

CHALLENGES REGARDING THE ELECTRONIC BILL OF LADING (EBOL)

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Abstract

The electronic bill of lading (eBoL) has not been into practice up to the present despite the fact that digitalization gains ground at a rapid pace. There are a few reasons why there is such disbelief as regards the substitution of the paper bill of lading. Generally speaking, a great debate has been raging all these years. Advantages as well as disadvantages are to be found on both sides. On the one hand, defenders of the idea that the electronic bill is realizable in near future even though there are a few drawbacks to be overcome, collide with the reluctance and hesitation of those who controvert the concept of the eBoL. But on which basis are the objections and oppositions exactly based. Significant steps in the right direction are to be pointed out, but it seems that there are still crucial practical hindrances at the front.

Keywords: eBoL, document of title, negotiability, pledge, EDI

1. An Overview

The disadvantages of the paper-based seaborne trade drew the attention of the international community, which acted on the new challenges by trying to introduce the electronic bill of lading. In the context of universal digitalisation as a fundamental characteristic of the modern era, where computers play a great role in transactions (electronic commerce), it is pointless to stay attached to the traditional shipping documents, including of course the paper bill of lading. However, as it turned out, the reaction of the community could be described as perfunctory and facile rather than coordinate and prosperous. Moreover, trade community seems to adhere to the idiom 'do not rock the boat' and is reluctant to accept any new idea and practice. This stand is partly justifiable, considering also that there are functional aspects that make practically difficult or even impossible the usage of the electronic bill of lading. Indeed, the major reason of the unsuccessful institution of the electronic bill of lading is to be found in the inherent features of the traditional bill as document of title. These features and mainly the negotiability of the bill of lading are not attributable to the electronic bill.

Although the electronic bill of lading has definitely many advantages in comparison with the paper bill, the former cannot substitute the latter. As it will be analysed below, in terms of practicality, there are some impediments that the electronic bill of lading is still not capable of overcoming. In the course of the time, this may change, although there are well-founded and sound reasons for believing that the present situation is unlikely to alter at least in near future. Of course, it is a long shot, but simultaneously it is more necessary than ever.

2. Electronic Bill of Lading

Although the majority opinion may assume that the electronic bill of lading constitutes simply the electronic form of the traditional bill of lading, just a few remarks need to be noted. Of course, the above view is partly right, since the electronic bill of lading shall be identical to the paper bill, but the former has an additional fundamental component, which lies within the transmission of the electronic messages among all parties that are involved.

3. Pros and Cons of The Electronic Bill of Lading

On the one hand, the advantages of the electronic bill of lading are not to be disregarded at all, especially in the modern digitalised age. Considering that the velocity of the vessels has been significantly increased, the major problem of the paper bill of lading is that it arrives at the consignee after the arrival of the goods. In that sense, it is self-evident that the paper bill inflames the problematic situation and consequently, its displacement is essential for moving forward and successfully overcoming that quite awkward situation. In addition, the use of electronic bills of

lading would result in a significant decrease in transactional costs, and in a rise of the transactions' rapidity. All these indispensable advantages are also highlighted under the pioneering scheme named as Electronic Data Interchange (EDI). Regarding the security, advocates of the international transactions conducted by electronic means, here by electronic bills of lading, contend that the latter is not so vulnerable to fraud compared to the paper bill. As it well known, the paper bill of lading is, due to its substance, more assailable to frauds compared to the electronic bill, which is less possible to be counterfeited. According to Todd, the electronic bill of lading provides "a far higher level of security than will ever be possible with paper and thus, the risks of some types of maritime fraud are reduced". However, even though the electronic bill of lading minimises dramatically the risk of possible frauds, maritime industry has an overall negative attitude towards its use, considering it insecure. This view is also reinforced by the fact that the legal regime governing the use of the electronic bill of lading is quite ambiguous, deficient and inadequate. An additional advantage of the electronic bill of lading is that a huge amount of paper is saved and, under an ecologically conscious view, this is not to be undermined at all. Paper sheets need also to be kept and stored, which actually means further expenses and expenditures (Civelek, Uca, Çemberci, 2015).

4. The Ebol In An International Convention Context

It is undeniable that the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea 2009 (Rotterdam Rules) constitutes the most ideal and appropriate legal framework in light of the contemporary transactional digitalised environment. Nevertheless, the first and even premature steps in that direction had already been made during the decade of 1970, when the United Nations Convention on the Carriage of Goods by Sea 1978 (Hamburg Rules) was enacted. The Hamburg Rules made for first time provision for the prospective introduction of electronic procedures in transport sea operations and were followed by the Rotterdam Rules in 2009, which adopted the term 'electronic shipping document' defined under Article 1(18).

In particular, Article 14(3) of the Hamburg Rules impliedly envisage the electronic bill of lading by affirming that "the signature on the bill of lading may be in handwriting (...) 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". Indeed, by recognising the validity of the electronic signature, this provision could be viewed as the first step towards the gradual introduction of the electronic bill of lading. Noteworthy is also that the Hamburg Rules provide that "writing" encompasses, among others, telegram and telex (Article 1(8)). After almost thirty years, the enactment of the Rotterdam Rules could be considered revolutionary, even though they were not welcomed by the global community. Article 8(b) of the Rotterdam Rules, which provides for the maintenance of the feature of negotiability, even though the transport record is in electronic form, is very illuminating of the great change that this set of rules aimed at bringing upon.

It is generally admitted that an International Convention which would regard the electronic bill of lading as an analogous document of title compared to the conventional bill of lading, could result in the wide endorsement of the negotiability of the electronic bill of lading, as well. The lack of uniformity through an International Convention that will have in view two main types of bill of lading equivalent to each other has as a consequence the reluctance of the traders to embrace the use of the electronic bill of lading. The necessity of a broad agreement imprinted in an international convention that would regulate the use of both the traditional and the electronic bill of lading is absolutely imperative. Moreover, that convention should deal with the additional issues that would arise as corollary of the equal legal status of the electronic and the paper bill of lading. Just to name a few indicative issues that would probably spring up as a result of an alleged equalisation; how exactly the transfer of the property and possession is addressed under an electronic bill? Furthermore, how the electronic bill will carry out the security function of the traditional bill and how priorities will be determined in case of the purchaser's or vendor's insolvency?

These questions have already concerned the international community, but the corresponding answers were, admittedly, not so satisfactory. Nevertheless, it is to be noted that although an international convention would surely foster the idea of the electronic bill of lading, it is not exclusively up to the international community. In the contrary,

domestic law can play an important role in bringing into being and materializing the idea of the electronic bill of lading.

5. Had COGSA 1992 Foreseen Beyond Paper?

Attempts towards the transformation of the traditional bill of lading to an electronic format are also noticed at a national level. As far as English law is concerned, the use of the telecommunications and computerized systems was already envisaged in COGSA 1992. Specifically, section 1(5) COGSA 1992 envisages that the specific Act applies 'to cases where an electronic communications network or any other information technology is used for effecting transactions corresponding to: (a) the issue of a document to which this Act applies; (b) the indorsement, delivery or other transfer of such a document; or (c) the doing of anything else in relation to such a document. Moreover, in order to make few terms more comprehensible and penetrable, section 5 COGSA 1992 provides their definition, including, inter alia, the definition of the term 'information technology'. Accordingly, information technology includes any computer or other technology by means of which information or other matter may be recorded or communicated without being reduced to documentary form'.

From all the above, it follows that COGSA 1992 had not ruled out the possibility of an electronic document. In contrast, COGSA 1992 recognised straight away that the documentary form is not necessarily a prerequisite for what is traditionally known as document, since the latter can also be electronically formulated.

It is evident therefore that, in the absence of an international convention, it is at the discretion of the national law to provide for regulation related to the electronic bill of lading. Indeed, for the time being it seems that it depends on the national courts whether the words, such as 'writing', 'document' etc., should be viewed under a strictly conformist viewpoint or in a liberal manner. In other words, national courts can freely decide on that issue pursuant to the interpretation rule, in favour of which they stand, and taking into account general principles.

6. The Major Defect Of The Electronic Bill Of Lading

In terms of practicability, it is well known that the most cardinal drawback of the electronic bill of lading is the lack of negotiability. In contrast to the traditional bill of lading, whose negotiability is of great significance, the electronic bill is devoid of the particular feature on the ground that it is intangible. At common law, the fact that the electronic bill is intangible means automatically that it is not negotiable, since negotiability derives from the bill's qualification as a document of title. But, what is actually a document of title?

First and foremost, documents of title are immediately relevant with the management of legal rights over the goods, including of course the possession of the goods as well as the entitlement of their delivery, which emanates from the actual possession of a genuine official paper, i.e. bill of lading. Therefore, it follows that physical possession and electronic bill of lading are two concepts absolutely incompatible and discordant. Indeed, it is strongly believed that the electronic bill of lading and notions, such as 'indorsement', 'delivery' or 'possession', do not fit together. Moreover, the electronic bill does not match adequately with the word 'holder', since the electronic bill of lading is intangible. Finally, in respect of possession, it has to be noted that, in the case of the paper bill of lading, its transfer confers possession to the consignee, while the transferor forfeits mandatorily any right over the goods. However, it is debatable whether the transfer of the electronic message would effectuate the loss of any possession of the goods by the transferor of the bill.

Notwithstanding the practical issues stemming from the use of the eBoL, such as the inherent risk of the electronic data to get lost in case of malfunction or a collapse of the computer's system or the risk of creating copies that are identical to the genuine bill of lading, legal issues are also of great significance. In light of the lack of an ambiguous legal status of the electronic bill of lading, it is at the court's discretion to decide whether an electronic bill of lading is equivalent to the paper one. In other words, it depends exclusively on the court's approach, since most national legal systems do not contain an explicit definition of the term "document" and its features. For instance, the question whether the document is required to be in written form is open to debate. Solely a few vague thoughts and abstractive concepts are to be found scattered in case law and several legislations. For example, In Ireland, the

Interpretation Act, 2005 defines writing as including "printing, typewriting, lithography, photography and other modes of representing or reproducing words in a visible form". On the contrary, when it comes to electronic documents, special terminology in lieu of the word "document" is frequently used. For example, the UN Model Law on Electronic Commerce makes reference to the term "data message", which is interpreted as follows: 'information generated, sent, received or stored by electronic, optical or similar means including but not limited to Electronic Document Interchange (EDI), electronic mail, telegram, telex or telecopy'. Likewise, the wording in the BOLERO Rulebook stays away from the term 'document of title'. In particular, it says that the electronic bill's possessor 'shall be deemed to have all the same rights and privileges under and in relation to the contract of carriage (...) and in respect of the goods to which the (electronic bill of lading) relates as he would have enjoyed had he been the holder of a conventional paper bill of lading in respect of those goods' (Rule 8.2.).

To sum up, it is implausible that the electronic bill of lading will ever be regarded as document of title under the strict standpoint of common law that requires the physical substance of the bill of lading. Generally, the majority opinion inclines to accept that the electronic bill of lading is not capable of conveying property over the goods as well as entitlements and obligations stemming from the contract of carriage, because it is not included in the exclusive enumeration of the negotiable documents of title. Moreover, it must be noted that, in the absence of a statutory definition of the electronic bill of lading and of a relevant 'merchandise custom', it is uncertain if COGSA 1971 could ever have had a so broad scope of application. It appears that the bill of lading in COGSA 1971 does not encompass the electronic message or record.

7. Can The Electronic Signature Pave The Way For The Electronic Bill Of Lading?

Once the major issue was whether the manual signature that various official documents require, can be replaced by the electronic signature. Nowadays this problem is obsolete, since both forms of signature are equally effective. Of course, the enactment of germane legislation, including the statute on electronic commerce, has played a decisive role in going over the difficulties. For instance, under common law, every document of title has to be signed manually in order to be legally valid. In terms of authentication, this is indispensable because it manifests that the document is genuine. On the other hand, in the event of electronic signature, authentication is sufficiently performed through the so-called digital key.

The great breakthrough was the enactment of the Electronic Signatures Act 2000, which embodied the Electronic Signatures Directive. According to section 7 of the Electronic Communications Act 2000, 'an electronic signature is admissible evidence in relation to the authenticity or integrity of the data or communication concerned'. As soon as the joint legislative initiative of the European Parliament and the Council was transposed into domestic law, most countries get familiarised with the idea of the electronic signature, which was legally tantamount to the handwritten signature.

8. Negotiability And Electronic Bill Of Lading

Undoubtedly, the most challenging task is the electronic replication of the negotiability of the traditional bill of lading. The rest two functions of the bill of lading, namely as evidence of the contract of carriage and as receipt of the shipment, can easily be performed in a digital environment. By contrary, the electronic reproduction of the bill's nature as document of title is hard to be carried out. Furthermore, the particular feature has further legal implications. Specifically, by virtue of the fact that it signifies the possession of the goods as well as the title to them, it is capable of constituting the legal basis for security purposes, such as the creation of a pledge.

Since the electronic bill of lading is not considered a document of title under common law, the question whether the creation of pledge based on such a bill of lading is feasible, seems to arise. Considering the present situation, one certainly concludes that the creation of a pledge over the goods through an electronic bill is fictional rather than

realizable. From the lender's point of view, only a document of title can satisfy his purpose of securing his interests. However, the concept of creating a collateral security through the electronic bill of lading is not so far away.

UNCITRAL has already got started on a plan focusing on proposals how the transactions schemes shall be technologically updated. In other words, Working Group VI in Security Interests moves forwards and proceeds on securing the digitalised transactional environment by creating credits in exchange for assets, which are negotiable regardless of their nature. Further attempts of dealing with the issue whether the electronic bill of lading can constitute the legal basis from which collateral results, are to be found in the Uniform Commercial Code (UCC) under article 9, which encompasses not only the negotiable but also the non-negotiable documents.

9. Risks Of The Electronic Bill Of Lading

One of the most fundamental risks attributable to the electronic format of the bill of lading is its vulnerability against fraudulent practices. Although protection measures are always feasible and they may even improve in future, there is always the latent risk of being hacked in. Notably, decryption systems can provide a considerably significant degree of security, but, complete and absolute protection is considered utopia. Moreover, traders are not ready to trust the use of the electronic bill of lading, believing reasonably that at the end of the day the risks outweigh the benefits.

However, one might counter-argue that, in terms of electronic bills of lading, frauds are extremely rare, since the alleged crook is required to have expertise in computerised systems. Put simply, hackers may have access to data, albeit an encryption-decryption system, on the condition that they have accomplished to hack the system in. To make matters worse, although creating a fake or counterfeit copy of the original bill of lading entails special knowledge, the created copy is indistinguishable from the genuine. By contrast, the forgery in case of a conventional bill of lading is quite easily discoverable compared to the forged copy produced via computer. The reason is that the precise duplicate of the traditional bill of lading is especially difficult because of its written form. On the other hand, as counterargument, it could be alleged that there are many more potential culprits than hackers, given that the forgery of a paper bill of lading does not demand the crook to be expert on computerized systems.

It sounds as if there is no alternative rather than the electronic bill of lading. Indeed, according to many scholars (Paul Todd), there is no choice other than welcoming the use of electronic bills of lading. They argue that, notwithstanding the massive use of sea waybills, there is a limited degree of leeway when it comes to their usage in commercial practice. Indeed, the invaluable utility of the bill of lading is apparently noticed in the event of successive transactions while the goods are still in transit. Oil carriage is admittedly an illuminating example of the bill's usefulness by virtue of the fact that possession of the oil itself is usually transferred many times during the voyage. In this regard, it is the negotiability of the bill of lading that renders it absolutely essential.

Currently, owing to recent technological advancements the use of the electronic bill of lading in lieu of the conventional one, seems to be more possible than ever, provided that the requirements enlisted below are fulfilled. Firstly, the electronic bill of lading shall enable the transfer of proprietary rights over the goods, secondly everyone shall have access to make use of it and, last but not least, it must be able 'not only to transfer but also to check the documentation electronically'. However, as it was stated before, the basic impediment regarding the evolution and the massive spread of the electronic bill of lading is the inexistence of a stable legal context regulating the use of such document and, at the same time, taking into consideration all the parties' involved in international transactions (Civelek, Uca, Çemberci, 2015). The lack of a systematized and uniform framework is the basic obstacle to the adoption of the bill of lading in its electronic format ((Civelek, Çemberci, Uca, Çelebi, & Özalp, 2017).

10. Conclusion

To sum up, it seems that for the time being the substitution of the traditional bill of lading by the electronic is not possible. In terms of some practical aspects, the latter is deemed to have significant weaknesses that set impediments in its further development and establishment. Especially, as regards the potential security provided by the electronic bill of lading, it is extremely deficient and inferior compared to the security provided by the traditional bill of lading.

Notwithstanding the ambitious efforts of UNCITRAL and, sporadically, a few creative examples, such as Article 9 UCC, it seems that present situation is unlikely to change, at least in near future.

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