

UK P&I CLUB



MAY 2017

LEGAL BRIEFING

Sharing the Club's legal expertise and experience

Electronic Bills of Lading

UK P&I CLUB
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LEGAL BRIEFINGS

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Sharing expertise

We have recently seen many of our Members switching to electronic bills of lading ("eBLs") on some of their trades. The move towards a paperless trade is therefore gaining momentum. The Club is, however, still receiving many questions about eBLs and about the three eBL systems approved by the International Group of P&I Clubs, namely Bolero, essDOCS and e-title™. This Legal Briefing provides brief explanations on these three systems and how each of them works.

If Members have any questions after reading this Legal Briefing, please do not hesitate to contact the authors or your usual Club contact. Links to useful resources where answers to additional questions may be found are also provided at the end of this Legal Briefing. ■



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Electronic Bills of Lading

After a slow start, the switch to eBLs is definitely gaining momentum with three approved systems and the promise of an exciting new world ahead where everything can be achieved with the click of a button.

The electronic revolution (late 1970s – 1980s)

The global trade in goods involves many parties including carriers, distributors, cargo interests, banks, insurers, government agencies, terminals and customs authorities. This means a lot of paper documents need to be generated, copied and sent all over the world. With advancement in Information and Communications Technology (ICT), some of the above parties were quick to take advantage of Electronic Database Interchange (EDI) systems capable of transferring data from computer to computer to speed up transactions in their trades. Documents such as invoices, booking notes, booking confirmation slips and even sea waybills became routinely generated and transmitted electronically.

Attempts to create an eBL, however, faced more challenges.

Legal hurdles under English Law

Under English Common Law, the bill of lading is a document of title. Title to the goods resides in the bill and this title is transferred with the transfer of the bill. Whoever has the bill also has right of possession to the goods. Cargo can only be delivered against presentation to the Master of one original of this paper bill. As an eBL cannot be physically presented to the Master, it cannot be a document of title.

The Carriage of Goods by Sea Act 1992 (Coga 1992) contains provisions to get around the problems of privity of contract so that an assignee can stand in the shoes of the shipper to sue the carrier directly for any loss or damage to his goods. Coga 1992 does not however apply to eBLs. This means holders of eBLs cannot rely on Coga 1992 to give them rights to pursue claims against the Carrier.

The above hurdles aside, earlier attempts at creating an eBL system were also less successful because some systems required participants to invest in special equipment or hardware which was unpopular, some systems were not completely free from paper whilst others had security concerns which they were not able to overcome.

The three eBL systems approved by the International Group of P&I Clubs

Despite the problems encountered by the earlier eBL systems, some eBL systems were eventually developed successfully.

The International Group of P&I Clubs (IG) approved the Bolero and the essDOCS systems in 2010, and the e-title™ system in 2015. The latest approved versions of these systems at the time of writing are listed below:

- Bolero International Ltd Rulebook/Operating Procedures September 1999 (“Bolero”);
- essDOCS Exchange Ltd DSUA 2009.3 and 2013.1 (“essDOCS”); and
- E-Title Authority Pte Ltd (e-title™) – The Electronic Title User Agreement version 1.2

The IG in approving these three systems wanted firstly to ensure that these systems would be capable of performing the three functions of a bill of lading namely as a receipt, as a document of title and as a contract of carriage which incorporates the Hague or Hague-Visby Rules.

The legal frameworks for these three systems have been subjected to scrutiny



PAPER TRADING

by various legal experts and it is on the strength of these reviews that these three systems have been approved for use by these Clubs' Members.

Problems of trading in paper

The three main problems associated with the paper BL are delays, costs and security risks.

Delay

Ships frequently arrive at the discharge ports before the paper BL as the paper BL has to be transported from party to party usually by courier service. The non-availability of the paper BL at the discharge port means the cargo cannot be delivered because delivery of cargo other than against presentation of an original bill of lading may prejudice the carrier's P&I cover.

This results in demurrage claims or storage costs. If the cargo is a perishable cargo, the delay may even lead to the loss of the whole cargo.

In this scenario, parties often agree to deliver the cargo against a Letter of Indemnity (LOI). This, however, adds an administrative burden and cost to the trade. A LOI is also a generally unsatisfactory solution because it does not remove the carrier's liability under the bill of lading for cargo mis-delivery claims.

The risk of an eBL not being available at the discharge port to enable cargo discharge is on the contrary, remote. In early trials conducted, a complex commodity paper BL trade which usually takes 20 days to complete was completed in 4 days via Bolero, whilst a simpler trade which usually takes 4½ days to complete using a paper BL was completed in 65 minutes on essDOCS. e-title™ also conducted some trials on straightforward container line trades in which the eBLs completed their journeys in under a day.

Costs

The cost of issuing and managing paper BLs, LOIs and other paper

documentation is estimated to be upwards of 15% of the physical transportation costs. When eBLs are used, the requirement for LOIs is reduced by some 90%. This means a huge reduction in costs for the participants involved.

Security risks

Paper BLs are easily forged, stolen or lost. Again, when a paper BL has gone missing, the carrier often agrees to deliver the cargo against a LOI or a Bank Guarantee. The carrier, however, remains responsible for mis-delivery claims under forged BLs and stolen BLs.

The providers of the three IG approved eBL systems have built into their systems multiple layers of security making it very, very difficult for fraudulent eBLs to be created through their systems. Furthermore, as eBLs are not physically transferred from hand to hand, they will always remain securely stored in electronic form and will never go missing.

So, eBLs appear to have solved the three main problems of trading with paper BLs.

How Bolero and essDOCs work

As e-title™ works slightly differently to Bolero and essDOCS, we will explain e-title™'s workings separately to the workings of Bolero and essDOCs.

By way of background, Bolero was created jointly by TT Club (a sister club of UK P&I Club) and SWIFT, the international banking co-operative, to allow the trade to continue in the e-medium after the trade itself has been concluded. The creators of essDOCS were two MBA students who found the paper trade archaic and who set out to design a system that would propel the shipping industry into modern times.

These two systems therefore have different roots and look different. However, as you will see from below, both systems actually work in very similar ways:

- Both systems try to replicate the process flow and roles performed by the paper BL.
 - Both systems provide legal frameworks governing the use of their systems and media for data transfer. Users agree to treat electronic documentation within the systems as the functional and legal equivalent of paper documents, and undertake not to challenge the validity of any transaction or communication made on the ground that the same was made in e-form, instead of in paper form and/or that it is not signed or sealed.
 - Bolero's legal framework comprises of its Rule Book ("Rulebook") and essDOCS's legal framework comprises of its ess-Databridge™ Services & Users Agreement (DSUA). Both are multilateral agreements between all users and between each user and the respective system provider. It is important for each issuer of an eBL to be a signatory to the Rulebook/DSUA because it is the issuer of the eBL (usually the registered owner or bareboat charterer) who needs to be covered by the multilateral contract. Only through the issuer signing the agreement can the functional equivalence with a paper BL be guaranteed.
- The management or operating company does not have any rights or liabilities under the BL and it therefore does not need to sign the Rulebook/ DSUA.
- Both systems have central registries for the logging and storing of the holdership of the eBL for future reference. Bolero does this through its title registry which is a shared service for holder details and essDOCS does this via a centralised database.
 - Both systems are accessed via the internet and users do not need to invest in special hardware.
 - Both systems are constantly tested against external hacking and viruses and other forms of cyber attacks and both system providers take out

HOW THEY WORK

insurance against cyber risks for losses caused by their systems. essDOCS for example provides a standard \$20m cover per eBL free of charge. Whilst the details of Bolero's insurance cover are not publicly available, Bolero believes it has sufficient cover to meet its customers' requirements.

- Each party in a cargo transaction (shipper, carrier, bank, receiver) needs to be registered to use the same system. Security checks are carried out on all parties to prevent fraud. Only authorised parties are entitled and able to access the systems' registries to determine the status of the eBL and identify the party 'holding' the eBL. Users are issued with their own private keys which serve to identify the users. All instructions issued by users through these systems must be digitally signed, and may be encrypted by the Users so that messages can only be read by the intended recipients.
- The eBL is created on the system, uploaded and sent in draft form for approval between shipper and carrier. The eBL can incorporate a charter party or other external terms. Once agreed, the carrier issues the eBL with the click of a button. The eBL is then sent by the system to the next party in the chain (e.g. shipper) with another click of a button. The eBL can also be passed back and forth between holders in this way if, for example, amendments to the document need to be made. Like a paper BL however, there can only be one holder of an eBL at any time.
- Both systems rely on the principle of novation, instead of Cogsa 1992, to transfer rights and obligations. Instead of the assignee standing in the shoes of the assignor and suing under the original BL, the parties contractually agree that there is an express novation of the contract of carriage each time the eBL is transferred from one holder to the next. On a transfer, the rights held by the transferor are extinguished. The transferee takes those rights instead and becomes a party to the contract of carriage, allowing him to sue the carrier under

the same terms originally agreed between the carrier and the shipper.

- Both systems rely on the principle of attornment to enable the new holder of the eBL to obtain title in the goods. Each time the eBL is transferred, the system generates an automatic notice from the carrier to the new holder of the eBL confirming that the goods are now held to the new holder's order.
- Both systems have procedures for switching the eBL to a paper BL at any point in the transaction.

How e-title™ works

e-title™ is the latest of the three eBL systems to be approved by the IG, for use by the IG Clubs' Members. The company is founded by three ex-members of Bolero who recognised a niche in the market for a mechanism to assist carriers and logistic operators to issue and release bills of lading in a digitised electronic form without making any changes to the bill of lading or to the functionality of the bill. e-title™ is a patented software solution ("the solution") likened to the "intel" chip on laptops. It focuses primarily on enabling the secure transfer of the title in, and the negotiable function of, the document between trading parties.

- Like Bolero and essDOCS, e-title™ also has a legal framework called the Electronic Title User Agreement. This is again a multi-lateral agreement under which all users agree to treat e-documentation as the functional and legal equivalent of paper documents and undertake not to challenge the validity of any transaction facilitated by the system.
- Unlike Bolero and essDOCs however, e-title™ does not rely on the principles of novation and attornment to deal with the difficulties of transferring title in an eBL. Instead, e-title™ incorporates Cogsa 1992 into its user agreement so that all users signing the agreement agree that Cogsa 1992 applies also to eBLs generated under the system.
- e-title™ also differs from Bolero and essDOCS in that it operates as a non-centralised system. It is often referred to as a peer-to-peer system as it is there simply to facilitate the secure transfer of the eBL from one holder to another holder
- Currently, the carrier can choose to deploy the solution via the Singapore TradeXchange portal or it can invest in a secure device commonly known as the "black box" (with obvious reference to the black box used by airlines). This black box will sit behind the carrier's own in-house system for generating bills of lading. Using e-title™'s patented software, the Singapore TradeXchange portal or the black box will give the bills issued by the carrier's own in-house system, e-title and negotiable functionality, "locking" these two qualities into the eBL.
- The carrier's customers will access the solution via the carrier's portal on the internet. Each time the eBL is transferred from holder to holder, the endorsing party signs the endorsement record, ensuring authentication, non-repudiation and data integrity, similar to the physical endorsements on the back of a paper BL. As with paper BLs, the eBL can, at any one time, be possessed by only one party.
- Like Bolero and essDOCs, e-title™'s eBL can also be converted into a paper BL at any stage of the trade.
- e-title™ manages the state of its eBLs at all times to prevent double trading or illegal transfers. e-title™ maintains secure logs of every eBL transfer. The logs are used to provide status information to a user, for dispute resolutions between users, and as back-up in the event of a systems failure.
- All e-title™ users are also members of Electronic Title User Group (ETUG). ETUG is responsible for maintaining e-title™'s user Agreement terms and conditions and for resolving disputes between parties under a defined procedure.

CYBER RISKS

BIMCO's eBL Clause

BIMCO has published an eBL clause for use in charter parties. An express clause such as this BIMCO's clause needs to be incorporated into charter parties if the parties intend that charterers will have the right to order owners to issue eBLs.

The BIMCO Electronic Bills of Lading Clause

(a) At the Charterers' option, bills of lading, waybills and delivery orders referred to in this Charter Party shall be issued, signed and transmitted in electronic form with the same effect as their paper equivalent.

(b) For the purpose of Sub-clause (a) the Owners shall subscribe to and use Electronic (Paperless) Trading Systems as directed by the Charterers, provided such systems are approved by the International Group of P&I Clubs. Any fees incurred in subscribing to or for using such systems shall be for the Charterers' account.

(c) The Charterers agree to hold the Owners harmless in respect of any additional liability arising from the use of the systems referred to in Sub-clause (b), to the extent that such liability does not arise from Owners' negligence.

Under sub-clause (a) of the BIMCO clause, owners and charterers agree that the eBL issued will have the same effect as a paper BL.

When owners delegate to charterers the right to issue an owners' eBL, essDOCS and Bolero require the owner to provide a Power of Attorney (POA) to the charterer.

There is currently no IG approved POA wording but samples of POA wordings acceptable to Bolero and essDOCS are appended at the end of this article for Members' use. e-title™ does not require a POA to be issued by the owner to the charterer when charterers issue owners' bills.

Does the carrier have to pay to issue eBLs?

At present, Bolero and essDOCS do not charge carriers membership fees or



transaction fees for using their systems. e-title™ charges a fee for each transaction. This may however change in the future and there is also a possibility that future eBL systems coming onto the market may require carriers to pay upfront.

Sub-clause (b) of the BIMCO clause therefore provides that the cost to subscribe to and/or use the eBL system will be for charterers' account.

Does issuing an eBL expose the carrier to additional liabilities?

In signing up to use an eBL system, a user is obliged to undertake certain obligations relating to maintenance of computer links, and to confidentiality. Users should exercise usual IT care which we suggest would include installing and maintaining up-to-date anti-virus software. Users should also ensure that they have rules and procedures in place for members of staff issued with private keys to keep those private keys secure and confidential. However, such liabilities of confidentiality, etc. are common to most contracts which Members enter into and do not necessarily expose

Members to risks different to those which Members already face in their day-to-day business operations. These types of obligations and liabilities are non-marine in nature and thus not covered under Members' P&I cover.

Sub-clause (c) of the BIMCO Clause provides owners with an indemnity in respect of additional liabilities arising from the use of the parties' chosen eBL system provided that such liabilities have not arisen from owners' negligence.

Furthermore, when Members issue an eBL using an approved version of one of the eBL systems approved by the IG, P&I cover for the eBL transaction will be the same as that extended to a paper BL.

Cyber Risks Concerns

This appears to be the main concern impeding Members from making the switch from paper BL to eBL. Cyber risks are, however, not risks which are specific to the use of eBLs. Simply put, cyber risks are the risks of using a computer such as the risks of viruses, hacking, theft of information and blackouts. As computers are used to conduct Members'

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businesses on a daily basis, Members are exposed to cyber risks every day.

The insurance covers taken out by the system providers may cover losses which can be attributed to the providers' systems but will not cover losses caused by any weaknesses in the users' own systems. As mentioned, such weaknesses may include a failure to install up to date anti-virus software, and a failure to keep private keys and unique identifier codes issued by the providers confidential, thus enabling the systems to be hacked into or accessed by fraudulent parties, resulting in losses to the users and/or to third parties.

Many general business liability policies provide cover for such cyber risks and Members may therefore find that these risks are already covered under their business liability policies. In today's world, where cyber-crime is ever on the increase, the most recent example being the WannaCry ransomware cyber attack, we suggest it would be prudent for businesses to include such cover in their business liability policies.

Claims involving eBLs

Although there have been several cases and case precedents involving electronic documents, we are not aware of any past or current cargo claims or disputes involving eBLs. essDOCS, Bolero and e-title™ have also confirmed that they are not aware of any cases in any jurisdiction questioning the validity of an eBL.

Growth and Innovation

Bolero and essDOCS have reported fast annual growth averaging 60% annually in their respective memberships over the past three years. Their respective memberships now cover over 70 countries in all continents.

All the major traders in the metals, ores, agriculture and energy fields are now using paperless trade to varying degrees.

All three providers are/ have developed products to link major global banks

into the paperless cargo trade and to assist supply chain participants make the move to a paperless trade.

Bolero advises that it currently provides a comprehensive suite of cloud based applications that link carriers with buyers, sellers, banks and other trading parties and a secure integrated connectivity with specialised document preparation solutions, treasury management systems and other back office business applications. It is continuously working with ports and customs authorities around the world to promote the adoption of digitisation.

essDOCS claims that its CargoDocs solution can link all supply chain participants. Exporters, forwarders and logistics companies can manage the online creation and approval of trade documentation in its DocPrep module. Original title documents required for export, shipping, trade, finance and import (such as eBLs) can be electronically signed, presented and exchanged by exporters, importers, carriers, banks (and other relevant parties) in its DocEx module. essDOCS also advises that work is currently underway to tie its system to Customs Authorities' 'single windows' to enable a fully digitised process without the need to print out paper copies for local authorities that do not (or cannot) accept eDocs.

e-title™ has been working in partnership with carriers and global service providers to extend its services to support the use of eBLs. e-title™ is currently focussing on assisting small and medium sized companies, particularly in the liner sector, to integrate their freight and trade transactions seamlessly into a paperless international trading platform.

The future – Blockchain technology?

Blockchain technology is heralded as the future for a myriad of things including the global supply chain. This technology was invented to create the Bitcoin currency in 2009. The technology consists of an online chain of blocks, with each block recording, using cryptology technology, a chain of transactions of coins

that have been confirmed. Technology to ensure the uniqueness of a transaction using cryptology is not new but the forming of all these transactions or blocks into a chain, thus the name "blockchain technology" is new. Blockchain technology provides a highly secure and permanent means of recording digital transactions, because existing data cannot be deleted or amended. This ensures no double spending of the same coin.

As an eBL must be a unique document throughout its life cycle to ensure that only the holder of the eBL can exercise the right to claim the goods, blockchain technology which guarantees uniqueness, is equally applicable to an eBL.

Blockchain technology offers the possibility for an open decentralised system, unlike the current Bolero and essDOCS systems which are closed systems based on central registries. This will allow easier access to participants along the whole supply chain.

All the three systems approved by the Clubs currently already use cryptography and encryption to address the problem of security. Bolero and essDOCS are now also developing new versions of their systems incorporating blockchain technology, offering ever greater inter-operability for users.

At the time of writing, essDOCS have announced that it will be launching its blockchain technology version of eBL before the end of 2017.

Conclusion

New, innovative and revolutionary products are constantly being launched by the eBL providers, taking us ever nearer to a completely paperless global trading system.

It is difficult to argue against the benefits of an eBL trade in terms of the time saved, the reduction in administrative burden and the additional security inherent in it, which all translate into substantial savings in costs. Something else not to be overlooked in a paperless trade is of course, the number of trees saved! ■

FURTHER READING

For more details about the three eBL systems, please refer to the resources below, and if you'd like to discuss any of the issues raised in this article, please feel free to contact the authors or your usual Club contact.

IG Group

www.ukpandi.com – Paperless Trading FAQ

www.ukpandi.com – Electronic Paperless Trading Systems

Bolero

www.bolero.net – eBL FAQ

essDOCS

www.essdocs.com – User Agreements

www.essdocs.com – Industry Approvals

www.essdocs.com – Electronic Bills of Lading

e-title™

www.e-title.net – How does e-title work?

www.e-title.net – FAQs

www.e-title.net – Electronic title user agreement

BIMCO

www.bimco.org – Electronic bills of lading

CMI Rules

www.comitemaritime.org – Rules for electronic Bills of Lading

Power of Attorney

www.ukpandi.com – Bolero Power of Attorney wording

www.ukpandi.com – ess DOCS Power of Attorney wording



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