which explicitly states that electronic bills of lading and traditional bills of lading are equivalent and all legal rules that may apply to traditional bills of lading will apply to electronic bills of lading.

However, risk of exposure to liabilities not traditionally of a P&I nature associated with the use of an electronic system such as viruses, hacking, or the accidental release or theft of information remain. I listened with interest to Alexander Kababji, of Munich Re's talk yesterday morning on marine cyber risks. As he said though, the exclusion from P&I cover does not mean that there is no available cover for this kind of risk.

Apart from P&I approval, electronic bills of lading have been accredited by the TT Club representing freight forwarders and ITIC representing ship agents and independent inspectors.

Moreover, the new Incoterms have inserted a new sentence in Article A1 which allows the tender of electronic documents on the basis of the principle of functional equivalence.

It should also be noted that BIMCO, in response to market demand, has drafted a clause in relation to electronic bills of lading specifically for the purposes of conferring on electronic bills of lading the same status as paper bills of lading, under the terms of the charter party.

**[SLIDE 20]**

### **Conclusion**



As technology develops it is virtually impossible to exclude the shipping industry from its ambit.

I am of the opinion that electronic Bills of Lading will continue to exponentially increase their market share and simultaneously lead to a reduction in litigation. This is part of the process of the shedding of paper documentation within the industry of commercial oceangoing shipping which has been gaining momentum in the last few years, especially in the containerised side of shipping. The practical benefits from the use of electronic bills of lading outweigh overall, I believe, the disadvantages that have and may emerge in the future. It is to be seen however how the different legal systems in shipping states will approach this issue but I would hope that they would move to embrace electronic bills of lading.

It is important to mention that there are specific sectors within the shipping industry such as the trading of Handy and Handymax vessels where the use of eBoL is almost a precondition in certain trade routes, before entering into agreements with major commodity suppliers.

However, there have also been social arguments, criticising electronic bills of lading and providing that they have divided the world into hi-tech nations which can take advantage of the benefits of electronic bills, and low-tech countries which cannot. These arguments focus on the slow development of technology in some countries which could also impede the development of electronic bills of lading. However, I think that these arguments fail to acknowledge the fact that electronic bills of lading can be converted to paper Bills of Lading if necessary. They do not focus on the practical usefulness of electronic bills of lading, but on the resources available in certain countries to keep up with the technological developments from the prism of their position to compete worldwide.

It is my opinion that even though this might prove as an obstacle momentarily, the effects and use of technology cannot be obstructed.

Lastly, I would say, conscious that my head of session is, Mrs Abdelkhalek, of Eskadenia, that most of the practical, legal and commercial challenges of electronic bills of lading have been addressed by the two providers mentioned above and there is conceivably scope for more providers. There is, however, also still a long road ahead for electronic bills of lading to completely replace traditional bills of lading.

Hill Dickinson

A presentation by  
**HILL DICKINSON**

**Electronic bills of lading**

Andrew Dyer

May 2015

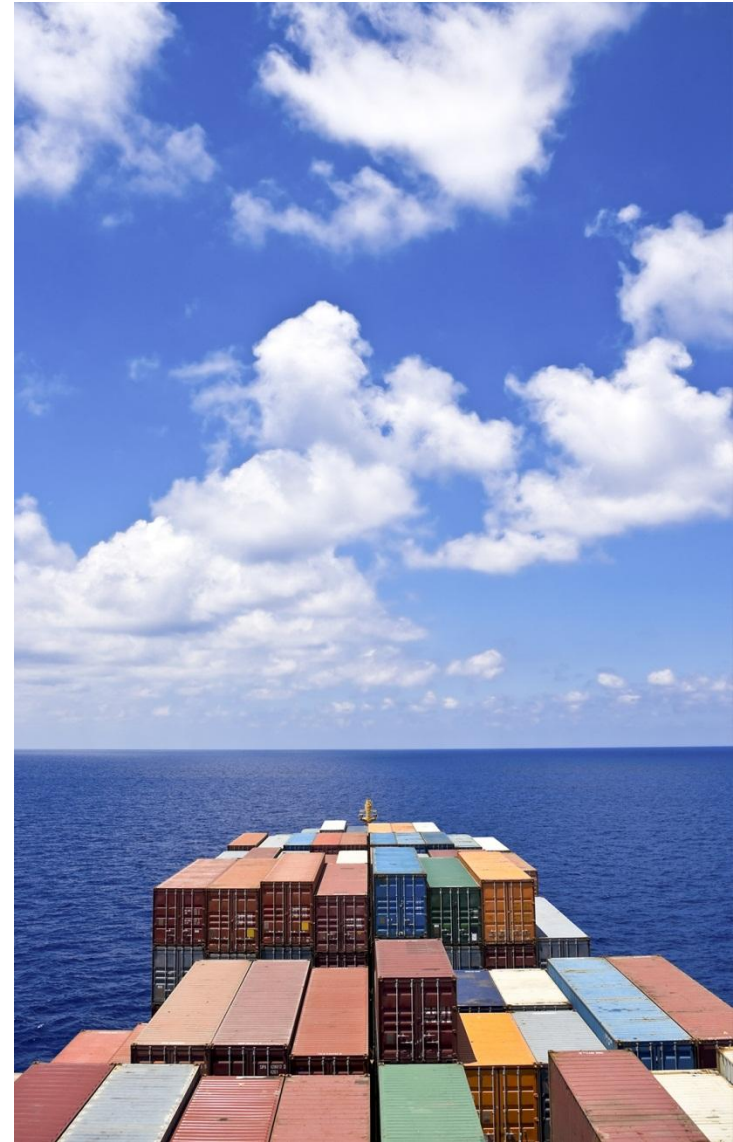


**Electronic bills of lading –  
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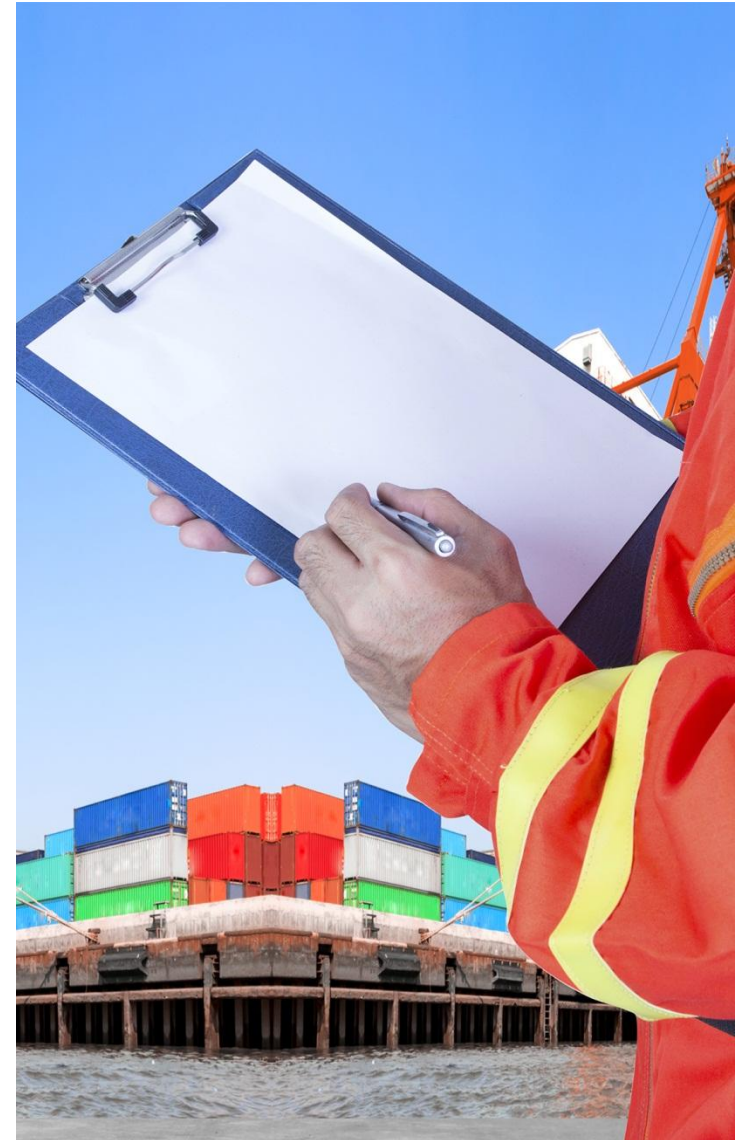
## Bills of lading

- Introduction to bills of lading
- Practical or useful in modern commerce?
- Advantages and disadvantages of electronic bills of lading
- Most dominant types of electronic bills of lading in the industry
- Significance of approval by P&I clubs



## Development of the bill of lading

- Developed since 14<sup>th</sup> century as useful way to allow the shipment of goods acting as :
  - receipt
  - contract of carriage
  - document of title



## Development of the bill of lading

- Issues and difficulties of bills of lading include:
  - who issues the bill – who has authority
  - whose bills are these?
  - owners losing sight of the bills
  - clausing of the bills of lading
  - incorporation
  - dating
  - splitting
  - amending/reissuing
  - late arrival



## Development of e-commerce

- Impact of World Wide Web
- E-commerce established theoretical, legal and commercial foundations of all paperless trading
- United Nations Commission on International Trade Law uniform set of legal principles
- UNCITRAL key elements for efficient electronic commerce:
  - legal recognition of electronic data message
  - admissibility of data messages as evidence
  - writing
  - electronic signatures

## Development of e-commerce

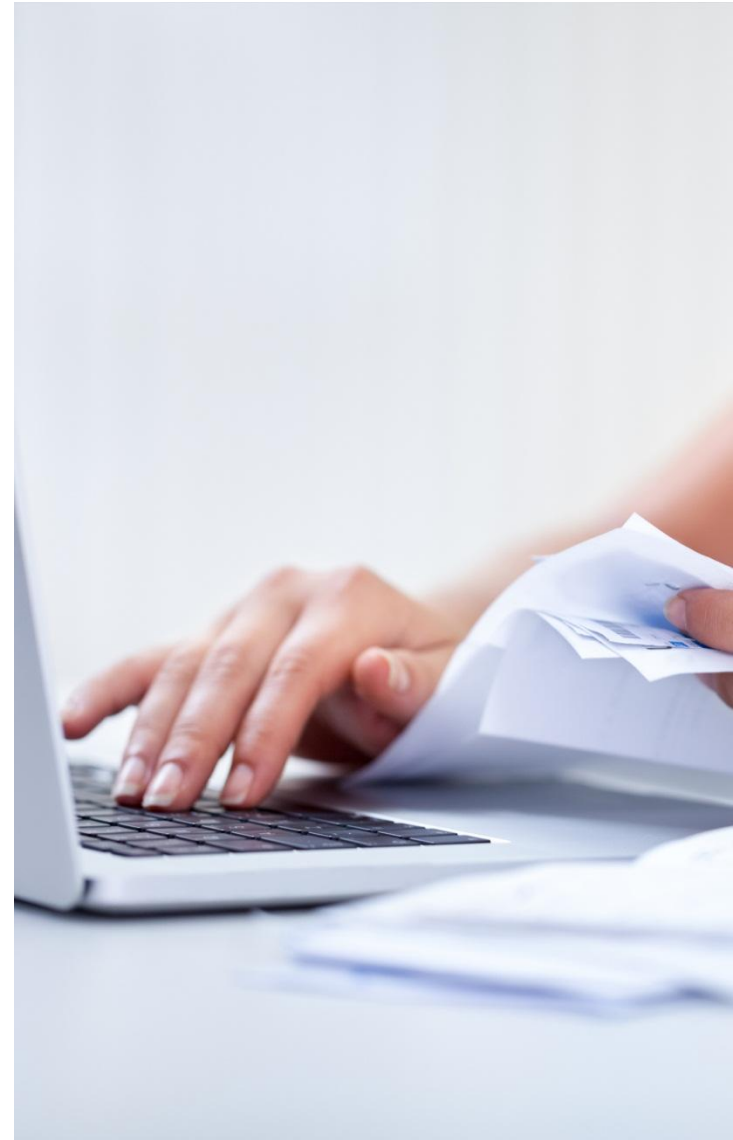
- Principle of 'functional equivalence'
- Communications in international contracts
- European Union enacted legal instruments to facilitate use of technology e.g. E-Commerce Directive





## What is the position under English law?


- Carriage of Goods by Sea Act 1992



## Major obstacles faced by users of electronic bills of lading?

- Problems relating to fulfilling legal requirements rather than overcoming technical challenges.
- Legal complexities deriving from elements of contract law, bailment, assignment, negotiability and tort law
- Legal requirements imposed by national systems
- For electronic bills of lading to be practically useful, they need to replicate all the basic functions of traditional paper-based bills of lading

## Major obstacles faced by users of electronic bills of lading?

- Only able to successfully compete with paper-based bills of lading if able to replicate three key functions
  - Electronic bills of lading must be able to be transferred to several parties across the chain such as banks
  - Lack of a unified set of rules
  - Major maritime stakeholders support Rotterdam Rules as a 'gateway' for electronic bills of lading
  - However - nations have shown reluctance to ratify them
  - Impact of market confidence
- 

## The two most important electronic bills of lading by market share

- Bolero
- Electronic Shipping Solutions



## Bolero

- System created in 1998
- “Neutral, trusted third party to develop an open and secure platform to deliver paperless trading between buyers, sellers, financial institutions and logistics service providers anywhere in the world, delivering transaction visibility, predictability, speed, accuracy and security”
- Operates on principles of novation and assignment in replicating the negotiability function of bills of lading
- Solves problem of legal recognition of electronic bills of lading by introducing the Bolero Rulebook
- Parties who wish to use Bolero’s eBoL must agree to the Bolero Rulebook - a tripartite agreement which established the rules that will govern the legal relationship of the parties involved
- Bolero Title Registry safeguards title holder from attempts to create fraudulent electronic bills of lading. It is a repository and an application which manages the transfer of title of the eBoL
- Bolero Messaging platform allows parties to communicate within a safe environment

## Bolero

|  |  |   |
|--|--|---|
| <b>Originator</b> *                              | <input type="text" value="ABC-carrier-company"/>   | <input type="button" value="Address Book"/> |
| <b>Surrender party</b>                           | <input type="text"/>                               | <input type="button" value="Address Book"/> |
| <b>Shipper</b> *                                 | <input type="text" value="EXP-exporting-inc"/>     | <input type="button" value="Address Book"/> |
| <b>Holder</b> *                                  | <input type="text" value="EXP-exporting-inc"/>     | <input type="button" value="Address Book"/> |
| <b>To order</b> <input checked="" type="radio"/> | <input type="text" value="International-Bank-Co"/> | <input type="button" value="Address Book"/> |
| <b>Consignee</b> <input type="radio"/>           | <input type="text"/>                               | <input type="button" value="Address Book"/> |
| <b>Blank endorse</b> <input type="radio"/>       |  |   |

\* Required field

Sort by  Descending

| X | ! | Originator | General ID                   | Type                                 | Date/Time ( GMT )                   | Final/draft           | Status                          | TR                    |
|---|---|------------|------------------------------|--------------------------------------|-------------------------------------|-----------------------|---------------------------------|-----------------------|
|   |   |            | <a href="#">bl-999-12345</a> | <a href="#">705 - Bill of Lading</a> | <a href="#">2013-02-14 16:20:09</a> | <a href="#">Final</a> | <a href="#">Sent in message</a> | <a href="#">Ended</a> |

## Bolero

- Two advantages of Bolero Messaging Platform:
  - it allows the eBoL to replicate the traditional paper process supporting the 'sending' of the eBoL from party to party
  - it delivers to the holder of the eBoL the eBoL without the need for the holder to interact with the application, and also ensures ease of integration by detaching the eBoL from the specific technology solution.
- Practical benefits of Bolero
- Use by large corporations such as Glencore, RBS, Citibank, BHP Biliton, ING

## Electronic Shipping Solutions

- Created in 2003 to address inefficiencies of the tanker business
- Developed on principle of one trade and route at a time
- Now developed as global industry standard in electronic bills of lading, used in 65 countries by over 2,300 customers across all shipping modes
- Neutral electronic document service provider for the trade finance, commodities trading and shipping industry



## Electronic Shipping Solutions

- Not limited to providing only electronic bills of lading, but provides in electronic format most of the documents required by financial institutions, commodities traders and by the shipping industry in international trade such as electronic packing lists, cargo manifests, commercial invoices, bunker receipts, barge nominations etc.
- All participants contractually agree to treat the electronic documents as equivalent to traditional paper-based bills of lading
- Greatly increased the standards of efficiency in international trade a representative example being that they sent in three minutes an electronic bill of lading across the entire trade chain

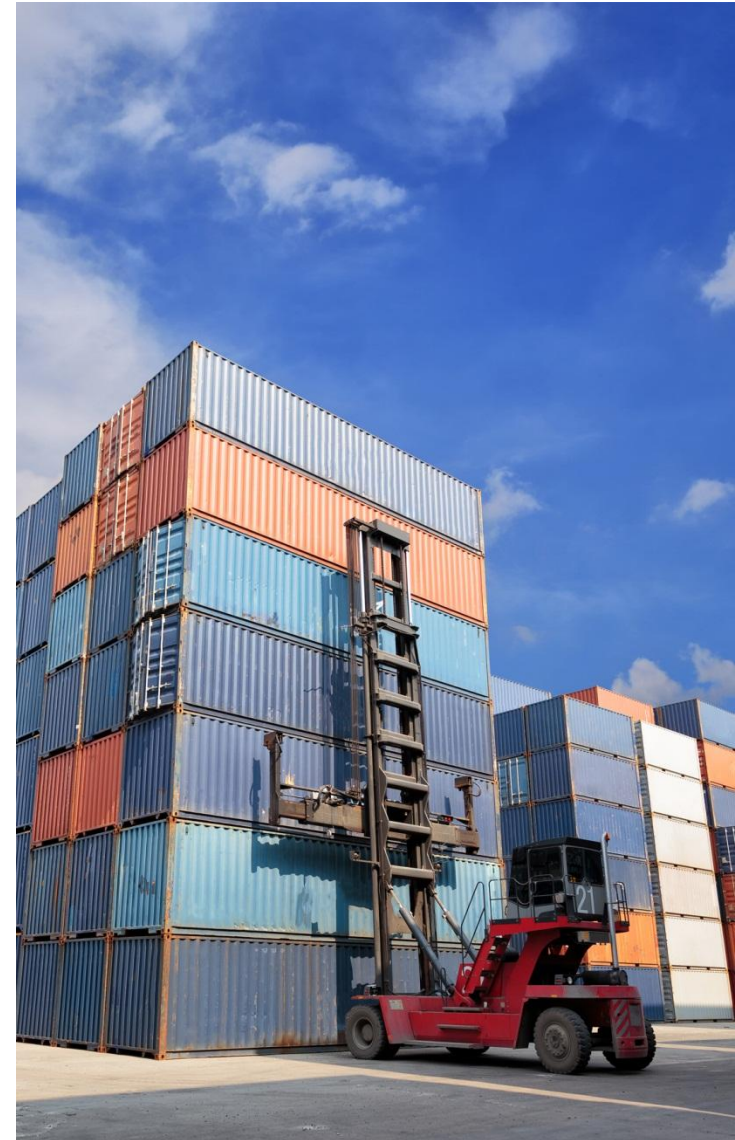
## Electronic Shipping Solutions

- Market acceptance and acknowledgment of benefits
- Large corporations such as Bunge, ExxonMobil and Cargill have entered into agreements with Electronic Shipping Solutions
- Note: ANZ four-cornered Bank Payment Obligation (BPO) transaction April 2015



## The case for change - advantages

- “Why change? What will I gain?”
- Save time, decrease operating costs, more convenient and safe
- However some things never change - examples



## P&I clubs and market



## In conclusion

- Pace of technological change and inevitable impact on shipping industry
- Predictions
- Practical benefits



HILL DICKINSON

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# Questions & answers

A presentation by  
**HILL DICKINSON**

