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The Multimodal Electronic Transferable Transport Record (ETTR) : A Survey of Laws and Basic Concepts

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THE MULTIMODAL ELETRONIC TRANSFERRABLE TRANSPORT RECORD (ETTR)

A survey of laws and basic concepts

by

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Submitted to UNCITRAL, Vienna

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Summary

A transport document is a receipt issued by the carrier of goods upon taking possession of them under a contract for their carriage. It is a document of title when its transfer may facilitate not only the transfer of the right to claim the goods from the carrier but also the transfer of title to the goods. Particularly in relation to the carriage of goods other than by sea, and by reference to banking and commercial practices, this study surveys the current legal position of both digitization and negotiability of transport documents. This is done with a view to preparing the ground for the establishment of a legal basis for a multimodal Electronic Transferable Transport Record (ETTR) of which control will be functionally equivalent to the possession of a negotiable tangible document of title. Views as to the need for a multimodal ETTR are divided and may not be the same across all industries and geographic regions. Nonetheless in some industries and regions the demand for an ETTR is genuine and merits a solution. To meet this demand the study recommends the treatment of the document of title under the American UCC Article 7 as the starting point for an ETTR project.

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I. Introduction

Following the consideration of a proposal by China¹ and a note by the Secretariat² on possible future work by UNCITRAL towards the development of a negotiable transport document, UNCITRAL requested its secretariat to conduct research on legal issues related to the use of railway or other consignment notes.³ At its fifty-third session, UNCITRAL requested its secretariat to start preparatory work toward the development of a new international instrument on multimodal negotiable transport documents that could be used for contracts not involving carriage by sea.⁴ UNCITRAL concurred with the assessment of its secretariat that the inclusion of electronic transport documents⁵ in that work would be particularly timely for supporting the new types of supply chain and logistics models expected to develop in response to the widespread business disruptions caused by the COVID-19 pandemic.⁶

This has taken place against two major background developments. The first is technological advances facilitating the evolution of an electronic format for the transport record. Hereafter this process may be referred to as ‘digitization’ or ‘digitization.’ The second is the emergence of a long-distance land-based trade, particularly by rail in Eurasia, side by side with a non-sea based multimodal trade. In both the duration of the transit of the goods enables and requires the use of transport documents that function as documents of title facilitating transactions and modes of financing using the transport documents as tokens for the goods.

Particularly in relation to the carriage of goods other than by sea, this study surveys the current legal position of both digitization and negotiability of transport documents, including documents of title, with a view to preparing the ground for establishing a legal basis for an Electronic Transferable Transport Record (ETTR)⁷ Part II provides an overview of transport documents and the salient features of each type. Part III reviews transport documents regulated under international conventions used in unimodal means of carriage of goods, that is, by road, rail, inland waterways and sea. Part IV discusses the functional equivalence principle particularly as codified. Part V addresses transport documents used in multimodal means of transportation, with particular emphasis on the Rotterdam Rules (‘RR’), which extensively address ETTRs. Part VI discusses Article 7 of the US Uniform Commercial Code (UCC) insofar as it goes beyond the

¹ UNCITRAL, *Possible future work regarding railway consignment notes: Proposal by the Government of the People’s Republic of China*, 52nd Sess, UN Doc A/CN.9/998, June 2019.

² UNCITRAL, *Possible future work on railway consignment notes*, 53rd Sess, UN Doc A/CN.9/1034, May 2020.

³ UNCITRAL, *Report of the United Nations Commission on International Trade Law, Fifty-second session (8-19 July 2019)*, CITRALOR, 74th Sess, Supp No 17, UN Doc A/74/17 (2019) at para 217.

⁴ UNCITRAL, *Report of the United Nations Commission on International Trade, Fifty-third session (6-17 July 2020 and 14-18 September 2020)*, CITRALOR, 75th Sess, Supp No 17, UN Doc A/75/17 (2020) at para 82.

⁵ I would have preferred to use ‘document’ only by reference to a tangible record but since taxonomy has not been uniform in that regard, whether a ‘document’ is tangible or virtual (i.e., electronic) is to be understood in each case from the context.

⁶ UNCITRAL, *supra* note 4, para 81.

⁷ To that end, it will be a precursor to a study declared by the UK Law Commission, which will cover international trade and the use of trade documents: “Proposals to allow electronic documents would revolutionise trade” (30 April 2021), online: *Law Commission (UK)* <www.lawcom.gov.uk/proposals-to-allow-electronic-documents-would-revolutionise-trade/> [perma.cc/NSC6-RPPU], accessed 11 July 2021.

Rotterdam Rules in the way it addresses both negotiability and electronic record issues. Part VII is a survey of selected jurisdictions as they address digitization and negotiability of transport documents, particularly in relation to multimodal means of transportation. Part VIII surveys existing bank and commercial practices. Part IX addresses the digitization of international trade. Concluding Part X summarizes the discussion and points, inter alia, to the option of using UCC Article 7 (2003 text) as a starting point for an ETTR legislative project.

II. Transport documents: overview

Briefly stated,⁸ a transport document is a receipt issued by the carrier of goods to the shipper (or consignor) upon taking possession of them under a contract for their carriage to the consignee. As such it constitutes a receipt for identified goods (or a specified portion thereof) by the party undertaking responsibility for their carriage. It is also a piece of evidence as to the terms of the contract for carriage as well as to the apparent condition of the goods when received by the carrier.

A transport document is a document of title when it purports to ‘lock’ the claim for the delivery of the goods into the holder’s possessory right in the document so as to facilitate the transfer of the document as a proxy for the transfer of title to the goods. In a given case, whether or not it is used to transfer property, the document of title serves as a document of control of the goods held by the carrier under the contract for carriage requiring the carrier vis-à-vis the shipper and as well as any subsequent holder the release or surrender of the goods only upon the production of it by the holder.

The classic document of title is the bill of lading issued by a sea carrier.⁹ When it is addressed to the order of a named person or to bearer, and sometimes only where it is marked ‘negotiable’, the bill of lading is negotiable. Otherwise, and sometimes when it is marked so, it is non-negotiable. A negotiable document of title made out to order is transferrable by delivery and endorsement, whether special or in blank. A negotiable document of title made out to bearer is transferable by delivery alone. There is no unanimity as to whether a bill of lading made out to order without saying to order of whom is to be considered as made out to the shipper’s order (so as to require the shipper’s endorsement for a transfer) or to bearer (so as to be transferable by delivery alone). The holder of a negotiable document is either the one to whose order the document is made or endorsed and who is in its possession, or it bearer. The endorsement in blank of a document made out to order renders it a bearer document, except that the holder may convert a blank endorsement to a special one, thereby restoring the document to an order one.

Unlike a negotiable monetary debt instrument, such as a bill of exchange or a promissory note, the bill of lading is inherently linked to the contract of carriage so that the carrier’s

⁸ For a fuller summary see e.g., Ewan McKendrick, *Goode and McKendrick on Commercial Law*, 6th ed (London, UK: LexisNexis, 2020) at 990-995, 1013-1021.

⁹ It is frequently issued in several (usually three) originals, a situation reflecting the period in which they were dispatched by mail and in which mailing was insecure. For some elaboration, see e.g., Laurie Railas, *The Rise of the Lex Electronica and the International Sale of Goods: Facilitating Electronic Transactions Involving Documentary Credit Operations* (LL.D Dissertation, University of Helsinki, 2004) at 240, 242, accessible online at <helda.helsinki.fi/bitstream/handle/10138/224327/THERISEO.pdf?sequence=1> [perma.cc/SA4Y-CDFZ], accessed 12 September 2021.

undertaking has no shade of autonomy.¹⁰ At the same time, the terms stated in the bill of lading are exclusive.¹¹ This is critical for the transferee, since the essence of the negotiable or ordinary bill of lading is that it is transferable on its own to different people in succession by ‘negotiation,’ that is, delivery with any necessary endorsement. Taking by negotiation entitles the holder to both to claim delivery of the goods as well as to sue the carrier for any breach of the contract for carriage.¹² In contrast, the prevailing understanding of the non-negotiable, also known as ‘straight,’ bill of lading is that it may be transferred only once, to the named consignee identified in the bill from its inception, who takes it by delivery alone, without being endorsed, and who must produce it to obtain delivery of the goods.¹³ However, as discussed below in Part VI, in the US not only is the non-negotiable bill of lading to be presented in order to take the delivery of the goods, but it is taken to be assignable other than by negotiation.

In France and perhaps elsewhere in civil law jurisdictions, the status of the bill of lading as a document of title (*titre de propriété*), the transfer of which may transfer title of the goods, or a mere document of credit (*titre de créance*), entitling the holder to take delivery from the carrier, has been discussed.¹⁴ However, for some purposes this debate may well be theoretical. Thus, by mercantile custom, possession of the bill of lading is tantamount to the possession of the goods in transit, so that the transfer of the bill of lading normally constitutes the constructive delivery of the goods themselves.¹⁵ Hence, there is an overall consensus that the bill of lading represents more than a mere claim against the carrier. Along these lines, it is recognized under the common law that transfer of title to the goods is an aspect of the contract for sale and not the transfer of the bill of lading on its own.¹⁶ From this perspective, the bill of lading is taken to be a control document by which constructive possession rather than title is passed.¹⁷ This position at least blurs the distinction between a document of title and a document of credit. Indeed, in the

¹⁰ For the link between the bill of lading and the consideration, that is, the underlying transaction, see e.g., Luis Cova Arria, “Legal Obstacles to the Implementation of the Electronic Bill of Lading in Civil Law Countries” (1997) Eur Transp L 709 at 709.

¹¹ In that sense, according to Railas, *supra* note 9 at 60: “Bills of lading represent an abstract undertaking by the carrier to deliver the goods in their recorded shape to a consignee surrendering an original bill of lading in good faith.” Railas certainly uses ‘abstraction’ to denote ‘exclusiveness’ which is a different sense than used by Arria, *ibid*, who uses ‘abstraction’ effectively to denote ‘autonomy’, namely, the separation between the obligation and the underlying transaction (which exists under the law of bills of exchange and promissory notes but not under the law governing bills of lading).

¹² Since a transferee holder is not a party to the original contract of carriage, his or her entitlement to sue the carrier in contract for fault or neglect was provided in English law by the *Bills of Lading Act*, 1855, recently superseded by the *Carriage of Goods by Sea Act* 1924. See e.g., Carol Proctor, *The Legal Role of the Bill of Lading, Sea Waybill and Multimodal Transport Document in Financing International Sale Contracts* (LL.M Thesis, University of South Africa, July 1996) 67-70, accessible online at: <www.worldcat.org/title/legal-role-of-the-bill-of-lading-sea-waybill-and-multimodal-transport-document-in-financing-international-sales-contracts/oclc/122291880> [perma.cc/9KQT-W5CV], accessed 12 September 2021. For a full analysis of the superseding legislation, see e.g., Robert Bradgate & Fidelma White, “The Carriage of Goods by Sea Act 1924” (1993) 56 Mod L Rev 188.

¹³ See *J.I. MacWilliam Co. Inc. v Mediterranean Shipping Co. S.A. (The ‘Rafaela S’)*, [2003] EWCA Civ 556, [2004] QB 702, *aff’d* [2005] UKHL 11, [2005] 2 AC 423, following the earlier decision of the Singapore Court of Appeal in *Peer Voss v APL Co Pte Ltd.*, [2002] 2 Lloyd’s Rep 707.

¹⁴ See e.g., Karim Adyel, “L’importance des fonctions du connaissement dans les opérations de commerce international par mer” (9 September 2010), online: *Village de la Justice* <www.village-justice.com/articles/importance-fonctions-connaissance,12616.html> [perma.cc/PLP6-JMKP], accessed 12 September 2021.

¹⁵ Railas, *supra* note 9 at 242.

¹⁶ McKendrick, *supra* note 8 at 992.

¹⁷ *The Delfini*, [1990] 1 Lloyd’s Rep 252 at 268.

view of one commentator, being a document of credit, the bill of lading under French law is the same as a document of title under English law.¹⁸ In fact, the common law recognized as far back in *Lickbarrow v Mason* (1787)¹⁹ that, “as between the vendor [i.e. the shipper] and third persons [such as a holder], the delivery of a bill of lading is a delivery of the goods themselves.” This is effectively no different than the civil law position under which “*livrer le connaissement, c’est livrer la chose.*”²⁰ Whether, and to what extent, the transfer of a bill of lading, as a ‘credit document’, as distinguished from a document of title, may pass property when so intended is outside the scope of the present study.

There is at least an overwhelming majority of jurisdictions recognizing the good title of the transferee-holder to whom the bill of lading was negotiated by a previous lawful holder, with the intent of passing title.²¹ It is however often stated²² that the negotiability of the bill of lading under English law goes merely to the form of transfer, rather than to confer on the transferee-holder acquiring the bill of lading in good faith and for value a better title than that of the transferring holder.²³ This is certainly true inasmuch as “documents of title to goods never have the currency of money.”²⁴ However, it ignores the ability of a good faith purchaser for value to acquire under some circumstances a better title of the transferor.²⁵ Thus in *Gurney v Behrend* (1854),²⁶ stated that²⁷

Ever since the great case of *Lickbarrow v. Mason*²⁸ ... the law has been considered to be that the bona fide transferee, for value, of a bill of lading, indorsed by the shipper or his consignee, and put into circulation by the authority of the shipper or consignee, has an absolute title to the goods, freed from the equitable right of the unpaid vendor to stop in transitu, as against the purchaser.

¹⁸ That is, “Le connaissement représentait un droit de créance, c’est un « document of title » en droit Anglais.”: Adyel, *supra* note 14, para 4. But see Railas, *supra* note 9 at 242-43, emphasising the difference and linking full negotiability to the ‘credit document’ character of the document. See also Luis Cova Arria, *supra* note 10 at 710, arguing that under French law the bill of lading is a document of credit and not document of title.

¹⁹ 2 TR 64, 100 ER 35.

²⁰ That is, “delivery of the bill of lading is the delivery of the thing [goods]”: Adyel, *supra* note 14, para 4, citing Dean René Rodiere. For the bill of lading as a “legal surrogate for the physical delivery of the goods”, see Raphael Brunner, *Electronic Transport Documents and Shipping Practice Not Yet married Couple* (LL.M. Shipping Law thesis, Zurich, 25 April 2007) at 38, quoting John Hare, *Shipping Law & Admiralty Jurisdiction in South Africa*, 1st ed (Cape Town, South Africa: Juta, 1999) at § 14-3.3.

²¹ I read this between the lines of Railas, *supra* note 9 at 243.

²² See e.g., Proctor, *supra* note 12 at 71, and McKendrick, *supra* note 8 at 994 and sources each cites. But cf n 24.

²³ For these two components of negotiability (albeit focusing on debt instruments—that is, bills of exchange, cheques, and promissory notes) see e.g., Benjamin Geva and Sagi Peari, *International Negotiable Instruments* (Oxford: OUP, 2021) at 6-11.

²⁴ MG Bridge, *The Sale of Goods* 4th ed (Oxford: OUP, 2019) at para 5.47.

²⁵ Cf McKendrick, *supra* note 8 at 994 n 73, who acknowledges this result but suggests that it is caused “by virtue of some exception to the *nemo dat* rule, e.g., estoppel” rather than something inherent in the nature of the document of title.

²⁶ 3 EL & BL 624, 118 ER 1275.

²⁷ *Ibid* at 638-39 (EL & BL), 1280-81 (ER).

²⁸ *Lickbarrow*, *supra* note 19.

And yet *Gurney v Behrend* did not go as far as to understand *Lickbarrow v. Mason* to endow the bill of lading with the full features of negotiability. Rather it held, albeit by way of obiter, that,²⁹

A bill of lading is not, like a bill of exchange or promissory note, a negotiable instrument, which passes by mere delivery to a bona fide transferee for valuable consideration, without regard to the title of the parties who make the transfer. *Although the shipper may have indorsed in blank a bill of lading deliverable to his assigns, his right is not affected by an appropriation of it without his authority.* If it be stolen from him, or transferred without his authority, a subsequent bona fide transferee for value cannot make title under it, as against the shipper of the goods.³⁰

[Emphasis added].

Accordingly, an embezzler within the organization of a holder of a properly negotiated bill of lading, either endorsed in blank or made out to bearer, will be able to confer a good title on a subsequent holder who took the bill of lading by negotiation, in good faith and for value. Conversely, not having authorized the transfer to a thief, the dispossessed ex-holder may recover not only from the thief but also from a subsequent holder who took the document by negotiation from a thief (or someone deriving title from the thief) in good faith and for value.

Among civil law jurisdictions the position of the holder of a negotiable bill of lading acquiring it in good faith and without gross negligence³¹ from (or through) a thief, varies.³² For example, maritime codes of Norway³³ and Spain³⁴ protect such a purchaser so as to confer upon the bill of lading full negotiability. Many if not most statutes elsewhere are silent on the point.

A transport document of which production to the carrier is neither required nor entitling to receive the possession of the goods from the carrier is not a document of title. Such a document issued by the carrier to the consignor need not necessarily be delivered to the consignee and in any event is not transferable by the consignee. Accordingly, goods to which it relates are to be released only to the named consignee. It cannot be used as a token for transacting with the goods. At the same time, its use may save time at both ends of the

²⁹ *Ibid* at 633-34 (EL & BL), 1279 (ER).

³⁰ For the position in the US, see Part V.

³¹ Being the general civilian formula for the acquisition of the status corresponding to that of a holder in due course of a negotiable monetary debt instrument under Anglo-American law. See e.g., art. 16 (2) of the *Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes*, 7 June 1930, 143 LNTS 257, Annex I, accessible at <www.jus.uio.no/lm/bills.of.exchange.and.promissory.notes.convention.1930/doc.html#54> [perma.cc/BQ5T-5Y3Y], accessed 17 September 2021.

³² See Railas, *supra* note 9 at 243.

³³ The *Norwegian Maritime Code*, 24 June 1994 no. 39 (as am) at § 306, accessible at <www.ilo.org/dyn/natlex/natlex4.detail?p_isn=88374&p_lang=en> [perma.cc/QB5B-ACGD], accessed 17 September 2021. Under § 306 (2), “[a] person who in good faith has acquired an order or bearer bill of lading is not obliged to surrender it to the person who lost it.”

³⁴ Ley 14/2014, de 24 de julio, de Navegación Marítima, art 254, accessible at <www.boe.es/buscar/act.php?id=BOE-A-2014-7877#top> [perma.cc/DFa9-MUSX], accessed 12 September 2021, providing that “[w]hen a person is dispossessed for any reason of a bill of lading, whether it is a bill of lading, or an endorsable bill of lading, the new holder who would have acquired it inter vivos according to the document circulation law will not be obliged to return it if you acquired it in good faith and without serious fault. The rights and actions of the legitimate owner against those responsible for acts of illegitimate dispossession will be safe”.

transaction. Thus, such a document may be issued by the forwarder as soon as it receives the goods, prior to shipment, and used immediately by the shipper to procure an advance from its bank. At the other end, the consignee may collect the goods upon their arrival even where the document has not reached it yet. During the voyage of the goods the consignor remains in full control. He or she may exercise that control by advising the carrier to deliver the good to a new purchaser to whom, other than for goods carried by sea, the consignor would have delivered his or her copy or duplicate transport document issued by the carrier. The waybill, issued by a sea or air carrier, and the consignment note, issued by a rail or road carrier, fall into this category.³⁵

A relatively recent development is the multimodal transport document issued by a multimodal transport operator (MTO). The latter contracts as principal to perform or procure performance of a multimodal transport from door to door under a multimodal transport (MT). An MT document could be either negotiable or non-negotiable.³⁶ While an MT document is to be presented for the release of the goods, query whether it is a document of title the transfer of which may pass the property in the goods when so intended.

To confuse matters, this terminology is not etched in stone. Thus, there are consignment notes and waybills that are required under an agreement to be presented in order to receive the goods. However, even if they may be transferred, they are incapable of transferring title and thus they are documents of control but not documents of title. As well, there are “inland bills of lading” that are not documents of title or even documents of control.

The broad category of ‘documents of control’ that include but are not limited to documents of title is addressed in article 58 of the *United Nations Convention on Contracts for the International Sale of Goods* (Vienna, 1980)³⁷ (CISG). Thereunder, unless otherwise agreed, the buyer of goods is required to pay their price “when the seller places either the goods or documents controlling their disposition.” Documents controlling the disposition of goods were interpreted “as referring to any document (electronic or paper) that entitles the buyer to take possession of the goods or, once in the hands of the buyer, establishes that the seller no longer has the right to control disposition of the goods.” They thus include:³⁸

- 1 Negotiable bills of lading, whether issued by an ocean carrier or an intermediary such as a freight forwarder, multimodal transport operator (MTO) or non-vessel-operating common carrier (NVOCC);
- 2 Straight (non-negotiable) bills of lading;
- 3 The consignor’s copy of an air waybill;

³⁵ See generally Railas, *supra* note 9 at 248, 252-257.

³⁶ See Ewan McKendrick, *supra* note 8 at 1022, 1204-1208.

³⁷ *United Nations Convention on Contracts for the International Sale of Goods*, 11 April 1980, 1489 UNTS 3 (entered into force 1 January 1988) [CISG].

³⁸ See CISG Advisory Council, “CISG Advisory Council Opinion No. 11: Issues Raised by Documents under the CISG Focusing on the Buyer’s Payment Duty” (3 August 2012), online (pdf): [CISG-AC <www.cisgac.com/file/repository/CISG_Advisory_Council_Opinion_No_11.pdf>](http://www.cisgac.com/file/repository/CISG_Advisory_Council_Opinion_No_11.pdf) [https://perma.cc/NC42-GVMS]. Also available online at: www.cisgac.com/cisgac-opinion-no11/, accessed 20 October 2021.

- 4 The consignor's duplicate copy of a rail consignment note;
- 5 The consignor's duplicate or first copy of a road consignment note;
- 6 Road and rail bills of lading in North America;
- 7 Warehouse receipts or warehouse warrants; and
- 8 Ship's delivery orders.³⁹

III. Transport documents in unimodal means of carriage: principal international conventions⁴⁰

The standard transport document for goods carried over land is the consignment note.⁴¹ Not surprisingly, the *Convention on International Carriage of Goods by Road* (CMR)⁴² does not contain any explicit provision addressing negotiability. Rather, under art 13, goods are delivered only to the consignee. An Additional Protocol to the CMR introduced the "Electronic consignment note," being "a consignment note issued by electronic communication..."⁴³

³⁹ Conversely, documents that do not control the disposition of the goods were said to include the following, unless there is a practice established between the parties or usage that governs the parties' contract under Article 9 of the CISG, requiring presentation of such a document: sea waybills; dock receipts, quai receipts or mate's receipts; commercial invoices; insurance policies or certificates; as well as survey reports, certificates of origin, certificates of quality, and sanitary or phytosanitary certificates (the latter being inspection certificates issued by a competent governmental authority to show that a particular shipment has been treated to be free from harmful pests and plant diseases). Together with documents controlling the disposition of goods such goods are nevertheless "documents relating to the goods" which under Article 34 of the CISG the seller may be required to hand over to the buyer "at the time and place and in the form required by the contract".

⁴⁰ To a large extent this part draws on UNCITRAL, Reference paper prepared by the UNCITRAL secretariat (available from the Principal Legal Officer and Head, Legislative branch): "Provisions on transport documents found in different international instruments addressing unimodal and multimodal transport", Experts Group Meeting on a new international instrument on multimodal negotiable transport documents, Vienna (online), 2–3 February 2021 [Reference paper 1].

⁴¹ See e.g., Serenat Baytan, "Turkey: The Content And Functions Of The Consignment Note Under The CMR" (29 march 2012), online: Mondaq <www.mondaq.com/turkey/rail-road-cycling/170492/the-content-and-functions-of-the-consignment-note-under-the-cmr> accessed 11 July 2021.

⁴² UN, *Convention on the Contract for the International Carriage of Goods by Road*, 19 May 1956, 399 UNTS 189 (entered into force 2 July 1961). Available online from the University of Oslo Faculty of Law website: <www.jus.uio.no/lm/un.cmr.road.carriage.contract.convention.1956/doc.html> accessed 11 July 2021.

⁴³ UN, *Additional Protocol to the Convention on the Contract for the International Carriage of Goods by Road (CMR) concerning the Electronic Consignment Note*, 20 February 2008, 2762 UNTS 23 (entered into force 5 June 2011). Accessible online at: <treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-B-11-b&chapter=11&clang=en> accessed 11 July 2021. For its part, "Electronic communication" is defined to mean "information generated, sent, received or stored by electronic, optical, digital or similar means with the result that the information communicated is accessible so as to be usable for subsequent reference."

The carriage of freight between Europe and Asia by rail is governed by two different legal regimes: the *COTIF/CIM Uniform Rules concerning the Contract of International Carriage of Goods by Rail* (“CIM Rules”)⁴⁴ and the *SMGS Convention*.⁴⁵ At the interface between the territories of the two legal regimes,⁴⁶ shipments have to be re-consigned and a new consignment note has to be made out.⁴⁷ The practicalities of this process are set out in the CIM/SMGS Consignment Note Manual.⁴⁸ The *Uniform Rules Concerning the Contract of International Carriage of Goods by Rail*, known as CIM, adopted by the Intergovernmental Organisation for International Carriage by Rail (OTIF) state in art 6 §9 that “[t]he consignment note and its duplicate may be established in the form of electronic data registration which can be transformed into legible written symbols.” The provision further requires that “[t]he procedure used for the registration and treatment of data must be equivalent from the functional point of view, particularly so far as concerns the evidential value of the consignment note represented by those data.” The Manual provides for both paper and electronic forms for a CIM/SMGS consignment note. Procedures used for data storage and processing must be equivalent to those of paper.

Providing for the consignment note, neither CIM nor SMGS contain provisions about a negotiable transport document to serve as a document of title. This has not been considered necessary specifically within the CIM area due to the comparatively short duration of the transport by rail. Meanwhile the increasing transport of goods by rail between Europe and Asia and vice versa changes the situation and creates the need to establish a negotiable transport document for rail transport.⁴⁹

The SMGS Agreement does not contain any provision describing the negotiability of a consignment note. At the same time, that the consignment note is neither negotiable, nor a document of title -- seems implicit in art 26 (1) under which upon the arrival of the goods to the destination both the consignment note and the goods are to be given by the carrier to the consignee

⁴⁴ Various relevant documents are indexed and accessible at: <int.search.tb.ask.com/web?st=sb&ptb=4401AC9C-2A24-4B3D-8A31-DD291C18209B&n=78492b35&ind=2018061109&p2=^CWZ^xmd017^TTAB02^ca&si=EAIaIQobChMItIGRjvJM2wIVSKsBCh3OdwE9EAEYASAAEgL5VfD_BwE&q=COTIF%2FCIM+Uniform+Rule+s+concerning+the+Contract+of+International+Carriage+of+Goods+by+Rail> accessed 11 July 2021 [CIM Rules].

⁴⁵ Various relevant documents are accessible online at: <www.cit-rail.org/en/rail-transport-law/smgs-smgs/> accessed 11 July 2021 [SMGS Convention].

⁴⁶ Roughly stated, CIM covers Western Europe, the Maghreb and the Middle East while SMGS covers the area of the former Soviet Union and the East European block countries. Most of the latter are now members in both.

⁴⁷ See generally: <www.cit-rail.org/en/freight-traffic/cim-smgs/> accessed 11 July 2021.

⁴⁸ Accessible online e.g., through: <int.search.tb.ask.com/web?st=sb&ptb=4401AC9C-2A24-4B3D-8A31-DD291C18209B&n=78492b35&ind=2018061109&p2=^CWZ^xmd017^TTAB02^ca&si=EAIaIQobChMItIGRjvJM2wIVSKsBCh3OdwE9EAEYASAAEgL5VfD_BwE&q=CIM%2FSMGS+Consignment+Note+Manual> [Manual].

⁴⁹ “Submission by Professor Rainer Freise on Measures to enable the Parties to the Contract of Carriage to use the Railway Consignment Note as a Negotiable Transport Document,” UNCITRAL Reference Paper (available from the Principal Legal Officer and Head, Legislative branch): Expert group meeting on the Use of Railway Consignment Articles and Possible Future work by UNCITRAL on documents of title in multimodal transport, Vienna, 15 April-16 April 2020.

The *Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway* (CMNI)⁵⁰ envisages the possibility of signing a transport document by electronic means in art 11 (2) but does not provide for electronic transport documents. As for negotiability, art 13 characterizes the bill of lading as a document of title that may be “issued in the name of the consignee, to order or to bearer,” and which must be presented in order to obtain the goods. It is transferable “to a third party including the consignee” who, upon taking it “in good faith in reliance on the description of the goods therein” benefits from an irrebuttable presumption as to the accuracy of information included in the document.

The *Montreal Convention for the Unification of Certain Rules for International Carriage by Air*⁵¹ does not contain any provision addressing the negotiability of an air waybill. At the same time, art 4 (2) mentions “[a]ny other means which preserves a record of the carriage to be performed may be substituted for the delivery of an air waybill.” This may be interpreted to include electronic waybills as well.

The *Hague-Visby Rules*⁵² governing the carriage of goods by sea predate the recent technological developments and do not provide for an electronic bill of lading. Nor do they expressly address the negotiability of the bill of lading, except that it is generally taken to exist.

IV. Functional Equivalence⁵³

Negotiability is a point to be provided by law, whether statutory, judicial, or customary.⁵⁴ For its part, digitization may be achieved by applying the principle of functional equivalence, between a tangible document and an electronic record containing the same information, as well as between possession and control, and the transfer of possession and the transfer of control. Accordingly, the functional equivalent of the transfer of possession of a tangible document is the transfer of control of an electronic record.

Depending on the legal system, functional equivalence could be a matter of either a general principle or of a specific statute.⁵⁵ To the latter end, the functional equivalence principle

⁵⁰ Adopted by the Diplomatic Conference Organized Jointly by the Central Commission for the Navigation of the Rhine (CCNR), the Danube Commission and UNECE, held in Budapest from 25 September to 3 October 2000 (entered into force 1 April 2005), online (pdf): <www.ccr-zkr.org/files/conventions/cmni_en.pdf> [perma.cc/67HJ-X4P5] [CMNI].

⁵¹ *Convention for the Unification of Certain Rules for International Carriage by Air*, 28 May 1999, 2242 UNTS 309 (entered into force 4 November 2003) [Montreal Convention]. Available online through the University of Oslo Faculty of Law website: <www.jus.uio.no/lm/air.carriage.unification.convention.montreal.1999/> accessed 11 July 2021.

⁵² *International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading* signed at Brussels on 25 August 1924, as amended by the *Protocol to Amend the International Convention for the Unification of Certain Rules of Law Relating to Bills of Lading* signed at Brussels on 23 February 1968, 1412 UNTS (entered into force 23 June 1977) [*Hague-Visby Rules*]. Available online through the University of Oslo Faculty of Law website: <www.jus.uio.no/lm/sea.carriage.hague.visby.rules.1968/doc.html-1> accessed 11 July 2012.

⁵³ See generally: José Angelo Estrella Faria, “Uniform Law and Functional Equivalence: Diverting Paths or Stops Along the Same Road? Thoughts on a New International Regime for Transport Documents” (2011) 2 *Elon L Rev* 1.

⁵⁴ For non-statutory law see e.g., *Goodwin v. Robarts*, (1875) (1875), LR 10 Ex 337, *aff’d* (1875-6), LR 1 App Cas 476 (HL). In fact, this is how the negotiability of the bill of lading was recognized in the UK: *Lickbarrow v Mason* (1794), 2 TR 63, 100 ER 35.

⁵⁵ Evolution by case law may however be blocked where a statute confers the authority to provide for digitization by regulations that are not promulgated. See Ewan McKendrick, *supra* note 8 at 999.

guided the drafters of the UNCITRAL *Model Law on Electronic Transferable Records* (2017)⁵⁶ (MLETR). Its art 11 treats ‘exclusive control of [an] electronic transferable record’ as a functional equivalent of ‘the possession of a transferable document or instrument.’ ‘Transferable document or instrument’ is defined in art 2 of the same to be:

a document or instrument issued on paper that entitles the holder to claim the performance of the obligation indicated in the document or instrument and to transfer the right to performance of the obligation indicated in the document or instrument through the transfer of that document or instrument.

In turn, art 2 of the MLETR defines ‘electronic record’ as ‘information generated, communicated, received or stored by electronic means.’⁵⁷

Art 8 of the MLETR renders information that is ‘accessible so as to be usable for subsequent reference’ the functional equivalent of ‘writing’. Similarly, the MLETR’s art 9 provides that where ‘a reliable method is used to identify [a] person and to indicate that person’s intention in respect of the information contained in [an] electronic transferable record’, a legal signature requirement of that person is satisfied.

Art 11 (1) of the MLETR goes on to state that the ‘exclusive control of [an] electronic transferable record’ established by ‘a reliable method’, which also identifies the person in control, meets a legal requirement for ‘the possession of a transferable document or instrument’. For its part, under art 11 (2) of the MLETR, ‘the transfer of control over [an] electronic transferable record’ is the equivalent for the ‘transfer of possession of a transferable document or instrument’.⁵⁸ “The requirement to identify the person in control ... demands that the method or system employed to establish control as a whole should perform the identification function with respect to all concerned parties.”⁵⁹ In fact, identification may be by means of “pseudonyms rather than ... real names” where “the possibility of linking pseudonym and real name, if need be” is available.⁶⁰ Being the functional equivalent of ‘possession,’ which, “in turn, may vary in each jurisdiction,” the notion of ‘control’ is not defined in the MLETR.

⁵⁶ UN, *UNCITRAL Model Law on Electronic Transferable Records* (New York: UN, 2018), online (pdf): uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/mletr_ebook_e.pdf [perma.cc/EY4H-CNSF] accessed 13 January 2021 [MLETR Explanatory Note]. Certainly, adoption is a slow process in each jurisdiction—let alone internationally—a point highlighted by Dr. Wang Feng, “Blockchain Bills of Lading and Their Future Regulation,” NUS Law Working Paper 2021/008, NUS Centre for Maritime Law Working Paper 21/01, at 22-26, online: papers.ssrn.com/sol3/papers.cfm?abstract_id=3817112# [perma.cc/M8SQ-XWU7], accessed 19 September 2021. As of 11 July 2021, legislation based on or influenced by the Model Law has been adopted in 2 States and a total of 3 jurisdictions: Bahrain, Singapore, and the United Arab Emirates (Abu Dhabi Global Market) uncitral.un.org/en/texts/ecommerce/modellaw/electronic_transferable_records/status [perma.cc/C983-DT4N].

⁵⁷ For when an electronic record becomes an ‘electronic transferable record’, see MLETR art 10 (1).

⁵⁸ In this context, art 15 of the MLETR provides the following: “Where the law requires or permits the endorsement in any form of a transferable document or instrument, that requirement is met with respect to an electronic transferable record if the information required for the endorsement is included in the electronic transferable record and that information is compliant with the requirements set forth in articles 8 and 9.”

⁵⁹ MLETR Explanatory Note, *supra* note 56 at para 116.

⁶⁰ *Ibid* at para 117.

V. Multimodal Transport Documents: Rotterdam Rules⁶¹

Conventions and other international instruments governing multimodal means of carriage of goods address digitization and negotiability in various ways.

The *UNCTAD* (United Nations Conference on Trade and Development) *Multimodal Convention*⁶² defines in art 1 "Multimodal transport"⁶³ document" to mean "a document which evidences a multimodal transport contract, the taking in charge of the goods by the multimodal transport operator, and an undertaking by him to deliver the goods in accordance with the terms of that contract." It provides in art 5 for the possible use of an electronic signature on the multimodal transport document. Arts 6 and 7 address the form and transferability of negotiable and non-negotiable transport documents. Under art 6(2), goods are to be released by the operator only "against surrender of the negotiable multimodal transport document duly endorsed where necessary." However, the Convention does not accord to the multilateral transport document the status of a document of title and in fact is silent on the point. Query whether the holding of the document is tantamount to the constructive possession in the goods.

The 1992 *UNCTAD/ICC Rules for Multimodal Transport Documents*,⁶⁴ apply under Rule 1 only upon their incorporation by the parties into their contract of carriage, albeit "irrespective of whether there is a unimodal or a multimodal transport contract involving one or several modes of transport." Art 2.6 defines "Multimodal transport document (MT document) to mean:

a document evidencing a multimodal transport contract and which can be replaced by electronic data interchange messages insofar as permitted by applicable law and be:

(a) issued in a negotiable form; or

(b) issued in a non-negotiable form indicating a named consignee.

This does not appear to envisage the issuance of an original electronic document but rather only as a replacement of an original paper document and even then, only "insofar as permitted by applicable law." On the other hand, art 3 treats the transmission of an "electronic data interchange message" to the transfer of a tangible document.

⁶¹ To a large extent this part draws on Reference paper 1, *supra* note 11, and the Reference paper prepared by the UNCITRAL secretariat (and available from the Principal Legal Officer and Head, Legislative branch): "UNCTAD ICC Rules for Multimodal Transport Documents and FIATA multimodal transport bill of lading (FBL) and multimodal transport waybill (FWB)" Experts Group Meeting on a new international instrument on multimodal negotiable transport documents, Vienna (online), 2-3 February 2021.

⁶² *United Nations Convention on International Multimodal Transport of Goods*, 24 May 1980, UN Doc TD/MT/CONF/16 (not in force) [*Multimodal Convention*]. Accessible online at: <treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XI-E-1&chapter=11&clang=en> accessed 11 July 2021.

⁶³ Requiring under art 1 (1) "the carriage of goods by at least two different modes of transport," excluding "[t]he operations of pick-up and delivery of goods carried out in the performance of a unimodal transport contract."

⁶⁴ TRADE/WP.4/INF.117/Corr.1, TD/B/FAL/INF.117/Corr.1, accessible online: <unctad.org/system/files/official-document/tradewp4inf.117_corr.1_en.pdf> [perma.cc/Z2MJ-T63A], accessed 15 September 2021. For a discussion see e.g., Ewan McKendrick, *supra* note 8 at 1212.

The distinction between a negotiable and non-negotiable MT document—as well as a situation where no document has been issued—is addressed in art 4.3 by reference to the MTO’s obligation to ensure the surrender the goods:

(a) when the MT document has been issued in a negotiable form “to bearer”, to the person surrendering one original of the document; or

(b) when the MT document has been issued in a negotiable form “to order”, to the person surrendering one original of the document duly endorsed; or

(c) when the MT document has been issued in a negotiable form to a named person, to that person upon proof of his identify and surrender of one original document; if such document has been transferred “to order” or in blank the provisions of (b) above apply; or

(d) when the MT document has been issued in a non-negotiable form, to the person named as consignee in the document upon proof of his identify; or

(e) when no document has been issued, to a person as instructed by the consignor or by a person who has acquired the consignor’s or the consignee’s rights under the multimodal transport contract to give such instructions.

Neither the *UNCTAD Multimodal Convention* nor the *UNCTAD/ICC Rules* accord to the multilateral transport document the status of a document of title. Both are silent on the point. Query whether the holding of the transport document under either UNCTAD Convention or Rules is tantamount to the constructive possession of the goods. As well, both UNCTAD Convention and Rules do not elaborate on the extent of the negotiability of the negotiable document, e.g., as to whether a good title can be acquired by a good faith purchaser to whom the document is transferred by negotiation from or through a thief.

FIATA, the International Federation of Freight Forwarders Associations, is a non-governmental organization representing freight forwarders worldwide. Its Multimodal Transport Bill of Lading (FBL) may be either negotiable or non-negotiable. In line with the digitalization of the freight industry, FIATA has joined forces with essDOCS—further discussed in Part IX below—to offer an electronic version of the FIATA Bill of Lading (eFBL).⁶⁵

For its part, the 2008 *Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*, known as the Rotterdam Rules (‘RR’),⁶⁶ “is ambitious in scope, covering not only carriage of goods by sea but also, within limits, other modes of transport where

⁶⁵ See generally: Michael Ardelt, “What is a FIATA Bill of Lading?” (14 December 2017), online: *Forto* <forto.com/de/blog/fiata-bill-of-lading/> [perma.cc/H3EL-EM5M] [English translation] accessed 11 July 2021 [Ardelt].

⁶⁶ *United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*, CITRALOR, 63rd Sess, Annex, UN Doc A/RES/63/122 (2008) [Rotterdam Rules or RR]. Accessible online at: <uncitral.un.org/en/texts/transportgoods/conventions/rotterdam_rules> accessed 11 July 2021.

used in conjunction with carriage by sea.”⁶⁷ It provides for (tangible) transport documents as well as electronic transport records. Each could be either negotiable or non-negotiable.⁶⁸

Also, albeit “[s]ubject to the requirements set out in this Convention,” functional equivalence is provided by RR art 8 as follows:

(a) Anything that is to be in or on a transport document under this Convention may be recorded in an electronic transport record, provided the Issuance and subsequent use of an electronic transport record is with the consent of the carrier and the shipper; and

(b) The issuance, exclusive control, or transfer of an electronic transport record has the same effect as the issuance, possession, or transfer of a transport document.

Under RR art 1 (14),

“Transport document” means a document⁶⁹ issued under a contract of carriage⁷⁰ by the carrier⁷¹ that:

(a) Evidences the carrier’s or a performing party’s⁷² receipt of goods under a contract of carriage; and

(b) Evidences or contains a contract of carriage.

“Electronic transport record” is effectively the functional equivalent of a “transport document.”⁷³ It is defined in art 1 (18) to mean:

information in one or more messages issued⁷⁴ by electronic communication⁷⁵ 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

⁶⁷ Ewan McKendrick, *supra* note 8 at 1213.

⁶⁸ The right to have a transport document or an electronic transport record issued is governed by RR art 35. Each must be ‘signed’: see RR, *supra* note 66, art 38. For the evidentiary effect of the contract particulars provided in the document or record see *ibid*, art 41, discussed further below.

⁶⁹ “Document” is not defined and is taken to refer to a tangible written item.

⁷⁰ See RR, *supra* note 66, art 1 (1): “‘Contract of carriage’ means a contract in which a carrier, against the payment of freight, undertakes to carry goods from one place to another. The contract shall provide for carriage by sea and may provide for carriage by other modes of transport in addition to the sea carriage.”

⁷¹ *Ibid*, art 1 (15): “‘Carrier’ means a person that enters into a contract of carriage with a shipper.”

⁷² *Ibid*, art 1 (6): in principle, “‘Performing party’ means a person other than the carrier that performs or undertakes to perform any of the carrier’s obligations under a contract of carriage”

⁷³ For the replacement of one by the other by agreement, see *ibid*, art 10.

⁷⁴ *Ibid*, art 1 (21): “[t]he ‘issuance’ of a negotiable electronic transport record means the issuance of the record in accordance with procedures that ensure that the record is subject to exclusive control from its creation until it ceases to have any effect or validity.”

⁷⁵ *Ibid*, art 1 (17): “‘Electronic communication’” means information generated, sent, received or stored by electronic, optical, digital or similar means with the result that the information communicated is accessible so as to be usable for subsequent reference.”

(b) Evidences or contains a contract of carriage.

“Negotiable transport document” as well as “Negotiable electronic transport record” is defined in RR art 1 (15) and (19) by reference to its indication

by wording such as “to order” or “negotiable” or other appropriate wording recognized as having the same effect by the law applicable to the document [or record], that the goods have been consigned to the order of the shipper, to the order of the consignee, or to bearer, and is not explicitly stated as being “non-negotiable” or “not negotiable”.

The use of negotiable electronic transport records is to be subject to procedures which “shall be referred to in the contract particulars and be readily ascertainable.”⁷⁶ Under RR art 9 (1) these procedures must provide as follows:

(a) The method for the issuance and the transfer of that record to an intended holder;

(b) An assurance that the negotiable electronic transport record retains its integrity;

(c) The manner in which the holder is able to demonstrate that it is the holder; and

(d) The manner of providing confirmation that delivery to the holder has been effected, or that, pursuant to articles 10, paragraph 2, or 47, subparagraphs 1 (a) (ii) and (c), the electronic transport record has ceased to have any effect or validity.⁷⁷

Any transport document and electronic transport record which does not fall within the definition of a negotiable transport document or negotiable transport record is non-negotiable.⁷⁸

In principle the delivery of the goods is to be claimed by the holder and made against either the surrender of the document to the holder of a negotiable document, or upon demonstration by the holder, in accordance with the procedures referred to in art 9 (1), that it is the holder.⁷⁹ In other cases, the entitlement is that of the consignee.⁸⁰ When a non-negotiable transport document has been issued that indicates that it shall be surrendered in order to obtain delivery of the goods, the surrender of the document by the consignee is required.⁸¹

Under RR art 1 (10) “Holder” means:

(a) A person that is in possession of a negotiable transport document; and

(i) if the document is an order document, is identified in it as the shipper or the consignee, or is the person to which the document is duly endorsed; or

(ii) if the document is a blank endorsed order document or bearer document, is the bearer thereof; or

⁷⁶ *Ibid*, art 9 (2).

⁷⁷ In general, these provisions address the replacement of the record and the discharge of the obligation thereon.

⁷⁸ RR, *supra* note 66, art 1 (16) and (20), respectively.

⁷⁹ *Ibid*, art 47 which nevertheless envisages a situation in which “the negotiable transport document or the negotiable electronic transport record expressly states that the goods may be delivered without the surrender of the transport document.”

⁸⁰ *Ibid*, art 45. See also art 1 (11): ““Consignee” means a person entitled to delivery of the goods under a contract of carriage or a transport document or electronic transport record.”

⁸¹ *Ibid*, art 46.

*(b) The person to which a negotiable electronic transport record has been issued or transferred in accordance with the procedures referred to in article 9, paragraph 1.*⁸²

The transfer of the holder's rights is provided for in RR art 57 as follows:

1. When a negotiable transport document is issued, the holder may transfer the rights incorporated in the document by transferring it to another person:

(a) Duly endorsed either to such other person or in blank, if an order document; or

(b) Without endorsement, if:

(i) a bearer document or a blank endorsed document; or

(ii) a document made out to the order of a named person and the transfer is between the first holder and the named person.

2. When a negotiable electronic transport record is issued, its holder may transfer the rights incorporated in it, whether it be made out to order or to the order of a named person, by transferring the electronic transport record in accordance with the procedures referred to in art. 9, paragraph 1.

With respect to a negotiable electronic transport record, 'transfer' is defined in RR art 1 (22) to mean "the transfer of exclusive control over the record." In relation to an electronic record 'control' is not defined.⁸³ However, as recalled, under RR art 8 (b), "[t]he issuance, exclusive control, or transfer of an electronic transport record has the same effect as the issuance, possession, or transfer of a transport document."⁸⁴

In the footsteps of the *UNCTAD Multimodal Convention* and the *UNCTAD/ICC Rules*, the RR do not accord to the transport document or record the status of a document of title and are silent on the point. Query whether the holding of the transport document under RR is tantamount to the constructive possession of the goods. As well, the RR do not provide for the rights of a holder of negotiable transport document or electronic transport record.⁸⁵ There are, however, two exceptions. First, in principle, under RR art 41, a transport document or an electronic transport record is *prima facie* evidence of the carrier's receipt of the goods as stated in the contract particulars. Proof to the contrary by the carrier in respect of any contract particulars shall not be admissible, when such contract particulars are included in:

(i) a negotiable transport document or a negotiable electronic transport record that is transferred to a third party acting in good faith; or

⁸² For the holder's liability, see *ibid*, art 58.

⁸³ Cf *ibid*, arts 1 (12) and (13) as well as 50-56 (Chapter 10) for the 'control' of the goods. For the holder as the "controlling party" with respect to the goods see *ibid*, art 51.

⁸⁴ See also *ibid*, art 1 (21), reproduced in note 74.

⁸⁵ Both points came out in the preparatory work. See e.g., UNCITRAL, "Consolidated Official Reports on the Preparation of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea ("The Rotterdam Rules")" at 37, online (pdf): [UNCITRAL <uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/compilation_of_reports.pdf>](https://uncitral.un.org/sites/uncitral.un.org/files/media-documents/uncitral/en/compilation_of_reports.pdf) [perma.cc/9H5F-AETA], accessed 15 September 2021.

(ii) a non-negotiable transport document that indicates that it must be surrendered in order to obtain delivery of the goods and is transferred to the consignee acting in good faith;

(iii) a non-negotiable transport document or an electronic transport record of which the consignee there under has acted in good faith in reliance on any of specified contract particulars included in the document or electronic transport record.⁸⁶

Effectively, it is only the transferee of a negotiable document or record that has an unqualified right to rely on the information contained in the document or record. Typically, such a transferee is a holder to whom the document or record was transferred.

Second, under RR art 25 (1) (c), goods may be carried on the deck of a ship only under specified circumstances, one of which is where “[t]he carriage on deck is in accordance with the contract of carriage, or the customs, usages or practices of the trade in question.” However, under RR art 25 (4), the carrier may not invoke this provision “against a third party that has acquired a negotiable transport document or a negotiable electronic transport record in good faith, unless the contract particulars state that the goods may be carried on deck.”

VI. US Uniform Commercial Code (UCC) Article 7

In the US, UCC Article 7 (2003 text) provides for an electronic document of title. The scheme goes beyond RR provisions in five principal ways. First, it is not limited to a document issued by a carrier; rather, it also covers a document issued by a storer. Second, the document issued by a carrier is not exclusively the one relating to the carriage of goods by sea, whether as a principal or incidental medium of transport.⁸⁷ Rather, it is modal-neutral. Third, it provides for unrestricted transferability also for a non-negotiable document. Fourth, it provides for an elevated status of a holder of a document of title. All such four ways are not limited to the electronic format of the document of title. Fifth, and this is limited to the electronic format, the scheme is more detailed as to the meaning of ‘control’.

Under UCC § 1-201 (b):

(16) "Document of title" means a record (i) that in the regular course of business or financing is treated as adequately evidencing that the person in possession or control of the record is entitled to receive, control, hold, and dispose of the record and the goods the record covers and (ii) that purports to be issued by or addressed to a bailee and to cover goods in the bailee's possession which are either identified or are fungible portions of an identified mass. The term includes a bill of lading, transport document, dock warrant, dock receipt, warehouse receipt, and order for delivery of goods. An electronic document of title means a document of title evidenced by a record consisting of information stored in an electronic medium. A tangible document of title means a document of title evidenced by a record consisting of information that is inscribed on a tangible medium.

⁸⁶ This is not a quote of the text of the provision but rather my own summary.

⁸⁷ For a through bill of lading “embodying an undertaking to be performed in part by a person other than the issuer” see UCC § 7-302.

(31) "Record" means information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

(6) "Bill of lading" means a document of title evidencing the receipt of goods for shipment issued by a person engaged in the business of directly or indirectly transporting or forwarding goods. The term does not include a warehouse receipt.

Briefly summarized, a document of title, including a bill of lading, is a 'record' that could be either tangible (usually 'written' on paper) or electronic.⁸⁸ It is "issued by or addressed to a bailee and ... cover[s] goods in the bailee's possession." In turn, "the person in possession or control of the record is entitled to receive, control, hold, and dispose of the record and the goods the record covers."

Under UCC § 7-104, a document of title may be either negotiable or non-negotiable:

(a) A document of title is negotiable if by its terms the goods are to be delivered to bearer or to the order of a named person.

(b) A document of title other than one described in subsection (a) is nonnegotiable. A bill of lading that states that the goods are consigned to a named person is not made negotiable by a provision that the goods are to be delivered only against an order in a record signed by the same or another named person.

(c) A document of title is nonnegotiable if, at the time it is issued, the document has a conspicuous legend, however expressed, that it is nonnegotiable.

The transferability of a negotiable document of title is governed by UCC § 7-501. Transferability is by 'delivery', meaning under UCC § 1-201(b)(15), "with respect to an electronic document of title ... voluntary transfer of control and with respect to ... a tangible document of title, ... voluntary transfer of possession." For its part, control of an electronic document of title is provided for by UCC § 7-106 as follows:

(a) A person has control of an electronic document of title if a system employed for evidencing the transfer of interests in the electronic document reliably establishes that person as the person to which the electronic document was issued or transferred.

(b) A system satisfies subsection (a), and a person is deemed to have control of an electronic document of title, if the document is created, stored, and assigned in such a manner that:

(1) a single authoritative copy of the document exists which is unique, identifiable, and, except as otherwise provided in paragraphs (4), (5), and (6), unalterable;

(2) the authoritative copy identifies the person asserting control as:

(A) the person to which the document was issued; or

⁸⁸ Both formats are interchangeable. See UCC § 7-105.

(B) if the authoritative copy indicates that the document has been transferred, the person to which the document was most recently transferred;

(3) the authoritative copy is communicated to and maintained by the person asserting control or its designated custodian;

(4) copies or amendments that add or change an identified assignee of the authoritative copy can be made only with the consent of the person asserting control;

(5) each copy of the authoritative copy and any copy of a copy is readily identifiable as a copy that is not the authoritative copy; and

(6) any amendment of the authoritative copy is readily identifiable as authorized or unauthorized.

The requirement for “a single authoritative copy of the document ... which is unique, identifiable, and ... unalterable” under UCC § 7-106(b)(1), while not without a parallel elsewhere in American law,⁸⁹ goes beyond MLETR and RR.⁹⁰ One, though not an exclusive, way to meet it is to have a custodian of the electronic record who enters all transfers of the document, identifies the person in control, and records this information.⁹¹

Case law under other statutes requiring “control” over “a single authoritative” record teaches that in enforcing one’s rights under an electronic document of title on the basis of ‘control’ thereof it is crucial to submit sufficient evidence to establish that one is the controller of the single authoritative copy of the document. This usually involves presenting a detailed transfer history, and extensive evidence regarding the systems used to store the single authoritative copy of the document.⁹²

Another significant lesson from case law is that an electronic document should reflect the parties’ understanding that (i) a document in an electronic form exists and that (ii) the parties’ electronic signatures will bind them to its terms.⁹³

Finally, the requirement relating to “a single authoritative copy of the document ... which is unique, identifiable, and, ... unalterable” raises a question with respect to a system using a distributed ledger technology (DLT), such as premised on the blockchain. Thereunder, in the

⁸⁹ See e.g., *Uniform Electronic Transactions Act* (UETA) 1999, § 16 (c).

⁹⁰ Respectively discussed in Parts IV and V.

⁹¹ See Uniform Law Commission, “Revised Article 7 of the Uniform Commercial Code: A SUMMARY” (n.d.), online: <www.uniformlaws.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=e82a58b8-014b-387a-a478-654cabbe893f&forceDialog=0> [perma.cc/F3LB-YW8S].

⁹² See e.g., *Good v. Wells Fargo Bank, N.A.*, 18 N.E.3d 618 (Ind. Ct. App. 2014) (control not proven); *Rivera v. Wells Fargo Bank, N.A.*, 189 So.3d 323 (Fla. Ct. App. 2016) (control proven); *Wells Fargo Bank, N.A. v. Benitez*, 2016 WL 7647929 (Suffolk Cty. Sup. Ct. 2016) (control not proven) except that subsequently, in *Wells Fargo Bank, N.A. v. Benitez*, 2017 WL 6883783 (Suffolk Cty. Sup. Ct. 2017) the court found that in a subsequent filing Wells Fargo supplied such additional factual information to overcome the issues identified in the court’s earlier ruling denying Wells Fargo’s motion for summary judgment (so that control was proven); *New York Community Bank v. McClendon*, 138 A.D.3d 805, 807 (2d Dep’t 2016); (control proven); and *Decisive Innovations, LLC v. Eel River Organics, LLC* 2019 WL 229441 (M.D. Fla. Jan. 16, 2019).

⁹³ See e.g., *Good, Rivera, and McClendon, ibid.*

absence of functionality generating a single authoritative copy, “[i]f each computer or node contains the same copy of the whole database, how can there be one unique original authentic copy of an electronic document of title recorded on the ledger?”⁹⁴ That is, if all copies are equally authoritative, is there “a **single** authoritative copy of the document”? [Emphasis added].⁹⁵

Addressing transferability in detail, UCC § 7-501 distinguishes between rules applicable to a tangible and those applicable to an electronic document, and further touches on aspects of negotiability, as follows:

(a) The following rules apply to a negotiable tangible document of title:

(1) If the document's original terms run to the order of a named person, the document is negotiated by the named person's indorsement⁹⁶ and delivery.⁹⁷ After the named person's indorsement in blank or to bearer, any person may negotiate the document by delivery alone.

(2) If the document's original terms run to bearer, it is negotiated by delivery alone.

(3) If the document's original terms run to the order of a named person and it is delivered to the named person, the effect is the same as if the document had been negotiated.

(4) Negotiation of the document after it has been indorsed to a named person requires indorsement by the named person as well as delivery.

(5) A document is duly negotiated if it is negotiated in the manner stated in this subsection to a holder⁹⁸ that purchases it in good faith, without notice of any defense against or claim to it on the part of any person, and for value, unless it is established that the negotiation is not in the regular course of business or financing or involves receiving the document in settlement or payment of a monetary obligation.

(b) The following rules apply to a negotiable electronic document of title:

⁹⁴ For all three points see e.g., Katherine Cooper, “Recording Electronic Warehouse Receipts on a Distributed Ledger: Possibilities and Pitfalls” (9 June 2019), online: *Commodity Corner* <www.commodity-corner.com/newsitem/news/recording-electronic-warehouse-receipts-on-a-distributed-ledger-possibilities-and-pitfalls-746/> [perma.cc/CUF3-BKVM] accessed 11 July 2021, and from which the quote is taken. Blockchain and DLT are addressed in Part IX.

⁹⁵ A possible (albeit tentative) answer is that being identical, notionally all copies reflect “a single authoritative copy of the document”.

⁹⁶ Under UCC § 7-505, unlike in the case of negotiable instrument, an indorser of a document of title is not a guarantor for other parties.

⁹⁷ For delivery without indorsement and the right to compel indorsement, see UCC § 7-506.

⁹⁸ Under the relevant part of UCC § 1-201(b)(21), ‘holder’ is defined to mean:

- ...
- (B) the person in possession of a negotiable tangible document of title if the goods are deliverable either to bearer or to the order of the person in possession; or*
 - (C) the person in control of a negotiable electronic document of title.*

(1) If the document's original terms run to the order of a named person or to bearer, the document is negotiated by delivery of the document to another person. Indorsement by the named person is not required to negotiate the document.

(2) If the document's original terms run to the order of a named person and the named person has control of the document, the effect is the same as if the document had been negotiated.

(3) A document is duly negotiated if it is negotiated in the manner stated in this subsection to a holder that purchases it in good faith, without notice of any defense against or claim to it on the part of any person, and for value, unless it is established that the negotiation is not in the regular course of business or financing or involves taking delivery of the document in settlement or payment of a monetary obligation.

(c) Indorsement of a nonnegotiable document of title neither makes it negotiable nor adds to the transferee's rights.

(d) The naming in a negotiable bill of lading of a person to be notified of the arrival of the goods does not limit the negotiability of the bill or constitute notice to a purchaser of the bill of any interest of that person in the goods.

Under UCC § 7-502(a), in principle, a holder to which a negotiable document of title has been duly negotiated, as defined in UCC § 7-501(a)(5) and (b)(3)), acquires thereby:

(1) title to the document;

(2) title to the goods;

(3) all rights accruing under the law of agency or estoppel, including rights to goods delivered to the bailee after the document was issued; and

*(4) the direct obligation of the issuer to hold or deliver the goods according to the terms of the document **free of any defense or claim by the issuer** except those arising under the terms of the document or under this article. ... In principle, under UCC § 7-502(b),*

title and rights acquired by due negotiation are not defeated by any stoppage of the goods represented by the document of title or by surrender of the goods by the bailee and are not impaired even if:

*(1) the due negotiation or any prior due negotiation constituted a **breach of duty**;*

*(2) any person has been deprived of possession of a negotiable tangible document or control of a negotiable electronic document by misrepresentation, **fraud, accident, mistake, duress, loss, theft, or conversion**; or*

(3) a previous sale or other transfer of the goods or document has been made to a third person.

[Emphasis added].

Per the emphasised language in UCC § 7-501(a)(4) and (b)(1) & (2), the overall impact of UCC §§ 7-501 and -502 is that full negotiability is conferred on the negotiable document of title. Both freedom from the issuer's defences, and from third party claims, are available to the acquirer by due negotiation, regardless whether or not acquisition is or is not from or through a thief.

At the same time, the title of a purchaser by due negotiation will not always prevail over an interest in the goods which existed prior to the procurement of the document of title. Rather, they will usually prevail as long as the possession of the goods by the person obtaining the document derived from any action by the prior claimant which introduced the goods into the stream of commerce or carried them along that stream.⁹⁹ For example, a purchaser by due negotiation will not defeat an owner from whom the shipper (or predecessor in title) stole the goods.

In the absence of a due negotiation, under UCC § 7-504(a),

*A transferee of a document of title, whether negotiable or nonnegotiable, to which the document has been delivered ..., acquires the title and rights that its transferor had or had actual authority to convey.*¹⁰⁰

VII. Selected Laws Elsewhere¹⁰¹

What follows is a survey of selected jurisdictions as they address the digitization, transfer of property, and negotiability of transport documents, particularly in relation to multimodal means of transportation. Other than Kazakhstan, they all address negotiability, either in a direct or indirect way, albeit none discusses the extent of negotiability. To some degree or another, all, other than Kazakhstan and signatories to the Mercosur Agreement (except Argentina), address either digitization or functional equivalence, albeit so far as digitization is concerned, treatment may be limited to the electronic signature. The character of a multimodal transport document as possibly a document of title (or bill of lading) is not addressed in the Andean Community Decision.

Argentina is a member of both the Andean Community and MERCOSUR. For relevant provisions of Decision 331 on Multimodal Transportation of 4 March 1993 of the Andean Community, applicable to all its member countries, see Bolivia, Colombia, Ecuador and Peru. For relevant provisions of the MERCOSUR Partial Agreement for the Facilitation of Multimodal Transport of Goods of 27 April 1995, see Brazil and Paraguay.

⁹⁹ See comment to UCC § 7-503.

¹⁰⁰ In the case of a non-negotiable document of title, certain defences are cut-off by notice to the bailee. See UCC § 7-504(b).

¹⁰¹ This part draws on a Reference paper prepared by the UNCITRAL secretariat (and available from the Principal Legal Officer and Head, Legislative branch): "Provisions of national acts on multimodal transport documents," Expert Group Meeting on Future Negotiable Transport Documents, Vienna (online), 2-3 February 2021. Translation to English may be unofficial.

In addition, Argentina has enacted special legislation on multimodal transportation: Law No. 24.921 on Multimodal Transport of Goods, Official Bulletin, 12 January 1998. Its art 2 contains the following definitions:

a) Multimodal transport of Goods: [Transport] carried out under a multimodal transport contract using at least two different modes of carriage through a single operator, who must issue a single document for the entire operation, receive a single freight and assume responsibility for its performance, without prejudice to the fact that it includes, in addition to the transport itself, the services of collection, unitization or de-unitization of cargo by destination, storage, handling or delivery to the consignee, including the services that were contracted at origin and destination, including consolidation and deconsolidation of merchandise, complying with current legal regulations;

...

d) Depositary. The person who receives the merchandise for storage in the course of executing a multimodal transport contract;

...

i) Multimodal transport contract. The agreement by which a multimodal transport operator undertakes, against the payment of a freight to perform the multimodal transport of merchandise or arrange for its performance;

j) Multimodal transport document. The instrument that proves the conclusion of a multimodal transport contract and certifies that the multimodal transport operator has taken the goods into his custody and has agreed to deliver them in accordance with the contract;

Under art 3, the MTO is mandated to issue a multimodal transport document within twenty-four (24) hours of receiving the goods for transport. As for form of the document, under art 4,

When the multimodal transport document is issued in a negotiable form, it may be, to order, bearer, or registered and is transferable with the formalities and effects prescribed by the law for each of the aforementioned categories of commercial papers. If a set of several originals is issued, the number of originals that make up the set shall be expressly indicated in the body of the multimodal transport document, each of which must include the legend "Original". If copies are issued, each of them must bear the mention "Non-Negotiable copy."

The content of the multimodal transport document is governed by art 5. Under art 6,

*The multimodal transport document will be signed by the multimodal transport operator or by a person authorized for this purpose by him, whose signature must be registered in the registry of multimodal transport operators. **The regulations will decide the conditions for the use of electronic documentation in a manner that guarantees legal security.** [Emphasis added].*

Under art 7,

The legitimate holder of the multimodal transport document has the right to dispose of the goods during the carriage and demand its delivery at destination

Under art 8,

The issuance of the multimodal transport document establishes the presumption that the goods were received in apparent good order and condition, according to the particulars of the multimodal transport document. The presumption indicated admits evidence to the contrary.

However, said proof will not be admitted when the multimodal transport document has been transferred to a third party in good faith, including the consignee.

The effect of reservations noted by the MTO and that of a letter of indemnity issued by the shipper are governed by arts 9 and 10 respectively.

In **Austria**, the consignment note is a multimodal transport document. Under § 444 UGB (Austrian Commercial Code),¹⁰² “A consignment note may be issued by the carrier in respect of the obligation to deliver the goods.” § 445 governs the contents of the consignment note and further provides that the consignment note must be signed by the carrier who, at the request of the carrier, shall hand over to him a copy of the consignment note signed by him. Under § 446:

(1) The consignment note shall determine the legal relationship between the carrier and the consignee of the goods; the provisions of the contract of carriage not included in the consignment note shall be ineffective against the consignee unless the consignment note expressly refers to them.

(2) The provisions of the contract of carriage shall continue to govern the legal relationship between the carrier and the sender.

§ 447 (1) identifies the person entitled to receive the goods (against the return of the consignment note)¹⁰³ as either the consignee, or the transferee by endorsement if the consignment note was made out to order. Effectively providing the availability of transfer by negotiation, the provision suggests at least some degree of negotiability. Under § 447 (2), “the person entitled to receive the goods has the rights to which the sender is entitled in respect of the disposal of the goods if a consignment note has not been issued.” Under § 447 (3),

The carrier may only comply with an instruction by the sender to stop, return or deliver the goods to a consignee other than the consignee legitimised by the consignment note if the consignment note is returned to him; if he fails to comply with this obligation, he shall be liable to the lawful owner of the consignment note for the goods.

¹⁰² See Legal Information System of the Federal Government, “Consolidated federal law: Entire legal provision for the Company Code, version of 07/12/2021,” online: *Rechtsinformationssystem Des Bundes* <www.ris.bka.gv.at/GeltendeFassung.wxe?Abfrage=Bundesnormen&Gesetzesnummer=10001702> [perma.cc/L97L-E8LF] [English translation] accessed 12 July 2021. Official title: Bundesrecht konsolidiert: Gesamte Rechtsvorschrift für Unternehmensgesetzbuch, Fassung vom 12.07.2021 [original German] [UGB].

¹⁰³ *Ibid.*, § 448.

While the UGB does not appear to address electronic transport document, § 17 (1) *Freight Transport Act (Bundesgesetz über die gewerbsmäßige Beförderung von Gütern mit Kraftfahrzeugen)* envisages electronic receipts:

*The entrepreneur shall ensure that in every motor vehicle used for the commercial carriage of goods, **receipts in electronic or paper form** are handed over to the driver throughout the carriage, are carried along during the carriage and are handed over to the supervisory bodies on request, showing the goods carried, the place of loading and unloading and the principal. [Emphasis added].*

Bolivia, Colombia, Ecuador and Peru are members of the Andean Community. The latter issued Decision 331 on Multimodal Transportation of 4 March 1993 as modified by Decision 393 of 9 July 1996.¹⁰⁴ The Decision applies in all member-States of the Andean Community. Under its art 1, “Multimodal Transportation Document” (MTD) is defined to mean:

*The document proving the existence of a multimodal transportation contract and proving that the multimodal transportation operator has taken the merchandise into its possession and committed itself to deliver it in keeping with the clauses of this contract. **It may be replaced by an electronic mail message and be issued:***

- a) As a negotiable instrument; or*
- b) As a non-negotiable instrument, bearing the name of the consignee shall be entitled to reimbursement of his expenses for such checking.*

[Emphasis added].

Chapter III governs the multimodal transportation contract. Under art 3, upon taking the merchandise to its possession, the MTO is required to issue a signed **written** multimodal transportation document “which shall, at the shipper’s choice, be either negotiable or non-negotiable.” For its part, “[t]he signature may be handwritten, printed in facsimile, perforated, stamped, in symbols or recorded by any other mechanical or electronic means.” Arguably, that is unless a document may be ‘written’ electronically,¹⁰⁵ the transport document must be issued in a tangible form, albeit later it may be replaced “by an electronic mail message.”

Art 4 provides for the information to be contained in the MTD. Under art 5:

The data contained in the multimodal transportation document shall establish the presumption, unless proven otherwise, that the multimodal transportation operator has taken possession of the merchandise, as described in the cited document, unless an indication to the contrary has been included in the printed text or added to it, such as "weight, nature and number declared by the carrier,"; "container filled by the carrier" or other similar statements.

¹⁰⁴ See OAS, “DECISION 331: Multimodal Transportation” (n.d.), online: *SICE Foreign Trade Information System* <www.sice.oas.org/Trade/Junac/decisiones/dec331e.asp> [perma.cc/NP2P-CQYU] accessed 12 July 2021.

¹⁰⁵ See e.g., *Golden Ocean Group v Salgocar Mining Industries*, [2012] EWCA Civ 265. See also: *Pereira Fernandes v Mehta*, [2006] 1 All ER (Comm) 885 at para 28.

No proof to the contrary shall be accepted if the multimodal transportation document has been transferred or the electronic mail message of equivalent data has already been sent to the consignee, which has acknowledged its receipt and, on its basis, has acted upon it in all good faith.

Art 8 governs the delivery obligations of the MTO as follows:

a) When the multimodal transportation document has been issued as a negotiable instrument, "to the bearer", to the person that presents one of the original copies of that document;

b) When the multimodal transportation document has been issued as a negotiable instrument, "to the order of", to the person presenting a duly endorsed copy of the original document;

c) When the multimodal transportation document has been issued as a negotiable instrument to the order of a given person; to that person, after having proven its identity and upon presentation of one of the original copies of the document. If the document has been endorsed "to the order of" or in blank, the provision of letter b) shall be applied;

d) When the multimodal transportation document has been issued as a non-negotiable instrument, to the person designated in the document as the consignee after that person has proven its identity; and

e) When no written document has been issued, to the person indicated in the instructions received from the consignor or such person as may have acquired the rights of the consignor or consignee to issue such instructions, pursuant to the multimodal transportation contract.

MTO's responsibility is governed by arts 13-14. Shipper's responsibility is provided for by art 20. In principle, deviation from the provision of Chapter III is precluded under art 26.

As member States of MERCOSUR,¹⁰⁶ **Brazil**¹⁰⁷ and **Paraguay**¹⁰⁸ implemented¹⁰⁹ the *Agreement for the Facilitation of Multimodal Transport*,¹¹⁰ of which relevant provisions read as follows:

Art 1 (a) defines ‘Multimodal Goods Transport’ to be:

The carriage of goods by at least two different modes of transport under a Multimodal Transport Contract, from a place located in a State Party where a Multimodal Transport Operator takes the goods under his custody to another place located in another State Party designated for their delivery, including, in addition to the transport itself, the services of collection, unitization or de-unitization of cargo by destination, storage, handling and delivery of the cargo to the recipient, including the services that were contracted between origin and destination, including consolidation and deconsolidation of loads.

Having taken the goods into its custody, the Multimodal Transport Operator is authorized under art 3 to issue in writing “a Multimodal Transport Document or Bill of Lading” that at the shipper’s discretion may be either negotiable or non-negotiable:

Its¹¹¹ form and content will be those used in current and internationally recognized Multimodal Transport and must be dated and signed by the Multimodal Transport Operator or by the person effectively authorized by him.

There is no reference to an electronic format.

Under art 5,

The data contained in the Multimodal Transport Document will establish, unless proven otherwise, that the Multimodal Transport Operator took the goods under its custody as described in the Document.

¹⁰⁶ For other members, see MERCOSUR, “MERCOSUR Countries,” online: <www.mercosur.int/en/about-mercocur/mercocur-countries/> accessed 12 July 2021.

¹⁰⁷ Decree No. 1563 of 19 July 1995 implements the Agreement in Brazil (see UNCTAD, Commission on Enterprise, Business Facilitation and Development, *Efficient Transport and Trade Facilitation to Improve Participation by Developing Countries in International Trade*, UN Doc TD/B/COM.3/60, 3 October 2003 at 9 [UNCTAD Note]). For an unofficial text in Portuguese, see Presidência da Republica, “Decreto 1563/95 | Decreto no 1.563, de 19 julho de 1995” (n.d.), online: *Jusbrasil* <presrepublica.jusbrasil.com.br/legislacao/112574/decreto-1563-95> [perma.cc/MG3Q-K9C9] accessed 14 July 2021.

¹⁰⁸ Decree No. 16.927 of 16 April 1997 implements the Agreement in Paraguay (see UNCTAD Note, *supra* note 107). For an unofficial text in Spanish, see El Presidente de la República del Paraguay, *Decreto N° 16.927/97, Por El Cual Se Autoriza La Vigencia en La República Del Paraguay, del “Acuerdo de Alcance Parcial, Para La Facilitación Del Transporte Multimodale De Mercancías”, Protocolizado en El Marco Del Tratado de Montevideo Del Año 1980*, 11 de Abril de 1997, online: *Morínigo & Asociados* <www.morinigoyasociados.com/todas-disposiciones/1997/decretos/decreto_16927_97.htm> [perma.cc/MNS7-HSYH] accessed 14 July 2021.

¹⁰⁹ For Argentina, see above.

¹¹⁰ See Common Market Council, *Agreement on Multimodal Transportation within MERCOSUR*, Decision No 15 (1994), online: <www.loa.org.ar/legNormaDetalle.aspx?id=294> [perma.cc/G9BD-C8U3] [unofficial English translation] accessed 12 July 2021. In the original Spanish: Consejo Mercado Común, *Acuerdo sobre Transporte Multimodal en Ámbito del MERCOSUR*, Decisión Nro. 15 (1994).

¹¹¹ Query as to whether this applies only to the Multimodal Transport Document or also to the Bill of Lading.

The Multimodal Transport Operator may express reservations based on the Bill of Lading or Document, when it considers the description of the cargo (brands, numbers, quantities, weights, etc. of the goods) made by the shipper inaccurate, or when it or its packaging are not in perfect physical condition in accordance with the particular needs and legal requirements of each mode to be used in transport.

The Bill of Lading and / or Documents issued by all the natural or legal persons that intervene by order of the Multimodal Transport Operator will always be on the latter's behalf.

Art 8 distinguishes among the delivery duties of the Multimodal Transport Operator according to the type of document or bill as issued:

The Multimodal Transport Operator is obliged to execute or have all the actions necessary for the goods to be delivered:

a) to the person who presents one of the originals of the Document or Bill, when the Multimodal Transport Document was issued in a negotiable form to the bearer:

b) to the person who presents one of the originals of the duly endorsed Document or Bill, when the Multimodal Transport Document was issued in negotiable form to order;

c) when the Multimodal Transport Document or Bill is issued in negotiable form in the name of a specific person, to that person, with prior verification of their identity and against the presentation of one of the originals of the document. If the Document or Knowledge¹¹² was endorsed to the order or blank, the provisions of item b) shall apply;

d) to the person designated in the Document or Knowledge¹¹³ as consignee, with prior verification of their identity, when the Document or Multimodal Transport Bill was issued in a non-negotiable manner.

¹¹² In the Spanish original the word is ‘*Conocimiento*’, which (albeit as I am not a Spanish speaker) I suppose should better be translated to ‘cognizance,’ ‘notice’ or ‘acknowledgement’.

¹¹³ *Ibid.*

Cambodia, Indonesia, Lao PDR, Myanmar,¹¹⁴ **Philippines, Thailand,**¹¹⁵ and **Vietnam,**¹¹⁶ ratified the 2005 ASEAN Framework Agreement on Multimodal Transport.¹¹⁷ In principle, under art 27 (1),

Any stipulation in the multimodal transport document shall be null and void and shall produce no effect if it either directly or indirectly departs from the provisions of this Agreement and, specifically if stipulations are made that are prejudicial to the consignor or the consignee.

The issuance of a multimodal transport document is governed by art 4,

- 1. When the goods are taken in charge by the multimodal transport operator, he shall issue a multimodal transport document which, at the option of the consignor, shall be in either negotiable or non-negotiable form.*
- 2. The multimodal transport document shall be signed by the multimodal transport operator or by a person having authority from him.*
- 3. The signature on the multimodal transport document may be in the form of handwriting, print, perforated, stamped, symbols, or in any other mechanical, or **electronic** forms, not inconsistent with the laws of the country where the multimodal transport document is issued.*

Art 5 provides for the particulars to be included in the document. Evidentiary effect is provided by art 6 as follows:

- 1. The multimodal transport document shall be prima facie evidence of the taking in charge by the multimodal transport operator of the goods as described in that document unless a contrary indication, such as "shipper's weight, load and count", "shipper-packed container" or a similar expression, has been made in the printed text or superimposed on the document.*

¹¹⁴ Myanmar has also its own law: *Pyidaungsu Hluttaw Law No. 3/2014 - Multi-Modal Transport Law*. The original Burmese version is accessible at: <dmaportal.files.wordpress.com/2017/08/multimodal-transport-law.pdf> accessed 12 July 2021. For an English version, see Government of the Republic of Myanmar (Ministry of Transport), *The Multimodal Transport Law, 2014*, online (pdf): <asean.org/wp-content/uploads/2012/05/Myanmar-Multimodal-Transport-Law-2014.pdf> [perma.cc/5MQW-GPTU] accessed 12 July 2021.

¹¹⁵ Thailand also has its own law. See *Multimodal Transport Act, B.E. 2548 (2005)*, 27 July 2005, Government Gazette Vol 122, Part 61a, online (pdf): <web.krisdika.go.th/data/outside/outside21/file/Multimodal_Transport_Act_B.E._2548.pdf> [perma.cc/LEV2-93V3] [unofficial English translation] accessed 12 July 2021. It addresses electronic signatures (§ 12) and “electronic data of the multimodal transport bill of lading” (§ 13).

¹¹⁶ Vietnam also has its own law. See The Government of the Socialist Republic of Vietnam, *Decree on Multimodal Transport*, 19 October 2009, Decree No 87/2009/ND-CP, online: <vanbanphapluat.co/decree-no-87-2009-nd-cp-of-october-19-2009-on-multimodal-transport> [perma.cc/U622-QFVA] accessed 12 July 2021. It addresses electronic signatures (arts 10-11). Amendments to that decree were enacted in 2018 but they did not affect the provisions reproduced in this paper: see The Government of the Socialist Republic of Vietnam, *Decree Amending and Supplementing Certain Decrees on Multimodal Transport*, 16 October 2018, Decree No 144/2018/ND-CP, online (pdf): <asean.org/storage/2012/05/Viet-Nam-Amending-Decree-on-Multimodal-Transport-2009-16-Oct-2018.pdf> [perma.cc/EA7Z-9FMW] accessed 12 July 2021.

¹¹⁷ *2005 ASEAN Framework Agreement on Multimodal Transport*, signed at Vientiane, Lao PDR on 17 November 2005, online (pdf): <afamt.asean.org/wp-content/uploads/2019/07/2005-ASEAN-Framework-Agreement-on-Multimodal-Transport.pdf> [perma.cc/3S6B-48X7] accessed 12 July 2021.

2. Proof to the contrary shall not be admissible when the multimodal transport document has been transferred, or the equivalent electronic data interchange message has been transmitted to and acknowledged by the consignee, who in good faith has relied and acted thereon.

MTOs' and consignors' liability is addressed in arts 9 and 21, respectively.

In the People's Republic of **China**, Maritime Law¹¹⁸ Chapter IV § 4 (arts 71-80) provides that a transport document may either be a bill of lading or a document other than a bill of lading. Under art 79, a bill of lading may be either negotiable or non-negotiable. For its part, under art 80, a document other than a bill of lading "shall not be negotiable." Chapter IV § 8 (arts 102-106) governs multimodal transport contracts in which the carriage of goods by sea is included. Chapter IV § 8 does not contain provisions for multimodal transport documents which are thus those provided in Chapter IV § 4.

A judgment of the Supreme People's Court¹¹⁹ held that, though a bill of lading is a document of title, its possession by the holder does not necessarily confer on the latter the ownership of the goods covered by it. Rather, the holder's rights depend in each instance on the intention of the contracting parties, which in that case amounted to the creation of a security interest.

A sea leg is not required for multimodal documents of transport under *Civil Code* Chapter XIX § 4 arts 838-842 (previously *Contract Law*, 1999¹²⁰ arts 317-321). Under art 840, "[t]he multimodal carriage document may either be assignable or non-assignable as required by the consignor." At the same time, there is no provision either regarding negotiability or for the nature of the document as a bill of lading or otherwise. See also *Regulations Governing International Multimodal Transport of Goods by Containers*, 1997.¹²¹ At the moment there are no electronic transport documents except that a change in this situation is under discussion.

Under art 102 of the *Maritime Law*, a multimodal transport contract is defined to mean a contract under which the multimodal transport operator ('MTO') (who has entered the contract with the shipper either by himself or another person acting on its behalf) undertakes to transport the goods, against the payment of freight for the entire transport, from one place to another by two or more different modes of transport, one of which being sea carriage. Arts 103-106 provide for the duration and scope of the MTO's responsibility. Specifically, they authorize the MTO to enter into separate contracts with the carriers of the different modes defining their

¹¹⁸ See *Maritime Code of the People's Republic of China*, adopted and promulgated by Order No 64 on 7 November 1992, online (pdf): *AsianLII* <www.asianlii.org/cn/legis/cen/laws/mcotproc360/> [perma.cc/K4E3-BYT3] accessed 12 July 2021.

¹¹⁹ *China Construction Bank Guangzhou Liwan Branch v. Guangdong Lanyue Energy Development Co., Ltd., Huilai Yuedong Power Fuel Co., Ltd., Guangdong Lanhai Shipping Co., Ltd. and LAN Wenbin*, Civil Judgment (2015) Min Ti Zi No. 126 (Retrial Judgment) Supreme People's Court [China].

¹²⁰ See *Contract Law of the People's Republic of China*, adopted and promulgated by Order No 15 on 15 March 1999, online (pdf): *International Labour Organization* <www.ilo.org/dyn/natlex/docs/ELECTRONIC/52923/108022/F1916937257/CHN52923%20Eng.pdf> [perma.cc/YK2C-7E2N] accessed 12 July 2021.

¹²¹ Guibin Xu, "Multimodal transport and trade facilitation: implications in the Chinese context" (1999), online: *World Maritime University Dissertations* <commons.wmu.se/all_dissertations/123>. See 28-31 for discussion on Chinese Regulations Regarding Multimodal Transport.

responsibilities with regard to the different sections of the transport under the multimodal transport contracts without affecting its own responsibility to the shipper. The *Civil Code* provisions characterize the MTO as a 'carrier' and in principle follow those of the Maritime Law.

The Regulations cover the main issues involved in multimodal transport operations. Their structure bears similarities with the MT Convention, albeit "in a much simplified form in its formulations."¹²² Chapter 2, along with Chapters 7 and 8, governs administrative matters. Conditions for negotiability and non-negotiability of the multimodal transport document are laid down in Chapter 3, which more generally stipulates the contents of the multimodal transport document. Chapters 4 and 5, respectively addresses the consignor's and the MTO's liability. Chapter 6 governs the time bar for actions.

Transport documents which are not documents of title are provided for by art 11 and art 19 of *Railway Law* (consignment note), as well as art 80 of *Maritime Law*, and arts 113-120 of *Civil Aviation Law* (waybill). A recent case effectively treated a railway transport document named "railway bill of lading" as a document of title.¹²³

Ethiopia provides for the multimodal transport document in *Multimodal Transport of Goods Proclamation, 2007*.¹²⁴ Under art 44, adherence to its provisions is mandatory and must be stated in a multimodal transport document. Under art 42 (1), "[a]ny stipulation in multimodal transport contract or multimodal transport document shall be null and void to the extent that it derogates, directly or indirectly, from the provisions of this Proclamation."

Under art 4:

1/ When the goods are taken in charge by the multimodal transport operator, [he] shall issue a multimodal transport document which, at the option of the consignor, shall be in, either negotiable or non-negotiable form.

2/ The multimodal transport document shall be signed by the multimodal transport operator or of a person having authority from him.

*3/ The signature on the multimodal transport document may be in hand writing, printed in facsimile, stamped, in symbol or made by any other mechanical or **electronic means**.*

....

[Emphasis added].

Under art 5 (1), with the shipper's agreement,

¹²² *Ibid* at 29.

¹²³ *Chongqing Fuqi Automobile Sales Co., Ltd. v. Chongqing Sinotrans Logistics Co., Ltd.* People's Court of Chongqing Pilot Free Trade Zone (Yu 0192 Civil First Trial No. 10868), Judgment) [2019].

¹²⁴ Federal Negarit Gazeta of the Federal Democratic Republic of Ethiopia, *Proclamation No. 548/2007, Multimodal Transport of Goods Proclamation*, 13th Year, No 59, online: <perma.cc/7M2J-F32A> accessed 19 September 2021.

a non-negotiable multimodal transport document may be issued by making use of any mechanical and electronic means or other means preserving a record of the particulars stated in Art. 8 [Emphasis added].

Art 8 provides for the content of a negotiable as well as a non-negotiable document. Art 5 goes on to provide that a non-negotiable document must identify the consignee. For its part, the MTO is discharged upon the delivery of the goods to the consignee “or to such other person as he may be duly instructed, as a rule, in writing.”

Under art 6:

Where a multimodal transport document is issued in negotiable form:

1/ it shall be made out to order or to bearer,

2/ if made out to order it shall be transferable by endorsement,

3/ if made to bearer it shall be transferable without endorsement,

4/ if issued in a set of more than one original it shall indicate the number of originals in the set,

5/ if any copies are issued each copy shall be marked "non-negotiable copy".

Under art 7 (1), a multimodal transport document is to be regarded as a document of title:

Every consignee named in the negotiable or non-negotiable multimodal transport document and every endorsee of such document as the case may be, to whom the property in the goods mentioned therein shall pass, upon or by each reason of such consignment or endorsement shall have all the rights and liabilities of the consignor.

Under art 10, in principle:

1/ the multimodal transport document shall be "prima facie" evidence of the taking in charge by the multimodal transport operator of the goods as described therein, and

2/ proof to the contrary by the multimodal transport operator shall not be admissible if the multimodal transport document is issued in negotiable form and has been transferred to a third party, including a consignee, who has acted in good faith in reliance on the description of the goods therein.

Articles 11 and 12 respectively provide for the MTO’s and shipper’s responsibilities for misstatements. Under art 14 delivery of the goods to the person entitled to receive them is upon the surrender of the document.

In **Germany**, the *Multimodal Transport Reform Law* (“Transportrechtsreformgesetz”), which was passed in 1998, introduced revisions to the fourth and fifth books of the Commercial Code (HGB),¹²⁵ respectively addressing the contract for carriage and maritime law.

¹²⁵ Bundesgesetzblatt, *Gesetz zur Neuregelung des Fracht-, Speditions- und Lagerrechts* (Transportrechtsreformgesetz – TRG), teil I Nr. 39, ausgegeben zu Bonn am 29. Juni 1998; online (pdf): <www.fsk-

HGB § 515 provides for the content of the maritime bill of lading while HGB § 516 addresses the signature requirement on it and further provides for the functional equivalence of the electronic format for a bill of lading:

(1) The carrier must sign the bill of lading; reproductions of the personal signatures by means of printing or stamp shall be sufficient

(2) An electronic record having the same functions as a bill of lading shall be deemed equivalent to a bill of lading, provided that the authenticity and integrity of the record are assured (electronic bill of lading).

(3) The Federal Ministry of Justice and Consumer Protection is hereby empowered to determine by regulation, issued in agreement with the Federal Ministry of the Interior and not requiring the consent of the Federal Council (Bundesrat), the details of issuing, presenting, returning and transmitting an electronic bill of lading, as well as the particulars of the process of posting retroactive entries to an electronic bill of lading.

HGB § 526 is a similar provision applying to the sea waybill.

HGB § 524 provides for the effect of the transfer of a bill of lading as follows:

Provided the carrier is in possession of the goods, the transfer of a bill of lading to the consignee identified therein shall have the same effects, in terms of the acquisition of rights to the goods, as does the delivery of the goods for carriage. The same shall apply to a transfer of the bill of lading to third parties.

Stated otherwise, in principle, the possession of the bill of lading is tantamount to the constructive possession of the goods themselves.¹²⁶

Under HGB § 408, the carrier may issue a consignment note, to be signed by the shipper, who may require that the carrier also sign the consignment note. Along the same lines as § 516, § 408 (3) provides for the functional equivalence of an electronic record of the consignment note, “provided that it is ensured that the authenticity and integrity of the record are preserved.” As well,

The Federal Ministry of Justice and Consumer Protection is authorized, in agreement with the Federal Ministry of the Interior, Building and Community, to regulate by ordinance, which does not require the consent of the Bundesrat, the details of the issuing, carrying and presentation of an electronic consignment note as well as the procedure for a subsequent entry in an electronic consignment note.

Note that Regulation under § 408 (3) envisages the presentment of the electronic consignment note.

gmbh.de/etc/docs/trg.pdf> [perma.cc/MQ3E-W6JP], accessed 12 July 2021. Federal Law Gazette, *Law on the New Regulation of Freight, Forwarding and Storage Law (Transport Law Reform Act – TRG)*, Part I, No 39, issued in Bonn on 29 June 1998. For the English translation HGB Books 4 and 5 (incorporating revisions made by the *Multimodal Transport Reform Law*), respectively visit: <www.sterac.com/fileadmin/content/documents/downloads/STERAC_HGB_DE-EN.pdf> [perma.cc/4H68-ADE7] and <www.gesetze-im-internet.de/englisch_hgb/englisch_hgb.html#p0929> [perma.cc/584L-PMFU], both accessed 17 September 2021.

¹²⁶ See Part II for more in general on this aspect of a document of title.

The evidential value of a consignment note signed by both parties is provided for in § 409 as follows:

(1) A consignment note signed by both parties shall be prima facie evidence of the conclusion of the contract of carriage, the conditions of the contract and the receipt of the goods by the carrier.

(2) A consignment note signed by both parties shall also give rise to the presumption that the goods and their packaging appeared to be in good condition when the carrier took them over and that the number of packages, their marks and numbers corresponded with the statements in the consignment note. However, the consignment note does not give rise to this presumption if the carrier has entered a reservation accompanied by reasons; the carrier may give as a reason that he had no reasonable means of checking the accuracy of the statements.

(3) If the gross weight of the goods or their quantity otherwise expressed or the content of the packages have been checked by the carrier and the result of the checks has been entered in a consignment note signed by both parties, the latter shall be prima facie evidence that the weight, quantity or content corresponds to the statement in the consignment note. The carrier is obliged to check the weight, quantity or contents if the sender so requires and the carrier has reasonable means of checking; the carrier is entitled to be reimbursed for his expenses for such checking.

Under § 443, the carrier may issue and sign a consignment bill, in respect to the obligation to deliver the goods which will contain same particulars as a consignment note. Such a document is used for the carriage of goods on inland waters and under HGB § 448 is a document of title. If it is made out to order it shall contain the consignee's name. "If the name is not indicated, the bill of lading shall be deemed to be made out to the order of the sender." In the footsteps of HGB § 516 and 408, HGB § 443 (3) provides for the functional equivalence of the electronic format.

Under HGB § 444, the consignment bill establishes the presumption that the carrier has taken the goods, as well as those presumptions created by a consignment note under § 409 (2) and (3), some of which are irrebuttable against a transferee acting in good faith. HGB § 445 provides for the delivery of the goods against the surrender of the consignment bill.

While these provisions do not mention 'negotiability', HGB § 519 speaks of bills of lading made out to bearer or to order, and in the latter case, speaks of the holder "as the consignee, either directly or through an unbroken chain of endorsements." Transfer by endorsement of a consignment bill made out to order as prima facie entitling the endorsee to take delivery of the goods is addressed by HGB § 446.

In **India**, the governing statute is *The Multimodal Transportation of Goods Act, 1993*.¹²⁷
Under § 7,

(1) *Where the consignor and the multimodal transport operator have entered into a contract for the multimodal transportation and the multimodal transport operator has taken charge of the goods, he shall, at the option of the consignor, issue a negotiable or non-negotiable multimodal transport document: ...*

(2) *The multimodal transport document shall be signed by the multimodal transport operator or by a person duly authorised by him.*

Under § 2:

(la) *“multimodal transport document” means a negotiable or non-negotiable document evidencing a multimodal transport contract and which can be replaced by electronic data interchange messages permitted by applicable law;*

...

(n) *“negotiable multimodal transport document” means a multimodal transport document which is— (i) made out to order or to bearer; or (ii) made out to order and is transferable by endorsement; or (iii) made out to bearer and is transferable without endorsement;*

(o) *“non-negotiable multimodal transport document” means a multimodal transport document which indicates only one named consignee;*

Under § 8, a multimodal transport document is to be regarded as document of title so as to pass the consignor’s rights and liabilities. Content, reservations, and evidentiary effect are respectively governed by §§ 9, 10, and 11.

Kazakhstan enacted *Rules of multimodal transport* on 26 November 2015. The Rules were developed in accordance with the Law of the Republic of Kazakhstan dated 21 September 1994 “On Transport in the Republic of Kazakhstan”.¹²⁸ The Rules equate between a consignment note and a bill of lading. The document should be written and consist of four copies. According to art 4 (31) it must be “signed by the customer and the operator, which certifies the receipt of the cargo by the operator”.¹²⁹ Neither negotiability nor digitization is addressed by these Rules.

¹²⁷ See Government of India Ministry of Law and Justice, *The Multimodal Transportation of Goods Act, 1993*, online (pdf): <legislative.gov.in/sites/default/files/A1993-28.pdf> accessed 12 July 2021 [English translation] [MMTG]. The text of provisions of the MMTG are also available through <indiankanoon.org> accessed 12 July 2021.

¹²⁸ The text of the Rules is available online in Russian at <adilet.zan.kz/rus/docs/V1500012569#z8> accessed 12 July 2021.

¹²⁹ Under *ibid*, art 4 (32) the first carrier must sign to certify the receipt of the goods.

The **Singapore Bills of Lading Act**¹³⁰ covers shipping documents; that is, bills of lading, sea waybills and ship's delivery order, all of which are shipping documents and not multimodal transport documents.¹³¹ Effectively, the bill of lading may be negotiable.¹³²

In any event, as indicated, Singapore is in the process of adopting the UNCITRAL MLETR.¹³³ As well, its *Multimodal Transport Bill*, Bill No. 42/2020¹³⁴ defines “*multimodal transport document*” to mean:

a document which evidences —

(a) a multimodal transport contract for the international multimodal transport of any goods;

(b) the taking in charge of the goods by the multimodal transport operator of the contract; and

(c) an undertaking by the multimodal transport operator to deliver the goods in accordance with the terms of the contract.

Under art 9, it must “be signed by the multimodal transport operator or by a person authorised by the multimodal transport operator” and “at the option of the consignor of the goods, either be in negotiable or non-negotiable form.” When issued to the bearer it is “negotiable by delivery.” When issued to order it is “negotiable by the endorsement of the holder completed by delivery.” As well, under art 9 (6), subject to the provisions of the Act, and in principle, the stipulations of the document,

A consignee of goods that are the subject of a multimodal transport contract as evidenced by a multimodal transport document has and is vested with all rights of action and is subject to all liabilities in respect of those goods as if the consignee were a party to the contract.

Under art 11, when

*the multimodal transport document has been transferred, or **transmitted by electronic data interchange** to the consignor of the goods who —*

(a) has acknowledged the receipt of the document; and

¹³⁰ C. 384 (revised edition 1994), online: <sso.agc.gov.sg/Act/BLA1992> [perma.cc/LEV6-DXVL] accessed 17 September 2021.

¹³¹ *Ibid* at s. 1 (1).

¹³² *Ibid* at ss. 1 (2) and 5 (2), addressing indorsement and bearer form.

¹³³ *Electronic Transactions (Amendment) Bill*, Bill No 1/2021, introduced 4 January 2021, online: *Singapore Statutes Online* <sso.agc.gov.sg/Bills-Supp/1-2021/Published/20210104?DocDate=20210104> accessed 12 July 2021. See also Gilbert Leong, “4 things you need to know about the amended Electronic Transactions Act” (3 February 2021), online: *Dentons Rodyk & Davidson LLP* <dentons.rodyk.com/en/insights/alerts/2021/february/3/4-things-you-need-to-know-about-the-amended-electronic-transactions-act> accessed 12 July 2021; Elizabeth Cole and Sushma Jobanputra, “Singapore’s Electronic Transactions Act Expanded to Include Transferable Documents” (February 2021), online: *Jones Day* <www.jonesday.com/en/insights/2021/02/singapores-electronic-transactions-act-expanded> accessed 12 July 2021.

¹³⁴ *Multimodal Transport Bill*, Bill No 42/2020, introduced 2 November 2020, online: *Singapore Statutes Online* <sso.agc.gov.sg/Bills-Supp/42-2020/Published/20201102?DocDate=20201102> accessed 12 July 2021.

(b) has in good faith relied on and acted upon the document

[Emphasis added], the evidentiary effect of the document as to the taking of possession of the goods and their description cannot be challenged. Under art 11 (3),

“electronic data interchange” means an electronic transmission of data from one computer to another computer, using an internationally recognised standard for secure electronic transfer of data that is agreed on by the multimodal transport operator, the consignor of the goods, and any other party involved in the international multimodal transport of the goods.

Under art 14, the MTO’s obligation to perform, or to procure the performance of, all acts necessary to ensure the delivery of the goods runs:

(a) where the multimodal transport document relating to the contract is issued in a negotiable form to bearer — to the person who surrenders to the multimodal transport operator one original of the document;

(b) where the multimodal transport document relating to the contract is issued in a negotiable form to order — to the person who surrenders to the multimodal transport operator one original of the document duly endorsed;

(c) where the multimodal transport document relating to the contract is issued in a negotiable form to a named person — to the person (upon proof of the person’s identity) who surrenders to the multimodal transport operator one original of the document;

(d) where the multimodal transport document relating to the contract is issued in a negotiable form to a named person and has been transferred to order or in blank — to the person if that person surrenders to the multimodal transport operator one original of the document duly endorsed;

(e) where the multimodal transport document relating to the contract is issued in a non-negotiable form — to the person named as the consignee of the goods in the document upon proof of the person’s identity;

(f) where no document is issued — to a person as instructed by the consignor of the goods or by a person who has acquired the consignor’s or consignee’s rights under the multimodal transport contract to give such instructions.

Consignor’s responsibilities are governed by art 24. Under art 28, a multimodal transport document is void if it departs from provisions of Act.

A full comparative discussion of the various national laws addressed above is beyond the scope of the present study. However, suffice it to say that in the final analysis, national legislation is not uniform and to one degree or another is inadequate. It does not address the extent of negotiability and it is not comprehensive as to digitization and its functional equivalence.

*VIII. Banking and commercial practices*¹³⁵

Transport documents are used in documentary sales. Some are documents of control, required to be presented to the carrier in order to receive the goods. As discussed in Part II, this is the case particularly for bills of lading. For their part, negotiable bills of lading can be used for transacting with the goods while they are in transit. At present, this practice may exist primarily in the oil trade.

As well, negotiable bills of lading may be used as collateral securing credit extension, particularly in trade finance. For example, in a documentary sale, the parties may use the documentary collection method for payment. The seller may draw a draft (bill of exchange) on the buyer for the price of the goods transported to the buyer. The seller may send the draft together with the bill of lading (and other shipping documents) through the seller's bank to the buyer's bank. Depending on whether the draft is a sight or time draft, the buyer's bank will surrender the bill of lading (and other shipping documents) to the buyer against the buyer's payment or acceptance. To bridge the gap between the delivery of the goods to the carrier and receipt of payment for them, the seller may discount the draft with the seller's bank. The seller's bank may rely on the bill of lading as collateral securing the seller's reimbursement obligation on the seller's endorsement to that bank. Whether the seller's endorsement to the seller's bank is with recourse or without recourse, the bill of lading in the hands of the draft holder will also secure the buyer's obligation on the acceptance of the draft.

At the other end of the sale transaction, whether or not the seller discounted the draft with the seller's bank, the bill of lading (together with the other shipping documents) will not be delivered to the buyer until the buyer pays or accepts the draft. For its part, the buyer's bank may advance funds to the buyer in which case it will rely on the bill of lading and through it on the goods themselves as collateral securing the buyer's reimbursement obligation. Furthermore, the buyer's bank will release the bill of lading to the buyer on trust terms. Under a 'trust receipt' accordingly issued, the buyer is a trustee and its bank is the beneficiary, who remains in constructive possession of the bill of lading and through it of the goods it represents, even after the buyer obtains the goods from the carrier against the presentation of the bill of lading. Thereby the buyer's bank purports to obtain a proprietary claim to the proceeds realized from the subsequent sale of the goods by the buyer.¹³⁶

Documentary collections make up a very small percentage of **North American**¹³⁷ imports—maybe 1%—but these transactions often utilize negotiable bills of lading as this gives a foreign seller a means of ensuring that the buyer cannot obtain the goods until paying or at least signing a time draft. This is strictly a risk-mitigation mechanism—not a means of obtaining

¹³⁵ This section primarily draws on information provided by bankers, some of whom are affiliated with the ICC, included in footnote * *supra*. Errors and omissions are mine.

¹³⁶ For an early-modern comprehensive discussion on the various ways in which a bill of lading can serve as a collateral, see e.g., Frederick Thulin, "Bill of Lading as Collateral Security under Federal Laws" (1918) 16 Mich L Rev 402 at 403-404.

¹³⁷ In this context, 'North America' consists of the US and Canada and to some extent Mexico.

finance. This is so since in the absence of a letter of credit, the seller is taking the chance that the buyer will not pay. By using a documentary collection with a bill of lading consigned to the order of the seller and endorsed in blank, the bank retains not just property right but also control over release of the goods. The buyer needs the documents in order to obtain the goods, but will receive them from the bank only upon payment or acceptance of the draft. Obviously, an accepted time draft is not much better than a normal receivable so that mitigation only works well with sight drafts where documents will be released to the buyer against payment. If the bank doesn't receive payment in the "documents against payment" case, the documents are returned to the supplier and, since these include the document of title, the seller can arrange to sell the goods to someone else or to have the goods returned by the carrier.

In the past, up to around 40 years ago, North American banks regularly issued letters of credit taking as collateral negotiable ocean bills of lading consigned to order of the bank or consigned to order of the seller and endorsed in blank. This added some protection if the buyer failed to reimburse the bank immediately after the bank paid on these letters of credit as the bank could then use the bill of lading to take physical possession of the goods. This protection was of short duration since once the bill of lading was given to the buyer, so that the buyer could pick up the goods, the bank lost any control of the bill of lading. The bank would therefore likely require additional collateral, based on the "advance rate" the bank was giving that buyer for their inventory (e.g., 60% of inventory value for goods that might be hard to liquidate). At this point financing became based on security interests filed against the buyer covering the goods and receivables that may result from re-sale of the goods.

At present, North American banks have no problem with issuing or negotiating under letters of credit that call for documents that evidence transportation of goods whether or not these are negotiable documents of title. However, they are reluctant to provide credit on the security of goods in transit and usually do not consider such goods to serve as collateral. Accordingly, they do not require title or any other property right pass through their hands by means of negotiation of bills of lading. Where they wish to use such goods as collateral, they obtain security interests by means of filing financing statements under UCC Article 9 - Secured Transactions (or corresponding personal property security legislation in Canada) instead. When they provide financing against letters of credit documents, North American banks view the issuing bank as the risk and are purchasing the exporter's right to payment by the issuing bank. They do not ground their credit decision on the basis of the bill of lading as collateral.

To that end, around 30 years ago, Boris Kozolchyk observed that¹³⁸

The ocean bill of lading is undergoing a radical transformation. Until the 1960's, most commercial letters of credit, reflecting documentary sales terms, called for payment against presentation of negotiable ocean bills of lading indorsed to the issuing or confirming bank. Bankers regarded the ocean bill of lading as sound collateral, and as a secondary source of repayment of the account parties'

¹³⁸ Boris Kozolchyk, "Evolution and Present State of the Ocean Bill of Lading from a Banking Law Perspective" (1992) 23 J Mar L & Comm 161 at 161-62.

reimbursement obligations to the issuing bank. This is no longer the case. During the last two decades more and more bankers have come to regard the bill of lading as just another letter of credit document.¹³⁹ Issuers of letters of credit now view themselves not as purchasers of bills of lading, but as mere examiners of the bills' facial compliance with the terms of the letter of credit. The banker's decision to issue a credit nowadays is rarely based upon the availability of a "clean, on board, negotiable" ocean bill covering the shipment of a readily marketable commodity. Prominent American bankers recently [advised] that half of their commercial letters of credit provided for payment not against ocean bills of lading, but against freight forwarders' cargo receipts. These forwarders' receipts lack essential elements of ocean bills of lading...

Transport documents North American banks handle are mainly for ocean and air transportation. These are air waybills, port-to-port bills of lading, and multimodal bills of lading with a sea leg. The port-to-port bills of lading and combined transport bills of lading are sometimes "straight consignment" bills of lading, i.e., not negotiable. They are very similar to sea waybills, which carriers in the US do not issue. Some straight consignment bills of lading indicate that goods will not be surrendered to the consignee without surrender of an original and so control delivery even though they do not serve as documents of title. Trucking, rail, and barge companies issue what they call "inland bills of lading". However, they do not serve to convey property; they are not documents of title or even control. Rather, they are essentially the same as consignment notes used in Europe. US banks see them under letters of credit financing trade with Mexico and in the rare commercial letter of credit that covers a domestic sale.

The decline in the use of bill of lading as collateral has coincided with the global tendency to move away from the use of documentary letters of credit. This tendency is attributed first to the high cost of letters of credit. Second, at present, letter of credit operation may slow down delivery of the shipped goods. The reason is that vessels are very fast these days and often arrive before the documents. Delays result from the fact that the seller has to get the goods loaded, obtain the bill of lading, create or obtain whatever other documents the letter of credit requires, and send them (perhaps by overnight courier) to the nominated bank. Then the nominated bank is likely to take two to four days to check the documents and inform the beneficiary whether they comply. Seventy-five percent of the time, the documents do not comply, so the beneficiary will either create or obtain corrected documents or ask the nominated bank to send an electronic message (e.g., by SWIFT) to the issuing bank to request waiver of the discrepancies. The issuing bank, upon receiving such a request may take a day or two to act by contacting the applicant (these days often by email) to see whether they will agree to reimburse the bank if they waive the discrepancies. The applicant might not respond for another day or more. Only after the issuing bank responds to them will the nominated bank forward the documents, and then it usually takes at least two days for the documents to arrive, even if sent by international courier. At this point, the issuing bank will still examine the documents, which is

¹³⁹ Namely, for such bankers, the bill of lading serves a proof that the goods were actually shipped with the carrier, as instructed by the applicant.

likely to take another two or three days, to see whether they might find other discrepancies. Then, they will contact the applicant to arrange for payment and, upon receipt of funds, they will send the documents to the applicant, which takes another day, even by overnight courier. Under such circumstances, it is very common for importers to complain that their goods have arrived in port and are incurring demurrage charges because the bank isn't turning the documents around fast enough.

Instead of using documentary letters of credit, parties to domestic trade transactions may however use standby letters of credit covering ongoing activity. Standby credits rarely call for transport documents and are generally payable against no more than a statement that the applicant is past due on one or more invoices. The standby credits are not to be specific to any particular shipments, so they "roll", *viz.*, since they are not drawn, they cover ongoing purchases as long as the buyer does not owe the seller more than the outstanding amount. Other than the fact that there is a standby credit to back up the buyer's credit line with the seller, these are open account transactions.

International shipments in which air waybills and non-negotiable ocean bills of lading are used as well as domestic shipments made by road, rail, or barge are usually made on an open account terms so that transactions do not require the use of a documentary letter of credit. In fact, around 90 percent of exports from the US and imports to the US are conducted on open account terms.

In such open account transactions, sellers may obtain financing by borrowing against their receivables (using "asset-based lending" products offered by banks) or by selling their receivables (small companies may use with-recourse factoring, whereas large companies may use asset-backed securitization structures). Selling receivables to banks is available in the market but is usually based on programs for financing "approved payables" (buyer-centric) rather than whole portfolios of receivables (seller-centric). Approved payables programs are offered to suppliers of particular companies and are based on the credit of the buyers and utilize on-line platforms where the buyers approve payables before the banks offer to purchase them from the suppliers. The buyers tend to be very large and creditworthy (e.g., Walmart) and the suppliers must usually be in the same country as the buyer. Other financing available to buyers includes inventory-based financing—another form of asset-based lending. As well, many companies simply obtain loans based on a pledge of (namely the giving of a security interest over) all their corporate assets to finance operations, i.e., they don't need trade finance for open account transactions.

Bills of lading are heavily used as collateral in the People's Republic of **China** in the financing of international maritime trade. In the course of trade finance, a bank will take a pledge of a bill of lading only where, by its terms, the document runs in the bank's favour as a holder. Typically, the bill of lading is to be made to the bank's order or to be made out to the bank as a consignee. A bill of lading on which the buyer is the holder will usually not qualify as such

document must first reach the buyer prior to negotiation to the bank, a procedure which gives rise to the risk of the buyer's failure to endorse—not to mention appropriate the goods.

Since the bill of lading is to be forwarded by the seller ultimately to the importer so as to enable the importer to take delivery of cargo, it is seldom the only collateral on the exporter's side. However, the exporter may take advantage of the bill of lading if it is returned upon dishonour at the buyer's end.

A bank issuing a letter of credit may agree to provide the applicant (importer/buyer) with trade finance. To that end, the bank will require a full set of original negotiable bills of lading of which it becomes the holder. Some issuing banks use import trade finance agreements and trust receipts in connection with their import trade loan, and release documents to the letter of credit applicant to facilitate the delivery of cargo and thus its re-sale to enable applicant's repayment. Under a typical trust receipt arrangement, the bank entrusts the bill of lading to the buyer who in dealing with the documents and the goods it covers is to act as a trustee for the bank. The proceeds of the sale of those goods by the buyer are thus earmarked for the repayment of the applicant/buyer's debt to the issuing bank.

For import trade finance using pledge agreement, especially in commodity trade finance, a warehouse supervision structure is often designed to enable the buyer's bank to handle the incoming goods. Under a typical arrangement, the bank will nominate a qualified warehouse person to deal with cargo under the pledged bill of lading. The bank, buyer and a warehouse person will sign an agreement addressing supervision, delivery, customs entry and related issues. Banks will usually set up a rate, typically a percentage of the value of the cargo covered by the particular bill of lading.

By the time of honour of a letter of credit, if the letter of credit applicant requests import finance, the issuing bank will sign an import trade finance contract with the applicant and advance payment under the letter of credit. The buyer/applicant/importer may take delivery of goods from the warehouse only upon the issuing bank's notice of release of cargo. The applicant will be required to provide cash collateral or repay the finance based on the pledge rate, quantity of the delivered cargo and the price of the cargo on the delivery date.

In documentary collection or open account payment (T/T, telegraphic transfer) transactions, the remitting bank (the importer's bank) will take similar approaches as the issuing bank in a letter of credit transaction.

Air/railway/road transport documents are not documents of title and thus may not be pledged. However, for air/railway/road transport, trade finance may nevertheless be provided where the consignee under the transport document is the issuing bank.

The following is a partial review of trade finance practices in randomly selected countries as it was indirectly conveyed. It purports to provide the salient trade finance features in each of the countries.

Cambodia:

Trade finance normally occurs only against collateral. Accordingly, bills of lading giving banks security and control over the goods are frequently used. No trade finance is available when goods are shipped by road, rail or otherwise using a non-negotiable transport document.

Hong Kong (SAR, China):

Banks provide trade finance based on the credit standing and repayment capabilities of corporate customers. Transport documents are mainly used to examine whether the transactions are real, and the transferability of the transport documents usually does not have an impact on credit granting procedures and trade finance decisions.

Trade in Hong Kong is mainly in goods in transit. To enable the resale of goods, a negotiable ocean bill of lading is usually required. Trust receipts are used to secure rights of reimbursement for documents and goods.

India:

Lorry Receipts (in Road transport), Railways Receipts (in Rail transport), and Airway bills (in Air transport) are not documents of title. Checking their authenticity and genuineness is challenging. However, in extending trade finance, banks in India tend to rely on them.

The bank accepting such transport documents insists that it should be endorsed or consigned in its favour. Transporters must be on the IBA (Indian Banks Association) approved list. IBA already requested the Government of India and the Reserve Bank of India to take measures to make the Lorry Receipt a document of title. A Model Scheme for licensing Transport Operators has also been prepared under the amended Motor Vehicles Act and circulated by the Central Government to State Governments. Among other things, the scheme purports to ensure that Lorry Receipts are treated on par with the Railway Receipts and that obligations similar to those on the Railways are placed on the licensed Transport Operators. As far as the Association is aware, the Model Scheme is still to be implemented by State Governments.

Although both the sea waybill and bill of lading are acceptable transport documents by Indian banks, the bill of lading, being a negotiable document of title, is the preferred one. Further, depending on the borrower's credit risk assessment, banks may insist upon order bill of lading to be endorsed to the bank so as to allow it to control the goods.

Typically, the sea waybill is issued (i) for inter-company shipments; (ii) where the shipment takes place between two different companies but there are no negotiations required between the two either directly or via bank for release of the cargo; and (iii) the shipper need not submit an original bill of lading to anyone to secure his payment.

Most of the Indian Banks acting as Issuers of letters of credit extend trade finance primarily on the basis of the creditworthiness of their customer (Applicant) and the quality of the underlying collateral security documents.

Indonesia:

When goods are shipped by road, rail or otherwise using a non-negotiable transport document, trade finance usually takes place against a document called STTB (*surat tanda terima barang*, meaning Goods receipt) that is signed by applicant and beneficiary.

Japan:

Usually banks do not provide trade finance against rail, road, or other non-negotiable transport documents. However, a trade finance facility called a “Clean Loan” is provided in international trade finance and in which collateral is not required.

Traditional ocean transport documents are usually required. There are also circumstances in which trade finance is provided against documents that are not transport documents (for example, Mate’s Receipt is included).

Banks tend to rely more on the credit standing of customers instead of the collateral value.

(South) Korea:

Export is either by air or by sea. The air waybill is a non-negotiable transport document. Sea waybills are not used. The bill of lading as a negotiable transport document is used in trade finance.

Korean exporters receive either a sight letter of credit or a usance letter of credit (deferred payment credit). Most times, after shipment, they present the shipping documents and banks negotiate the shipping documents and they are paid. The documents are then sent to the issuing bank and payment is made by the issuing banks overseas.

Although the air waybill is a non-negotiable transport document, above procedures are used to provide payment to the exporters after shipment.

Philippines:

Bills of lading and documentary credits are prevalent. In trade of goods shipped by road or rail, non-negotiable transport documents are primarily financed using Trust Receipts. It is common for these arrangements to have another supporting document establishing the security/collateral arrangement between the bank and the customer. Local banks can opt to use unsecured short-term loans instead.

Secured foreign trade lending (backed by the collateral value of the documentation) is an added mitigation tool to foreign trade lending. The customer's creditworthiness should still be the primary basis for foreign trade lending.

Russia:

For export trade finance, there are distinctions between negotiable and non-negotiable transport documents.

Russian banks treat traditional ocean bill of lading and non-negotiable sea waybill as if they are interchangeable. They usually provide trade finance based on the issuing bank's credit facilities or trade finance applicant's credit facilities.

Most Russian banks will rely on the credit standings of the customers in issuing letters of credit.

Singapore:

Most transactions require negotiable documents of title as a security under documentary credit. The charter-party bill of lading is the most common transport document called for under documentary credit transactions.

However, there are transactions which are non-documentary credit in nature in which a bank will finance even when the transport documents are non-negotiable. Such is the case, for example, where the importer (bank customer) is the end-user of the goods and due to the short transit period, non-negotiable seaway bill will be presented under import collection transaction. Certain voyages (e.g., shipment from Russia to China) will be made via road or rail whereby the transport documents called for will be the truck waybill or rail waybill. When financing such transactions, banks have to ascertain whether (1) the type of transport documents is reasonable and (2) the credit facility granted to customers requires the bank to have control over the goods.

Thailand:

Depending on variable factors such as shipping cost, type of product, degree of development and customer conduct, banks provide trust receipt financing in various forms of credit extensions relying on bills of lading which serve as documents of title.

The waybill is the non-negotiable transport document with the highest level of trust, and it can be used to release the cargo.

Turkey:

Electronic Transferable Records are not common in Turkey. Rather, traditional bills of lading issued to the order of the bank are still mostly preferred. Despite the fact that CMR or railway bills are non-negotiable documents, they are commonly endorsed in Turkey in market practice. Banks issue letters of credit rely on the applicant/customer's creditworthiness and require collateral, as well as, in some cases, blocked deposits. Regardless, transport documents are still requested to be issued to the order of the bank. Letter of credit issuance is subject to general management's and/or credit allocation units' approval.

Vietnam:

In domestic letter of credit transactions, non-negotiable transport documents (including non-transport documents such as the cargo receipt or delivery note) presented to the bank for obtaining finance are normally to be countersigned by the applicant and the beneficiary and co-signed by the issuing bank. The issuing bank's co-signature is designed to evidence that it has obtained control over the goods in their warehouse or another warehouse under their control.

For overseas shipment, if the bank finances the customer on the security of the goods, the full set of ocean bills of lading made out to the bank's order is required. For highly credit worthy customers, the surrender of a non-negotiable transport document may be adequate.

In a letter of credit transaction, reliance is mainly on the issuing bank's undertaking rather than on the control of transport documents. This year, during the breakout of Covid-19, demand for letters of credit increased. Documents required included a VAT Invoice as well as a cargo receipt issued by the beneficiary and counter-signed by the applicant.

This partial survey confirmed a divide between East and West, that is, Asian and Western routes, as to the use of the bill of lading as a document of title. While there is a heavy reliance on it as such in Asia, its function as such is in decline in the West.

Reasons mentioned for that East-West divide were culture, less developed secured transactions law in Asia, and mostly, liquidity or the need for additional security to provide it—which is much more prevalent in Asia. According to one view, banks in Asia finance operations while banks in Europe finance customers, and in any event have a higher threshold in selecting eligible customers.

It was also mentioned that, although many US companies do export to buyers outside of North America, this is usually only a small portion of their overall sales—maybe 10 to 20 percent. They are much more concerned with financing their “domestic” sales than their exports and this provides all the liquidity they need. For their part, banks lending against “foreign” (non-North American) receivables use asset-based loans while the goods are in inventory and letters of credit once the goods are shipped.

IX. International trade goes digital

At least in principle, the advantages of digitization in international trade cannot be overstated. In an era in which cargo loaded on a ship may travel faster than paper documents:

Paper documents require manual processing and time-consuming and costly air freight delivery from the seller to their bank to the buyer's bank and onwards to the buyer. Digitising the paperwork could save on operating costs for each party in the chain (e.g. no postage), reduce operational risk (e.g. lost documents, incorrectly read documents), improve carbon footprint (e.g. no post by air), enable governments to enhance and accelerate their customs controls (e.g. automated submission of documents for customs pre-checks while goods are in transit) and ensure no tax evasion (e.g. one electronic

submission to both exporting and importing customs offices preventing mislabelling or mis-valuing of shipment).¹⁴⁰

The inadequacy of the paper-based system has manifested itself in the course of the Covid-19 pandemic during which courier services have been interrupted. Frequently, physical delivery and presentation of tangible documents could not be facilitated, at least in a timely manner. A practical solution was the scanning and emailing (or SWIFT-ing) the relevant documents according to agreements among relevant parties. This could work smoothly for waybills and consignment notes but has been more difficult to implement for documents of title such as the marine bill of lading where in the absence of physical presentment, a carrier would likely not be keen to release the goods to the holder without some kind of a guarantee.

To that end, it could be expected that the digitization of transport documents in general and particularly the ETTR will be accepted enthusiastically all over the world. A case in point is China. So far, due to the complexities in cross-border trade, digitalization trade finance practice mainly focuses on domestic trade finance transactions without the needs for transferrable transport documents. For their part, major banks have developed their proprietary online trade finance platforms. However, third party platforms developed by IT companies are also common. Some government agencies have also developed platforms aiming to help financial institutions verify trade or credit information, guard against frauds and facilitate trade finance. A recent decision which gave effect to a security interest in a document of title enhanced the value and hence the use of trade finance. China is quite ready for the establishment of a legal framework accommodating the digitization of transport documents, including the adoption of the ETTR.

On the other side of the spectrum stands the US. It appears that, ironically, the country with the most advanced legislation accommodating the ETTR also has the least interest in it. As discussed in Part VII, there is no real interest in the US in documents of title. It is not surprising then that there is no interest there in the ETTR. At the same time, no particular resistance by American banks is anticipated. A discussion may arise as to the modality of digitization, and the role of banks in the process. Questions to be asked are likely to include the following: Will an e-bill of lading be presented as an attachment to an email? Will the bank be given a URL to visit in order to view an e-bill of lading and examine it online? Will the bank need to somehow verify authenticity and integrity of documents (e.g., by verifying digital signatures)? Will the bank be expected to act as a consignee and to transfer title by some sort of electronic endorsement? Will the bank have to install special software, obtain a private key from a signature authority, obtain IDs and create passwords? On the other hand, it is anticipated that there may be resistance to having to maintain IDs, passwords, and private keys, especially in order to receive documents from multiple sources.

At the same time these seem to be issues addressed by banks in any event as part of their daily banking service operations. Rather, the real issue from the American perspective is the perception that an ETTR project purports to digitize an obsolete document. In the view of a banking expert conveyed to me by email:

¹⁴⁰ Felix Prevost, "Regulation in a digital world" *ICC Global Survey on Trade Finance*, 77. See also Miriam Goldby "Digitalisation of Shipping and Insurance Documents: Implications for Trade Finance" in Christopher Hare and Dora Neo (eds), *Trade Finance: Technology, Innovation and Documentary Credits* (Oxford: OUP, 2021).

It seems that perhaps a lot of effort is going into creating an electronic version of something that really isn't necessary anymore. Banks continue to ask for negotiable bills of lading in their letters of credit because they think that's what importers and exporters want to use and perhaps importers and exporters continue to use them because they think that's what bankers want. Air waybills do not cause any problems; perhaps sea waybills are the answer rather than ETTRs. The one area I'm not so sure about is the oil trade, where tankers loaded with oil get bought and sold multiple times during passage. Paper bills of lading are used because control of title is important, but it seems a service like BOLERO would provide a solution to the fact paper bills of lading get lost. Indeed, many of us thought BOLERO¹⁴¹ would be a huge success even if they just focused on this sector. Now people say this can be done using a blockchain, but who is going to host that blockchain? If every steamship company has its own blockchain, no one will want to participate. Maybe BOLERO's time is finally coming.

Against this ambiguity in acceptance throughout the world, it is not surprising that a 2020 ICC global survey on trade finance¹⁴² reveals inconsistent results. On one hand, "[o]f the various digital trade technologies ... the most common implemented by banks is an online platform for trade finance (55%)," and "[o]f the banks surveyed, 64% indicated that they have a digital strategy for trade finance." However, on the other hand, "[the latter] number differs significantly by bank type:"

While 83% of global banks have a digital strategy, only 46% of local banks have one – a stark reminder of the challenges many banks face in integrating digital solutions into their existing offerings. Indeed, only 17% of respondents have successfully implemented digital solutions ..., with a surprising one in five not yet seeing any tangible benefits. 22% of banks said that they have tried to implement technology solutions but that it has been imperfect, while a further 19% are currently struggling to even match that. This clearly highlights that the effort and expense of upgrading bank technology continues to be a key hurdle in digitising trade, and indeed for some organisations runs into hundreds of millions USD ...

As well, "between half and two-thirds of local banks indicated that client usage of digital channels across trade finance products is either minimal or non-existent ... [f]or global banks the number is closer to one-third." Moreover, notwithstanding "the prevalence of digital channels for transaction origination," "most banks receive only a small amount (0–10%) of documentary trade ... and open account trade ... transactions digitally." Thus, "while many components of trade finance operations are being digitised (e.g., data capture, sanctions screening), very few players, if any, have managed to create a fully digital 'zero touch' end-to-end process (e.g., to include document checking)." While "[d]igital is clearly an important topic for banks, ... particularly for global banks, ... there is limited end-to-end adoption of digital solutions in trade finance." In the final analysis, "83% of respondents indicated only a minimal reduction in costs over the past five years due to digitisation."

¹⁴¹ On which see immediately below.

¹⁴² ICC Global Survey, *supra* note 140. Quotes below are from pages 85-87.

The demise of the service offered by SWIFT for verifying the conformity of an electronic document with the requirements triggering liability on a BPO is a wake-up call directing caution and prudence in moving toward full digitization of trade finance. A Bank Payment Obligation (BPO) is effectively a commercial letter of credit that calls for the presentation of a single electronic document prepared by the seller listing data elements taken from other documents that the seller is sending directly to the buyer. The BPO calls for this single document to contain specific data about the transaction with respect to which the BPO was issued. Such data would include the description of the goods, the amount invoiced, shipment details, and the consignee's name. A computer hosted by an independent third party would match the specific data with the BPO's requirements and confirm compliance to the BPO issuer. This would generate an unconditional payment obligation on the latter's part.¹⁴³ SWIFT, which was the sole provider of such a service, unplugged it around a year ago for lack of adequate demand.

A lack of universal access and use for a comprehensive e-commerce option throughout the world particularly by small business was mentioned as a stumbling block for a smoothly-run, all-inclusive digital trade commerce. At the same time, a secure and cost-effective technology is a key for reaping the benefits of the digitalization of trade documents as part of a broader strategy for the digitalization of all trade transactions.¹⁴⁴ It is a necessary even if an inadequate condition. Clear and specific laws giving effect to the results of technological enhancements are likely to expedite the process of the adoption of useful technologies and yet will not be effective unless such technologies are available. Per the US experience, they have also to be in demand.

The ensuing discussion addresses principal schemes under which trade documents are digitized.¹⁴⁵ Such schemes manifest diverse technologies deployed in the pursuit of security and cost effectiveness. They exist in legal frameworks that are in various stages of accommodating digitization. As a rule, gaps in available legal frameworks are filled in by contract, usually in the form of multilateral system rules. Without discussing the point in detail, I assume that such gap-fillers are only second-best to legislation, particularly by reference to third parties who are not parties to the relevant contractual scheme.

An early step in the development of the electronic bill of lading was taken by the **SeaDocs** scheme. Thereunder, a bill of lading issued in paper form was immobilized in a central registry. Transfer was effected by instructions sent to the registry which would then endorse the bill of lading as an agent of the transferor.

The scheme was abandoned for lack of support. Subsequent projects have been more daring and gained greater acceptance. They all have abandoned altogether the issuance of a tangible bill of lading and are premised on an initial issuance of the bill of lading in an electronic

¹⁴³ See in general: John F Dolan, "Negotiable Obligations for Discount: Notes, Acceptances, DPUs and BPOs" (2013-14) 29 BFLR 103. See also Agasha Mugasha, "The Bank Payment Obligation as a Signal Step in the Evolution of Digital Trade Finance" in Hare and Neo (eds), *supra* note 140.

¹⁴⁴ For sure, among other advantages, digitization accompanied by standardization of trade records will at least alleviate the obstacles in the operation of documentary letters of credit, as discussed in connection with the US.

¹⁴⁵ To a large extent it draws on McKendrick, *supra* note 8 at 998-1001, as well as various presentations at UNCITRAL Webinar on "International experiences with the dematerialization of negotiable transport documents", 13-14 April 2021, <uncitral.un.org/en/webinar-dematerialization-negotiable-transport-documents> accessed 20 July 2021 [UNCITRAL Webinar]. See also Goldby, *supra* note 140.

format. Six such systems have been approved by the International Group of P&I Clubs:¹⁴⁶ Bolero, CargoDocs DocEx, E-Title, edoxOnline, Wave and CargoX. As discussed below, in some of them communication is to a central registry where the transfers are affected by attornment and novation. In others, reliance is placed upon electronic peer-to-peer or blockchain technology.¹⁴⁷ Among them, Bolero uses a permissioned (private) blockchain while CargoX and Wave are both built upon a permissionless (public) blockchain so as to be open to everyone to join and enables each participant to interact with participants on the network.¹⁴⁸ A common issue shared by all systems is that in the absence of legislation expressly recognizing an entry in the system registry or ledger as the equivalence of the physical transfer of the bill of lading the impact of proprietary rights effectuated through it appears to be limited to system participants.

Bolero has a membership system so as to be open only to its members. Until very recently, the issue and transfer of Bolero Bills of Lading ('BBL') occurred via the Bolero Core Message Platform (BCMP). The process was initiated with a message sent by the carrier to the BCMP in which it requested that a BBL be issued to the shipper. The system would confirm the identity of the parties and send confirming messages to the carrier and the shipper. The shipper would then be entered in the Bolero Title registry as the holder of the BBL. Any transfer of the BBL would be initiated by a message sent by the holder through the BCMP. Once the parties' identities are confirmed, the transfer would be executed and the transferee would be entered in the Bolero Title registry as the new holder of the BBL.

In effect, the BBL was an electronic bill of lading and its registration in the Bolero Title Registry was the functional equivalent of having possession in a tangible bill of lading. To that end, members agreed that to be bound by the Bolero Rulebook under which the electronic bill of lading was treated as the equivalent of a paper bill of lading.

In February 2020, Bolero launched Galileo—a web-based system which brings all the services offered by Bolero together on one platform. The latter enables users also to create, edit and manage letters of credit, electronic presentations, guarantees, and open transaction services, as well as to subscribe to various external services.

Bolero claims to have established that the transfer of property and contractual rights could be separated such that a party financing the transaction could take security over the goods through constructive possession without becoming a party to the contract of carriage. However, Bolero concedes that if the financing party wished to enforce its security, it would be required to become a party to the contract of carriage.

As for the transfer of rights, because of more extensive writing formalities for assignment in civil law jurisdictions the solution adopted was novation (transfer of contractual rights) combined with attornment (transfer of property rights) rather than mere assignment. Bolero

¹⁴⁶ Providing "marine liability cover (protection and indemnity) for approximately 90% of the world's ocean-going tonnage." See <www.igpandi.org/about> accessed 20 July 2021.

¹⁴⁷ For a critical if not skeptical assessment of the alleged advantages of the latter see Jane K. Winn, "Will Blockchain Transform Trade Finance?" in Hare and Neo (eds), *supra* note 140. For a proposed self-regulation as a solution to blockchain regulatory issues, see Wang Feng, *supra* note 56.

¹⁴⁸ Wang Feng, *ibid* at 13. Also EdoxOnline is a permissionless (public) blockchain network: <zircon.tech/blog/an-ethereum-bill-of-lading-for-grain-exports-and-supply-chain/>, accessed 19 September 2021.

produced a multi-lateral agreement (Rulebook) that all users sign up to. Amongst other things, it prescribes the process and legal result of parties in roles performing functions.

CargoDocs DocEx has been developed by essDOCS Exchange Ltd. Like Bolero, it has a membership scheme of which rules governing its use are found in Databridge Services and Users Agreement. These rules provide the legal framework within which users can create and send shipping documents, including bills of lading, electronically. Thereunder, members agree to treat the electronic bill of lading as the functional and legal equivalent of a paper bill of lading. The system operates through a web-based platform called Cargo-Docs. It allows data to be uploaded so as to create an electronic bill of lading which visually looks like a tangible one. The system operates through a secure system of email communications which requires the parties to authenticate their identity and enables them to create, approve, sign, issue, endorse and manage electronic records which are the functional equivalent of documents. The system has achieved a high degree of integration so as to be now in use in 81 countries. Where functional equivalence between an electronic record and a tangible document is recognized, as under UCC Article 7 and the MLETR, the legal framework is not premised on attornment and novation.

E-Title is a Singapore-based company, using peer-to-peer technology not premised on a blockchain. It provides the functionality required to create, transfer and surrender bills of lading electronically:¹⁴⁹

e-title™ is patented, peer-to-peer technology that enables the creation and transfer of title and negotiable documents, such as the bill of lading. As peer-to-peer technology, e-title™ works equally well in the back office of a carrier, bank or multinational company as it does when provided by an Application Service Provider (ASP) for Small and Medium Enterprises (SMEs).

e-title™ complements existing Supply Chain, Trade Documentation and Financial Supply Chain applications by focusing exclusively on the electronic title creation and negotiation. This fills the gap in current trade documentation services – enabling full electronic trading, documentary credits and collections, and release of goods – without overlapping with functionality already available in the market

The e-title™ solution combines title document functionality with digital signatures that enable secure transfer during negotiation. These components run on tamper-proof hardware, known as a Hardware Security Modules or HSMs that prevents alterations or forgery of a title document when it is in the possession of the shipper, bank or importer.

When a carrier or forwarder is ready to release an electronic bill of lading, it is authorised in the bill of lading system in the same way that printing of an original bill of lading occurs today.

Instead of printing, their back office system directs the bill of lading to e-title™. e-title™ creates, digitally signs and registers an electronic title in the HSM. The digital signature

¹⁴⁹ See <www.e-title.net/sol_benefits.php> accessed 20 July 2021.

protects the electronic title during transfer; registration ensures that the electronic title will be sent to, and can only be used by, the shipper or exporter.

e-title™ then returns the electronic title to the carrier or forwarder's office system so that it can forward the electronic bill of lading and electronic title to the shipper via the carrier's or forwarder's standard communication gateway, such as an email server.

The electronic bill of lading and electronic title are received by the shipper's trade application – hosted by an ASP in this example. The trade application directs the bill of lading and electronic title to e-title™ for processing.

e-title™ validates the signature on the electronic title to confirm that it is authentic and that the bill of lading has not been altered. The electronic title is then registered in the HSM giving the shipper the right to transfer it to a new party, such as the bank or the importer.

When the shipper is ready to transfer the bill of lading and electronic title – for instance, to negotiate a letter of credit – he authorises presentation in his trade application. As part of this process, the trade application accesses e-title™ to endorse the bill of lading to the bank.

e-title™ validates that the shipper is the registered holder of the electronic title, creates and digitally signs an endorsement record and updates the electronic title registry on the HSM, ensuring that the shipper cannot transfer the electronic title a second time.

To conclude the transfer, e-title™ sends the electronic title and endorsement record to the Trade Application. The ASP combines the electronic title and endorsement record with the electronic bill of lading and other shipping documents for delivery to the bank.

edoxOnline was developed by Global Share, an Argentinian transportation software provider. It is a web-based platform for the digitization of international trade processes and documents, such as electronic bills of lading, which makes use of blockchain technology.

Wave is a Delaware-based operator making use of blockchain technology, enabling parties to issue, exchange and sign encrypted documents including electronic bills of lading. More generally, the system covers negotiable and non-negotiable documents of title such as bills of lading and bill of exchange, as well as unique and original documents like certificates and invoices, and accompanying documents like packing lists and cover letters. The system sends, receives and digitally signs all manner of valuable documents used in trade and supply chain finance—all while ensuring verified possession and authentication. Business workflows using WAVE BL are said to be “**identical** to paper processes — but the steps of physically printing, signing, attaching, sealing, and sending documents with a courier **are all replaced with one simple click.**”¹⁵⁰

¹⁵⁰ See <wavebl.com/> accessed 20 July 2021. [Emphasis in the original].

Another system for the digitalization of trade documents with blockchain document transfer is **CargoX** Platform. Effectuating a Blockchain Document Transfer (BDT), its processing of the electronic bill of lading mirrors paper bill of lading workflow and purports to meet the main challenges of uniqueness and originality through distributed blockchain ledger rather than through centralized administrator.¹⁵¹

When data is transferred across a DLT system, each transfer of information is represented in the form of a block being added to another chain of blocks. To verify this appendage, a difficult, mathematical computation must be solved. Because the proof of this computation is distributed across multiple nodes, the information on the blockchain cannot be deleted or amended; only appended. The result of this is accurate authentication of the transferor's identity and a record of data that is made immutable. The blockchain contains the history of every token in circulation, providing proof of who owns what at any given juncture through a chain of notarised appendages. This is the key differentiation between DLT-based EDI and regular, centralised EDI.

In the absence of either the entrenchment in law of the functional equivalence principle or specific legislation recognizing the electronic form of a bill of lading or its equivalence, as discussed in Parts IV to VII, the status of the electronic format of a transport document is uncertain. Network rules providing for functional equivalence may bind participants by contract. The contractual framework may be structured so that each transfer of an electronic document will result in a novation of the carrier's agreement so as to become bound directly to the transferee. The carrier's attornment could give the transferee constructive possession to goods held by the carrier. Arguably, regulatory authorities will be inclined to recognize this framework as generating the same legal regime as in a paper environment.¹⁵²

X. Conclusion

There are three dimensions to a multimodal ETTR project: multimodality, transferability, and digitization. ***Multimodality*** may be either general or limited to specific modes of transportation. For practical purposes, modality-neutral is covered by the discussion on multimodality. For its part, ***transferability*** is by reference to the transport record as a token for the control over the goods to which it relates, as well as the potential for representing a property right in the goods and not only control. In this context, issues pertain to whether transferability is either unrestricted or limited to the consignee, to the mode of transfer, and to the possible effect of the transfer to confer on the transferee a property right in the goods, not to mention a better title than that of the transferor. In this context, ***negotiability*** is a key concept. It means, *first*, the general or unrestricted transferability of a written transport document by way of 'negotiation'—that is, delivery plus endorsement, the latter being dispensed with where the document is made to the bearer or endorsed in blank. *Second*, depending on applicable statutory language or perhaps even general principle of law in a given place, negotiability may also facilitate a superior title. Finally, ***digitization*** addresses the medium of the record—that is, whether an intangible record

¹⁵¹ See UNCITRAL Webinar, *supra* note 145, presentation by Patrick Vlačič.

¹⁵² See discussion (from the common law perspective) by Goldby, "Digitalisation", *supra* note 140 at 210-212. A regulatory point highlighted by her is capital adequacy requirements for letter of credit transactions. See 212 n 102.

can fulfill the same functions of a tangible document. In the present context, full digitization requires not only the giving of a binding effect to information provided and liability incurred electronically. Rather, digitization is further taken to provide a functional equivalence between the control of the electronic record containing this information and the physical possession of a tangible or written document that would have contained it.

The effect of domestic legislation providing for the negotiability of a paper document will extend to cover the negotiability of an electronic record under the principle of functional equivalence. As indicated in Part IV, the adoption of the UNCITRAL *Model Law on Electronic Transferable Records* (2017)¹⁵³ (MLETR) introduces to the adopting jurisdiction such a principle. However, on its own, the MLETR as well as any similar statute to that effect, will introduce neither multimodality nor negotiability to documents that are not negotiable, which is the norm outside the marine carriage of goods.

International conventions governing the carriage of good by a unimodal means of transportation are poor models for the ETTR. Thus, the *Convention on International Carriage of Goods by Road* (CMR)¹⁵⁴ does not contain any explicit provision addressing negotiability. An Additional Protocol to the CMR introduced the “Electronic consignment note,” being “a consignment note issued by electronic communication...”.¹⁵⁵ However, the consignment note, whether in a tangible or an intangible format, is not a record of control, and thus is not transferable. Similarly, for carriage of goods by rail, both *COTIF/CIM Uniform Rules concerning the Contract of International Carriage of Goods by Rail* (“CIM Rules”)¹⁵⁶ and the *SMGS Convention*,¹⁵⁷ as well as the *CIM/SMGS Consignment Note Manual*,¹⁵⁸ address digitization. At the same time, not providing for records of control, they do not address transferability. Nor do they address negotiability in any other way. Conversely, the *Budapest Convention on the Contract for the Carriage of Goods by Inland Waterway* (CMNI)¹⁵⁹ addresses negotiability but not electronic transport documents. For its part, the *Montreal Convention for the Unification of Certain Rules for International Carriage by Air*¹⁶⁰ does not contain any provision addressing the negotiability of an air waybill and yet may be interpreted to recognize electronic waybills.

For their part, the *Hague-Visby Rules*¹⁶¹ governing the carriage of goods by sea predate the technological developments and do not provide for an electronic bill of lading. Nor do they expressly address the negotiability of the tangible bill of lading, except that it is generally taken to exist.

International Conventions and Rules governing multimodal means of transportation tend to be closer to the mark also in the two other dimensions, namely, transferability and

¹⁵³ MLETR, *supra* note 56.

¹⁵⁴ CMR, *supra* note 42.

¹⁵⁵ Additional Protocol, *supra* note 43.

¹⁵⁶ CIM Rules, *supra* note 44.

¹⁵⁷ SMGS Convention, *supra* note 45.

¹⁵⁸ Manual, *supra* note 48.

¹⁵⁹ CMNI, *supra* note 50.

¹⁶⁰ Montreal Convention, *supra* note 51.

¹⁶¹ *Hague-Visby Rules*, *supra* note 52.

digitization. Thus, *UNCTAD Multimodal Convention*,¹⁶² *UNCTAD/ICC Rules for Multimodal Transport Documents*, as well as rules governing the FIATA Bill of Lading¹⁶³ provide for general multimodality, and where it is so wished, transferability by negotiation as well as an electronic format. A survey of national laws, set out in Part VII, identifies several countries having legislation covering multimodal transferable (by negotiation or otherwise) electronic transport records.

For its part, the 2008 *Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*, known as the Rotterdam Rules (RR),¹⁶⁴ as its name suggests, applies only where at least part of the carriage is by sea. At the same time, it contains provisions as to negotiability and electronic format which exceed in their elaborations other conventions, international instruments, and most national statutes.

However, in the final analysis, as indicated in Part VI, in the US, the scheme provided by UCC Article 7 (2003 text) and which provides for a transferable electronic document of title, goes beyond RR provisions in five principal ways. First, it is not limited to a document issued by a carrier; rather, it also covers a document issued by a storer. Second, the document issued by a carrier, is not exclusively the one relating to the carriage of goods by sea, whether as a principal or incidental, medium of transport.¹⁶⁵ Rather, it is modal-neutral. Third, it provides for unrestricted transferability also for a non-negotiable document. Fourth, it provides for an elevated status of a holder of a document of title. All such four ways are not limited to the electronic format of the document of title. Fifth, and this is limited to the electronic format, the scheme is more detailed as to the meaning of ‘control’ in relation to an electronic record so as to be a functional equivalent of taking possession of a tangible document.

In selecting a scheme adopting a multimodal ETTR, parties’ options may be limited by applicable convention, national law, or rules of a scheme to which they adhere. As pointed out, other than under UCC Article 7 (2003 text), and to a lesser extent, the RR, applicable provisions may not be adequately comprehensive. Furthermore, and this may be critical, typically, selecting a specific source of rules, where selection is available, brings with it the entire scheme of liability and loss allocation under that source. Stated otherwise, there is no option to select an ETTR and disassociate it from the rules of liability and loss allocation under that source.

For these reasons it is recommended here to provide for a multimodal ETTR to be used in an international carriage of goods irrespective of the legal framework governing other aspects of the carriage of the goods. It seems to me that a comprehensive digitization is an option to be made available and encouraged in all modes of transport. As well, demand for a negotiable document (or record) of title has been demonstrated in the sea, rail and multimodal trade. Indeed, on their own, road¹⁶⁶ and air deliveries may be of too short duration for an advantageous use of a document of title for trade finance. At the same time, the availability for the selection by parties as needed of the ETTR, as a modal

¹⁶² *Multimodal Convention*, *supra* note 62.

¹⁶³ Ardel, *supra* note 65.

¹⁶⁴ Rotterdam Rules, *supra* note 66.

¹⁶⁵ For a through bill of lading “embodying an undertaking to be performed in part by a person other than the issuer” see UCC § 7-302.

¹⁶⁶ As well, it was pointed out that the use of a control document in the carriage of goods by road may require addressing logistical issues in truck unloading.

neutral electronic transferable transport document of title, will meet a genuine demand so as to immensely benefit international trade.

A preliminary question in this context is to what extent the recommended legal framework is to be uniform or facilitating state-by-state variations as to some key questions; for example, the superior title of the transferee holder.

UCC Article 7 (2003 text) would be the starting point for a discussion on rules governing the ETTR. That does not mean that, even if a uniform framework is preferred, all aspects of UCC Article 7 (2003)—not to mention specific solutions—be adopted. As discussed in Part VI, UCC Article 7 (2003 text) is unique in affording a superior title to a transferee/holder by negotiation as well as in facilitating an unrestricted transferability for a non-negotiable record. Each is a policy choice to be either discussed or left for national law, all of which does not preclude UCC Article 7 to be a starting point for a discussion.

In the footsteps of part VIII, Part IX pointed out that views as to the need for a multimodal ETTR are divided and may not be the same across all industries and geographic regions. Nonetheless, in some industries and regions the demand for an ETTR is genuine and merits a solution. It is to that end that action along the lines proposed here is recommended, even as universal acceptance across the board is not expected to happen anytime soon.