

Switching From Paper to Electronic Bills of Lading

HAS THIS LED TO AN INCREASE OF DOCUMENTARY FRAUD?



BOARD DISCUSSION

Spotlight on eBOLs

Digital signatures, audit trails, and data breach protection are all advantages.

Risks posed by cyber, people, and gaining industry acceptance.

Companies need to be aware of, and manage, the new risks that accompany use of eBOLs.

Fraud in the maritime and marine industries has been a prevailing risk, particularly documentary fraud involving the bill of lading (BOL).

For both the maritime and marine insurance industries, the BOL is used in legitimate business operations to evidence receipt, the contract of carriage, and title. Fraud erodes this system, however. To combat the threat of documentary fraud, the introduction of the electronic bill of lading (eBOL) has been hailed as a means of minimising traditional, paper-based frauds.

Despite these efforts, there is much disquiet surrounding the usage of eBOLs. As with any comparatively new concept, there is uncertainty regarding possible risk exposures.

This whitepaper hopes to offer guidance from an insurance perspective, reviewing the effect of eBOLs and their impact on the prevalence of fraud in the maritime and marine industries.

PROBLEMS OF PAPER BILLS

When understanding the function of title to goods, manipulating maritime trade provides the potential fraudster with the means to acquire cargoes and monies unscrupulously.

Developments in publishing and reprographics have eased fraudsters' abilities to copy, manipulate, and forge paper trading documents to fool the unwary.

Considering these vulnerabilities, the industry sought an alternative solution. The development of eBOL technology was a concerted effort to help eliminate risks of paper BOLs. Assessing the extent to which paper-based fraud can be averted through eBOLs and whether, indeed, this new technology poses other increased risks of documentary fraud, will be explored further in this paper.

EMERGENCE OF EBOLS AND ACCEPTANCE BY INSURERS

Recognising the benefits afforded by information technology, it did not take long for the maritime industry to follow suit with the development of electronic documentation. eBOL services have since been offered by three separate enterprises:

- Bolero: Operates by sending bills electronically on behalf of the carrier to prospective consignees via the Internet, following authentication by a digital signature, and then submitted to the Bolero Title Registry.
- essDOCS: Allows for eBOLs to be drafted directly onto a system known as CargoDocs.

- E-title: A peer-to-peer system which utilises the user's back office functions to create electronic titles through a Hardware Security Module (HSM), which safeguards the information.

Following the introduction of ecommerce solutions, debate has reigned among insurers, particularly Protection and Indemnity (P&I) clubs, concerning the acceptance of eBOLs, with security cited as the main concern.

Fraud is a covered peril under Rule 2(b) of the UK P&I Club Rules, for example; however, before February 2010, the International Group of P&I Clubs (IG) relied upon the Paperless Trading Endorsement which specifically excluded liabilities arising out of the carriage of cargoes under electronic trading systems. The position was subsequently reversed following a review of ecommerce systems, particularly eBOLs.

A circular was issued on 8 September 2010 by the IG (updated in October 2015 to include E-Title) which reads as follows:

The Group, after reviewing a number of electronic trading systems, agreed that liabilities arising in respect of the carriage of cargo under such systems would be covered from 20 February 2010 provided that the system had first been approved by the Group.

Two systems approved by the Group in their versions current at the date of this circular are that administered by Electronic Shipping Solutions (the ESS system - version DSUA v. 2009.3) and that administered by Bolero International Ltd (the Bolero system - Rulebook/Operating Procedures September 1999).

ASSESSING THE ADVANTAGES AND DISADVANTAGES OF EBOLS

There are concerns for insurers, however, regarding the security features of eBOL technology. Below we assess the advantages and disadvantages of electronic bills to determine their corresponding effects on increasing documentary fraud.

ADVANTAGES

Digital signatures

Although there is no way to completely prevent dishonesty in bills of lading, eBOLs combat against fraud by authenticating signatories digitally and making it more difficult to amend the document once issued. The technology allows only those persons/parties authorised to the trade to have access to the system and to the trading documentation therein. Electronic signatures and Personal Identification Numbers (PINs) ensure digital authorisation.

Audit trails

As well as authenticating the trade, eBOL technological systems allow users to carry out audit trails, allowing them to review the progress of a transaction and oversee the changes being made to the trading documentation, when and by whom.

Protection in the event of a security breach

Safeguarding the entire operation for both essDOCS and Bolero

is the provision of insurance protection in the event that security is compromised. For instance, essDOCS holds liability cover in the event of security breaches and other associated eRisks for up to US\$20 million per eBOL. Bolero also has similar coverage.

DISADVANTAGES

Despite the advantages this technology offers, advances, eBOL technology is not impenetrable to risk. EBOLs have created new electronic risks, which are not traditionally covered by marine insurance.

eRisks, cybercrime and vulnerability of processes and technology

Hackers could target shippers', agents', or carriers' email accounts, produce modified links/email addresses, email redirection, doctored attachments, fake company websites, and, crucially, fake eBOLs.

Furthermore, eBOLs could be at risk of internal collusion, in which someone has access to the system and can actually generate bills, legitimately, within the system. These are accepted by the system and, perversely, gain credibility, because they are electronic.

Moreover, there are the following additional technological exposures:

- The software could incorrectly identify a fraudster as the proper consignee.
- Encryption algorithms could be defective and liable for impersonation.
- Pirated/substituted versions might allow for impersonation of the true software by a fraudster.

Vulnerability of people

Naturally, a technological system is only as reliable as the people that maintain it.

EBOLs have created new electronic risks, which are not traditionally covered by marine insurance.

The risk is elevated still further when those people are too reliant on apparently fool-proof technology. Indeed, banks today have centres outsourced worldwide, where processing staff read the screen but never handle the original trading document, whether paper or electronic, which could lead to fraud going undetected.

Challenges of international law and industry endorsement

Another challenge is the lack of universal acceptance of eBOLs across internationally trading companies. In countries where there is acceptance of eBOLs, attitudes can be varied and not necessarily consistent in all international markets, particularly in those that are slower to implement new technology. These complications could reveal themselves in the event of trading disputes and litigation.

RECOMMENDATIONS

In order to avoid pitfalls that could come with the use of eBOLs, shippers/carriers, banks, and insurers should engage in the following:

TRAINING

Shippers/carriers and banking staff should be more extensively trained in international trade. Victims of trade fraud often lack information governing the commodity, route, method of trade, and ability to identify inconsistencies and irregularities in the documentation used and parties involved.

CYBER AWARENESS AND RISK TRANSFER

Practitioners must be cyber-aware when it comes to their businesses and should take the following steps:

- Confirm where all address commissions and brokerage commissions are destined.

- Check the registered details of the parties involved.
- Confirm the banking details direct with receiving bank and the parties involved.
- Background research on the parties involved and their past dealings – with reference to the Baltic Exchange or BIMCO databases.

DUE DILIGENCE

Shippers/carriers, banks, and insurers should ensure that constant vigilance is maintained and discourage passive acceptance when handling eBOLs. Fraudsters need only the inattentiveness of staff-members to masquerade falsified/forged documentation as the genuine article.

ELECTRONIC BILLS OF LADING CLAUSES

For P&I clubs and their members/insureds, clauses can be drafted under a charterparty agreement, authorising said members to utilise eBOLs freely and without prejudice to their operations, and hold harmless agreements can also be agreed in respect of liabilities resulting from their usage.

POTENTIAL EFFECTS OF THE UNITED NATIONS CONVENTION ON CONTRACTS FOR THE INTERNATIONAL CARRIAGE OF GOODS WHOLLY OR PARTLY BY SEA (THE 'ROTTERDAM RULES')

Finally, under the Rotterdam Rules, there is the potential for 'functional equivalence' of eBOLs as an alternative to paper BOLs. Under Article 8(a), eBOLs are considered legally equivalent to paper BOLs and would confirm their function as a document of title. This would resolve any lingering doubts concerning their legal enforcement. At the time of writing, only three out of 20 countries have ratified the Convention.

Although unlikely that it will come into force in the near future, the Convention would certainly ease legal difficulties and help mitigate documentary fraud.

CONCLUSION

On the surface, eBOLs are a better secured method of trade when compared with their paper equivalents. The use of encryption, digital signatures, audit trails prove useful in thwarting fraudulent actions.

Despite these advances, however, a note of caution is advised. There is not a single solution which can claim 100% invulnerability. Accordingly, this study has made a number of recommendations which it hopes will prove important in assisting maritime and marine insurance practitioners when identifying eBOL exposures and complement existing risk management strategies.

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ANDREW MACKENZIE

Claims Advocate

Marine Claims

+44 (0) 207 357 2484

andrew.mackenzie@marsh.com

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