## Understanding the Long March towards Dematerialisation of Bills of Lading

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Book review: Miriam Goldby, Electronic Documents in Maritime Trade Law and Practice, Oxford University Press, 2013; Philippe Garo, L'adaptation du droit des transports maritimes au droit du commerce électronique, Presses universitaires d'Aix-Marseille, 2012.

The introduction and expansion of the use of electronic means in commercial operations is a defining element of the age of globalisation. The use of electronic means, now pervasive and ubiquitous, has opened the door to significant productivity gains. Electronic communications enable not only fast transmission of data, but also their re-use and analysis; moreover, they make new business models possible, reduce operational costs of many existing ones and have a significant impact in redistributing those costs.

However, the process of dematerialisation of commercial and trade-related documents is still incomplete. Paperless trade remains a distant goal even when it involves only private parties. While the first stage of dematerialisation, dealing with single steps in the business process and documents, has often been completed, and more complex processes are now being assessed and dematerialised, the time for overall process re-engineering in light of the peculiar features of electronic means has seldom come. Meanwhile, global trade is booming thanks also to the extensive use of cross-border supply chains. The need for even broader use of electronic means and for completing the documents dematerialisation process seems more pressing than ever.

Yet, certain business sectors, such as banking, are traditionally prudent in embracing technological innovation. In other cases, the requirement for a common

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playing ground in terms of access to information and communication technologies is more difficult to achieve due to geographic, infrastructural and other challenges. This is the case of the transport industry, especially in least developed countries.

This may explain why the full dematerialisation of bills of lading, which are commercial documents sitting at the junction of banking and transport, has yet to take place. The law reflects business reality. Electronic bills of lading are currently used within contractual frameworks. However, because of their contractual nature, they lack some of the defining features of paper-based bills of lading, such as negotiability and third-party opposability.

The establishment of the legal requirements for full electronic equivalence of electronic transferable records with paper-based bills of lading has been pursued for some time, especially at the United Nations Commission on International Trade Law (UNCITRAL). Articles 16 and 17 of the UNCITRAL Model Law on Electronic Commerce, adopted in 1996, aimed at achieving that goal: but those provisions did not find actual implementation even in those jurisdictions where they have been enacted. More recently, the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea (New York, 2008) (the "Rotterdam Rules") offers a medium-neutral body of substantive law for the carriage of goods and specifically enables the use of electronic bills of lading, called "negotiable electronic transport records". However, the Rotterdam Rules provide limited guidance on the details of that use, which are left for party autonomy to define. Moreover, a practice has not yet developed pending the entry into force of that treaty.

Of course, a national law could develop the features necessary to fully enable electronic bills of lading and could be chosen as the law applicable to those bills of lading. However, this has not yet happened. One of the few – if not the only one – existing example of such law is that of the Republic of Korea. That law relies on a monopolistic registry-based system that has yet to find full implementation. The challenges encountered in implementing that law highlight the desirability of international coordination in order to achieve the intended result of enabling electronic bills of lading worldwide.

The various issues briefly mentioned are well documented in two recent books.

The work by Miriam Goldby provides for the first time in the English language an ample overview and discussion of the various relevant elements, successfully merging theory and practice. The book is divided in three parts, which, true to their titles, provide exhaustive background information, an illustration of the legal framework for electronic documents and a discussion of emerging electronic BOOK REVIEW 107

documents practice. A comprehensive approach to the documents used in international trade, featuring sale, transport, insurance and payment documents as well as certificates, is adopted. Thus, the author covers terrains seldom covered by commercial lawyers, such as regulatory issues, making reference to possible future solutions such as electronic single window facilities for customs operations. Being familiar with English law and with uniform texts (not limited to those prepared by UNCITRAL and relating to electronic commerce), she provides a broad illustration of both. Practitioners and academics alike will find her coverage of insurance and payment useful to fully understand the challenges related to the dematerialisation of business processes.

The book by Philippe Garo is likewise balancing theory and practice. Mr. Garo has extensive practical experience, to which he adds significant research. Starting with the introduction and extensive use of Electronic Data Interchange, he discusses the use of electronic communications in maritime trade in the light of French and European Community legislation as well as UNCITRAL texts and other global standards. This prepares the reader to discussing further dematerialisation of documents relating to carriage of goods by sea, including in the broader framework of cross-border supply chain management. In its introductory part (which is quite sizeable), the author offers a rare and welcome introduction in the French language to the fundamentals of electronic commerce law and related UNCITRAL texts.

The two books have differences but also striking similarities. Differences are almost inevitable: one focuses on English law, the other on French law; one expands to insurance and payments law, the other supports legal comments and proposal with a detailed technical background. Similarities are telling: both authors stress the importance of reconciling theory and practice and the need to win the trust of users in order to promote effectively the use of electronic bills of lading. That common conclusion should not surprise given that both books are clearly written, well-argued and rely on extensive research and experience. It is yet to be seen whether the final push for the use of electronic bills of lading will come from a market decision, in an effort to reduce operating costs, or will be induced by regulatory changes, for instance stemming from the effort to better control cross-border flows through electronic single window facilities for import-export operations.

Meanwhile, the preparation of enabling legal environment for electronic transferable records, a broad category including electronic bills of lading, electronic bills of exchange and promissory notes, and electronic warehouse receipts, is continuing at UNCITRAL Working Group IV. That work has already delivered important results, including a review of the notion of functional equivalent of original set forth in the UNCITRAL Model Law on Electronic Commerce.

Moreover, it has been clarified that uniqueness does not need to be an absolute intrinsic feature, as that approach would actually hinder the implementation of electronic transferable records; rather, focus is on reliably ensuring that the debtor may be asked performance only once. The Working Group is also refining the notion of functional equivalent of possession, currently based on the exercise of control on an authoritative electronic record.

The outcome of that work, now tentatively foreseen, in the first instance, as a model law for electronic transferable records that are functional equivalents of paper-based transferable documents or instruments, will provide important guidance given that only a handful of laws were enacted on this topic, and very few adopt a technology-neutral approach.

With respect to future perspectives, the research undertaken at the University of Goteborg on supply chain financing should also be mentioned, as it aims at studying how to merge bills of lading and financial documents in an electronic environment.

To sum up, there has been significant discussion on the continuing relevance of bills of lading for international trade. New business models and practices require adequate support and guidance. The books under review provide the information necessary to become acquainted with the subject matter and get ready for future developments.