# The Rotterdam Rules and Negotiable Electronic Transport Documents in Letter of Credit Business

# **Roberto Bergami**

Practice of International Trade School of Economics and Finance Centre for International Corporate Governance Research, Victoria University, Ballarat Road, Footscray Victoria, 3011, AUSTRALIA Roberto.Bergami@vu.edu.au

# ABSTRACT

This paper considers the implications of Bills of Lading issued as negotiable electronic transport documents for the maritime international carriage of goods, as proposed by the Rotterdam Rules. The legal usage of paper based documents is considered first. This is followed by discussion of the practical challenges that electronic negotiable Bills of Lading may pose, particularly in the lodgment of electronic records under international letter of credit transactions. The paper concludes that current business practices within the international trade, shipping and banking industries need substantial changes before this type of electronic document can be introduced successfully.

## Keywords

Rotterdam Rules, Letters of Credit, Electronic Negotiable Transport Documents, eUCP, International Carriage of Goods by Sea, BOLERO

# **1.0 INTRODUCTION**

The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea, commonly referred to as the 'Rotterdam Rules' (United Nations, 2009), was opened for signature on 23 September 2009, and by November 2009 the minimum quota of twenty signatory states, required for international convention status, was achieved. However, the Rotterdam Rules will not come into operation until such time as the twentieth signatory member state has ratified the rules, and it is not known for certainty when this will occur.

The Rotterdam Rules aim to replace the current three co-existing international conventions for the carriage of goods by sea, *viz* the Hague Rules, the Hague-Visby Rules and the Hamburg Rules, thereby providing one uniformly adopted worldwide standard.

The Rotterdam Rules, not surprisingly, have received praise and criticism, and have polarized opinion in some quarters of the shipping and logistics industries, and also among governments. The debate has centered on the contentious issues of volume contracts and derogations from the Rotterdam Rules, so as to potentially enable the carrier to dilute, or largely exclude liability (Parker, A., 2007; Diamond, A. 2008; Pezold, 2009). Other issues have included the uncertainty of insurance coverage availability, to compensate the traders for the dilution of carrier liability (Neame, 2009), and the discharge of cargo that may, in certain circumstances, be achieved without the surrender of negotiable transport documents (CLECAT 2009). However, due to length limitations, discussion of these issues is beyond the scope of this paper.

This paper focus on the introduction of a new type of document, referred to as the negotiable electronic transport document which, on the one hand has the potential to replace paper-based documents, but on the other hand presents considerable legal and operational challenges, particularly in the context of letter of credit transactions. These issues are discussed in the next section.

## 2.0 PAPER TRANSPORT DOCUMENTS

It is necessary to briefly describe current paperbased documentary practices, before discussing the proposed new electronic alternative.

The typical paper-based negotiable document issued for the maritime transport of cargo is the Bill of Lading (B/L). This is usually consigned 'To Order" – meaning that it may be transferred from one party to another by endorsement, and this is often done whilst the cargo is en route, to speed business transactions. The endorsement is added to the reverse side of the B/L as transfers are executed.

The B/L is produced by the carrier in a 'set' of, usually, three originals. Each original has equal value and bears the same number as the others and, for all intents and purposes, these three originals may be regarded as clones of each other.

It is common for the exporter to arrange for the movement of the goods and, therefore, the carrier will release the B/L to the exporter, who will subsequently send this on to the importer.

The carrier releases the cargo at the arrival port against the surrender of one original B/L - the other originals are thus deemed null and void as, after all, the consignment can only be claimed once. This procedure is followed regardless of whether the B/L has been transferred to third parties, or not. In the paper-based environment, therefore, the possession of the negotiable B/L is tantamount to effective control over the release of the cargo by the carrier, at final destination.

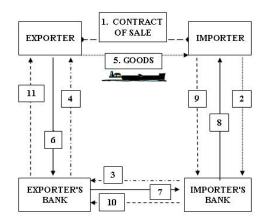
The procedure outlined above for the issue of the B/L is not affected by the Rotterdam Rules, although the terms and conditions of carriage may be varied, as derogations from the rules are allowed in contracts of carriage under this regime.

The procedure described above, however, varies where the transaction is subject to a letter of credit, because of the involvement of the bank in this method of payment, as outlined below.

### 2.1 The letter of credit cycle

Letters of Credit are governed by a set of rules, commonly referred to as the UCP 600 (International Chamber of Commerce, 2006), that specify the operations and obligations of the parties involved in this payment instrument. Letters of Credit are typically used in high value/high risk contracts. It is estimated that the annual letter of credit business worldwide exceeds 1 trillion US Dollars (Klein, 2006).

A letter of credit is a conditional guarantee of payment, given by the importer's bank to the exporter. Thus, the credit risk of the buyer is substituted with that of its bank. The condition of the letter of credit is that payment is only automatically triggered where the required documents are presented in a timely fashion, and their data content is to the satisfaction of the bank. The letter of credit flows are shown at Figure 1 (Bergami, 2009).



Legend:

- 1. Contract of sale between the parties
- 2. Importer lodges L/C application with issuing bank
- 3. Importer's bank issues L/C to exporter's bank
- 4. L/C advised to exporter
- 5. Goods despatched
- 6. Required documents lodged by exporter to the bank
- 7. Documents sent to issuing bank for acceptance
- 8. Documents released to importer
- 9. Funds transferred from importer as due
- 10. Funds transferred from issuing bank
- 11. Funds transferred to exporter
- Flows:

L/C Application (2)

L/C Issue and Transfer (3, 4) Documents (6, 7, 8)

Funds (9, 10, 11)

Figure 1: Typical letter of credit flows

Prior to establishing the letter of credit the importer's bank obtains security from the importer. Typically, this security is a percentage of the par value of the letter of credit, with 30% not being uncommon. This means that the importer's bank has a funding and financial exposure equivalent to the difference between the value of the security obtained and the par value of the letter of credit.

The importer's bank usually protects its financial exposure by having the B/L consigned to the order of itself, for account of the importer. This is a risk mitigation strategy enabling the importer's bank to withhold the release of the cargo, in case of doubt on the importer's ability to pay as due. In a worse case situation, the importer's bank could always resort to having the goods sold to recover any outstanding debt.

Of particular relevance to the discussion in this paper are steps 5, 6 and 8, in Figure 1, showing the

movement of the documents required under the terms of the letter of credit, including the transport document. It is important to note that all documents are to be lodged in a timely manner and in a single presentation to the exporter's bank, consequently, this can only occur after shipment. The exporter's bank forwards the documents to the importer's bank, as per step 7 in Figure 1.

The issuing bank releases documents to the importer, after processing. To avoid storage at the arrival port, it is necessary for the documents to be released to the importer prior to the arrival of the goods. It is usual for the customs clearance process to begin as soon as the documents are made available, to minimize any delays. Typically, the importer uses the services of a customs broker and, consequently, the documents, including the negotiable B/L, are transferred to this party for processing.

Importers, at times, purchase goods with the intention of on-selling the cargo to a third party, preferably whilst the consignment is en route. This may still be achieved where a letter of credit is involved. Once the B/L is released to the buyer from their bank, as per step 8 in Figure 1, that bank ceases further involvement in the process. Consequently, the buyer is free to transfer the B/L to third parties at will. As the holders of original B/L, third parties may collect the goods from the carrier, at destination, on surrender of one original B/L. It is the ability to transfer the rights in the goods to third parties that is the most important aspect of the discussion in this paper.

In the description of the process, as outlined above, it can be noted that the paper-based documents are physically transferred from one party to another, for appropriate handling and processing.

The Rotterdam Rules introduce the notion of a negotiable electronic transport document capable of being transferred between parties. How can the negotiability of a B/L be transferred in an electronic environment? In order to answer this question, two issues need to be considered: firstly the definition of an electronic record according to the Rotterdam Rules and, secondly, the legal status of electronic documents in commerce today. Both of these issues are discussed in the next section.

# **3.0 ELECTRONIC DOCUMENTS**

The Rotterdam Rules define a transport document in Article 1.14 as:

a document issued under a contract of carriage by the carrier that:

(a) Evidences the carrier's or a performing party's receipt of goods under a contract of carriage; and

#### (b) Evidences or contains a contract of carriage.

From this definition, three types of transport documents are possible. The first two - the paperbased negotiable and non-negotiable transport documents – already exist, but the electronic option is a new addition. This is referred to as an electronic transport record and it may be in either negotiable or non-negotiable format. The non-negotiable electronic record is already starting to be used, because, as it lacks negotiability, its legal status is much easier to define and accept. This type of document is not considered further in the argument in this paper.

#### 3.1 Electronic transport records defined

The Rotterdam Rules define electronic transport records in general, as per Article 1.18, as being:

information in one or more messages issued by electronic communication under a contract of carriage by a carrier, including information logically associated with the electronic transport record by attachments or otherwise linked to the electronic transport record contemporaneously with or subsequent to its issue by the carrier, so as to become part of the electronic transport record, that: (a) Evidences the carrier's or a performing party's

receipt of goods under a contract of carriage; and

(b) Evidences or contains a contract of carriage.

Negotiable electronic transport records are defined in Article 1.19 as being a record:

- (a) That indicates, by wording such as "to order", or "negotiable", or other appropriate wording recognized as having the same effect by the law applicable to the record, that the goods have been consigned to the order of the shipper or to the order of the consignee, and is not explicitly stated as being "non-negotiable" or "not negotiable"; and
- (b) The use of which meets the requirements of article 9, paragraph 1.

Article 9.1 refers to the procedures for the use of electronic transport records, and at subparagraph 2 it states in part that the procedures "shall be referred to in the contract particulars and be readily ascertainable".

The definition in Article 1.19 relies on legal acceptance of the electronic record. The problem with such acceptance is that legal frameworks have not been sufficiently developed, to date, to bestow negotiability on to an electronic record that is used internationally.

#### 3.2 Electronic transport records at law

UNCITRAL published a Model Law on Electronic Commerce in 1996, but this is not an international convention. It provides suggested patterns for consideration by law makers in each country. Despite the efforts of some countries, such as South Korea, to recognize electronic records at law, there is little comfort at present with electronic trade in negotiable documents across international borders, as

the legal status of electronic transactions remains uncertain in many economies where domestic ecommerce legislation has not been passed. In addition, the lack of a standard method for positively establishing the identity of trading partners has limited the demand from the private sector for electronic trade-related services with global focus (Department of Foreign Affairs and Trade, 2001, pp. 4-5).

Electronic records requiring negotiability are challenging because of endorsement requirements. For example, if an electronic record issued as a freely transferable record, this would need endorsement prior to transfer to a subsequent party. The endorsement, as additional data, would result in the creation of another electronic file, different to the original file, and this is where legal difficulties arise. Added to this are also the problems associated with the transfer of data between the parties involved in a letter of credit transaction, as discussed in the next section.

# 4.0 eUCP AND LETTERS OF CREDIT

The submission of electronic records in letter of credit transactions have been available since 2003, through supplementary rules, commonly referred to as eUCP (International Chamber of Commerce, 2002). The eUCP, updated in 2006 (International Chamber of Commerce, 2006b), apply to letter of credit transactions where the documents are wholly or partially submitted electronically, by substituting the relevant articles from UCP 600 (paper-based presentations), as appropriate. The application of the eUCP can significantly change the presentation of document processes as outlined in steps 5 and 6 in Figure 1.

The eUCP appears to provide advantages, but it also imposes a number of difficult compliance obligations, for the exporter, in relation to electronic record transmissions and receivals, and these issues have precluded the eUCP from being widely adopted.

In paper-based transactions, documents must be submitted by the exporter in one presentation, as shown in step 6 in Figure 2 (Bergami, 2004, p 30). It should be noted that for consistency and comparative purposes, the step numbering sequence has been kept the same as Figure 1.

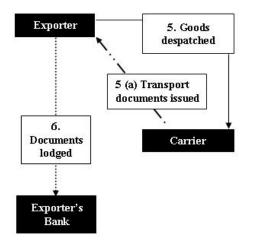


Figure 2: Letter of credit lodgment of paper-based documents

Electronic records may be presented directly to the bank by third parties, separately to the presentation the exporter makes, as shown in steps 6(a) and 6(b) in Figure 3. In accordance with requirements of Article 5(c) of the eUCP, the exporter must provide a notice of completeness in relation to the presentation of documents/records under a letter of credit transaction, as shown in step 6(c) in Figure 3 (Bergami, 2004, p. 30).

It is difficult to imagine how an exporter could issue a notice of completeness, where the electronic record is sent directly from a third party to the bank. Even if the exporter obtains a copy of the electronic record, this does not guarantee that it was delivered and received by the bank.

Other issues, such as security of data transfers and corruption of records, raise additional challenges. For example, once the electronic records have been lodged, these need to be transferred from the exporter's bank to the importer's bank, as reflected in step 7 at Figure 2. Depending on the type of record, this may be a relatively simple task, however, if the record is only accessible via a link to a secure site, access issues are bound to raise security concerns.

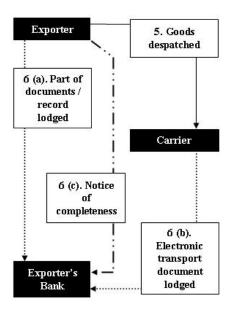


Figure 3: Letter of credit lodgment of electronic records

Once the electronic record has been received by the importer's bank it has to be released to the importer, as per step 8 in Figure 1. Where a negotiable transport document, such as a B/L, is included, endorsement may be required and this is where challenges may arise.

At the very least, it is anticipated that the electronic records must firstly be capable of being easily transferred between external parties; that electronic endorsement is capable of being given in a manner acceptable to the carrier at destination, for the purposes of discharging the cargo; and that this is legally acceptable in the country where these actions occur. This invariably requires electronic system interoperability, to avoid exporters, importers and carriers having to run several applications on their systems to deal with different clients and banks.

Generic solutions for a truly global e-trading environment do not yet exist, but a proprietary solution is available, and this may provide a possible remedy to the problem at hand, as discussed in the next section.

## 5.0 ELECTRONIC SOLUTIONS

There are significant difficulties with negotiability of transport documents in an electronic environment. A solution is a system enabling all parties to access and process data, and providing internationally accepted legal equivalence for electronic negotiable documents (records).

A global e-commerce trading environment, called Bill Of Lading Electronic Registry Organization (BOLERO), has been in existence for over a decade. BOLERO, a commercial organization, provides a secure environment for the exchange of trade information and contractually binding documents, for a fee. Members agree to abide by the Rule Book (Legal Standards) with multilateral contracts. Consequently, BOLERO achieves negotiability through its own Title Registry, capable of providing an endorsement chain with permission limiters and an audit trail.

BOLERO's annual membership costs, between 12000 and 30000 Euro, depending on the level of service required, have probably contributed to the slow adoption of this system. For micro, small and medium enterprises the high membership fees are a considerable barrier to entry and they may find it difficult to justify, on a cost benefit analysis. Howevere, for the larger enterprise this may be different, as trading volumes and the high quantity of documentation offer possible savings in processing costs overall.

If membership cost is the biggest hurdle to the enlargement of a safe electronic trading system making electronic negotiable transport records a commercial reality, then cost structures need to be reduced. It is argued here that cost reduction may be achieved through a second tier BOLERO membership. An organization could join BOLERO as a master account (Tier 1) with the ability to join members under its umbrella (Tier 2). Tier 2 clients retain their organizational autonomy. The Tier 1 member should be able to offer a considerably cheaper membership to its Tier 2 clients, by spreading its BOLERO joining fee across a wider base. For example, if the BOLEO joining fee was Euro 30000 and the Tier 1 account had 30 Tier 2 members, the cost of each Tier 2 membership would become Euro 1000. The Tier 1 member may be able to offer a cost structure of, say, Euro 2000 to 3000 (allowing for extra account fees by BOLERO) making it much more affordable and attractive for the smaller firms to become part of the BOLERO system. The expansion of membership is illustrated by the dotted circle in Figure 4, with Tier 2 members having access to BOLERO via Tier 1 accounts.

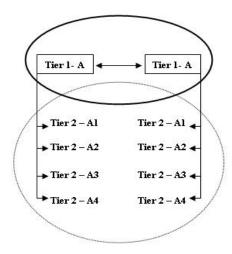


Figure 4: Tiered BOLERO system

The increase in user numbers should result in BOLERO becoming the standard world-wide electronic communication system for paperless trading in international trade. Importantly, the issue of negotiable electronic documents would be overcome.

# 5.0 CONLCUSION

The implementation of the Rotterdam Rules poses significant challenges, particularly in the context of letter of credit business and the legal status of electronic negotiable transport documents that, at present, are subject to disparate levels across the world. Therefore, current practices must change to allow negotiable transport records to be regarded as being equivalent to paper, and be given appropriate international legal recognition.

BOLERO may be a solution, through its own Title Registry, but only if critical membership mass is achieved. It is therefore recommended that BOLERO give consideration to the adoption of a two tier membership system, as the means by which membership may be expanded, through cheaper subscription rates. This may be a viable solution to solving the electronic negotiable transport issue for traders, carriers and bankers worldwide.

## REFERENCES

- Bergami, R. (2004). eUCP a Revolution in International Trade?, *The Vindobona Journal* of International Commercial Law and Arbitration, 8(1), 23-36.
- Bergami, R. (2009). International Trade: A Practical Introduction (3rd ed): Eruditions Publishing.
- CLECAT (2009). Positions Paper Re: 2008- United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea – the "Rotterdam Rules": Position Paper, 11 May.
- Department of Foreign Affairs and Trade. (2001). *Paperless Trading Benefits to APEC*: Commonwealth of Australia.
- Diamond, A. (2008) The Next Sea Carriage Convention? Lloyds Maritime and Commercial Law Quarterly, 2, 135-187.
- International Chamber of Commerce. (2002). Supplement to UCP 500 for Electronic Presentation eUCP: ICC Publishing S.A.
- International Chamber of Commerce. (2006). Uniform Customs and Practice for Documentary Credits, 2007 Revision: ICC Services.
- International Chamber of Commerce. (2006b). Supplement to the Uniform Customs and Practice for Documentary Credits for Electronic Presentation (Version 1.1): ICC Publishing S.A.
- Klein, C.H. (2006) Letter of credit law developments: Jenner & Block LLP.
- Neame, C. (2009, September 1). The Rotterdam Rules: Deadline Day. *The HFW Bulleting: Shipping.*
- Parker, A. (2007). *The Rotterdam Rules: A Step Backwards for Australian Shippers?*: Logistics Association of Australia.
- Pezold, G. C. (2009) The Rotterdam Rules XIV *Transdigest, XIV, 135*, 8-9.
- United Nations. (2009). United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea: United Nations.