Transferability in the Electronic Space at a Crossroads: Is it Really about the Document?

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I. INTRODUCTION

Transferable documents or instruments, including negotiable ones, as well as negotiability as a system for the transfer of rights or the allocation of title upon rights or goods,1 have probably been one of the most notable aspects of commercial transactions law. The importance of negotiability has decreased and has been questioned many times, especially in recent years.2 The use of negotiable documents in practice has likewise varied as a result of the development of alternative legal mechanisms or tools for finance and payments, as well as from advancements in communication technology. From a retrospective angle, it still is one of the best examples of how trade, in developing new practices, can and should condition the development and evolution of the law; but in some regards it might be also one of the best evidences of how the law may actually move away from the constantly evolving practical needs.

The United Nations Commission on International Trade Law, and specifically its Working Group IV on Electronic Commerce, has recently started a project focusing on the regulation of electronic transferable records.3 This project limits

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1 See James Steven Rogers, Negotiability as a System of Title Recognition, 48 Ohio St. L.J. 197, 201 (1987).

2 See supra note 1, passim: Albert J. Rosenthal, Negotiability – Who Needs It?, 71 Colum. L. Rev. 375, 396 (1971). Criticism vested on the rules on negotiable instruments or documents of title focus on their outdated character, their relative effectiveness for in fact protecting the interests of good faith purchasers (holders in due course), the limitations that for some transactions their reliance on possession of a piece of paper entails, and their questionable justification in some contexts, such as in consumer finance transactions, given the unfair results that they often lead to.

3 Electronic negotiable documents have already been identified as a possible area of work for UNCITRAL after the negotiations and discussions leading to the UNCITRAL’s 1996 Model Law on Electronic Commerce (see infra note 15) were finalized. In fact, such a feasible need, which was first identified with respect to transport documents, gave rise to an initiative that finally focused on contracts for the international carriage of goods and resulted in the approval of the United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea of 2008 (not yet into force), which actually includes provisions on the use of electronic negotiable transport records. Subsequent discussions on the possible work on electronic commerce, which also contemplated other interesting topics, lead to the mandate to
its scope to transferable or negotiable documents or records that are individually issued in the framework of commercial transactions, such as instruments for the transfer of the right to payment of a sum of money or delivery of certain goods. It is based on the approach traditionally followed by UNCITRAL instruments on electronic commerce law. Therefore, in its initial formulation, it aims at eliminating barriers to the use of electronic means in this specific context, while ensuring the adequate conditions for the promotion of legal certainty and trust in electronic transactions. Even though the project is still in its initial steps (or maybe precisely for such reason), many fundamental questions regarding transferability and negotiability are being discussed.\(^4\) These include how transferability works in the electronic space and, more broadly, how electronic means are

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being and will be used for such purpose, as well as whether the new rules should address only the instruments existing in previous law, or should simply provide the formal basis for the transfer of rights in the electronic space under the rules associated to transferable or negotiable documents, leaving however certain room for new (legislative or commercial) practices.\(^5\) The said project has also been preceded, as in previous experiences, by certain debate and disagreements on whether such a regulation and such an effort is really needed,\(^6\) for, indeed, the situation as to the use of negotiable or transferable documents varies from country to country and across the different sectors. Likewise, at this point, there are some countries that already have laws addressing the issuance and transfer of transferable and negotiable documents,\(^7\) but most nations have not regulated this matter yet. This entails a difficulty for the project itself, as compared to previous UNCITRAL instruments on electronic commerce law. The level of coordination of efforts then achieved, and the efficiency that such coordination very likely induced in the development of previous projects,\(^8\) may be threatened by the conscious or unconscious tendency of states with laws on electronic transferable or negotiable records to stick to their model. A second complication lies in the scope of the project itself. The minimalist or “enabling” approach adopted by previous e-commerce instruments produced by UNCITRAL, which in principle by necessity has to be followed in this occasion too,\(^9\) proves to be much more difficult to manage with regard to electronic transferable or negotiable instruments or documents.


Whereas notions such as writing and signature, and their feasible effects, to a great extent remain in the domains of purely formal (and evidentiary) elements of communications (without prejudice of their substantive implications), the focus on the transfer of rights, or on transferable or negotiable documents or records requires going a step further. In this setting, the accent is already put in the precise aim pursued by the use of electronic means (e.g., to create rights to enable their transfer by the creditor), as resulting from the will of the parties involved, with all ensuing possibilities (perfection of security interests, superimposition of other obligations, such as guaranties, enforcement of the right under certain conditions, etc.). Separation between purely formal or procedural and substantive issues becomes more difficult to manage in this context: and, on top of that, the temptation to alter, or simply abandon some rules of the pre-existing substantive regime that are clearly conditioned by the paper-biased structure of the law that applies to some documents becomes harder to resist.

In this work we will try to achieve two primary goals. First, and with the occasion of the UNCITRAL project, to overview and analyze how practices and rules on electronic transferable records are evolving. This will require taking a brief look at past and existing practices that were developed in the legal vacuum (that is, without an express legal recognition of electronic transferable or negotiable documents in the law), but mainly to try to get an insight of how existing laws work and the extent to which they have shaped the practice developed under the shelter they provide (Section 2). The second basic goal will be to provide some thoughts on how the UNCITRAL project (which has provisionally been given the form of a model law) may address the use of transferable electronic records in light of current practice and the examples provided by national rules, so as to maximize its feasible benefits. For that purpose we will have to take into account the limitations that international instruments, such as a model law, may find when addressing this particular area of law, but also to stress the advantages that such international instruments offer to the market and to national legislators (Section 3). Our main hope is to be able to identify some of the basic principles that the rules on electronic transferable records may be grounded upon, what they can keep and what they should forget about the existing paper-based rules.

II. PAST AND EXISTING PRACTICES AND RULES RELATING TO ELECTRONIC TRANSFERABLE DOCUMENTS OR INSTRUMENTS

Like in other areas of business and commercial law during the last two decades, the industry has undertaken in several practical attempts to electronically reproduce the functions of transferable or negotiable documents before the legislature reacted and, therefore, in spite of the lack of any express provisions enabling their issuance and transfer. These early attempts focused on documents of title used in international trade, and namely on bills of lading and on transactions in which such documents are usually issued (international transactions for the
sale of goods that one way or another involve their sea carriage). The situations envisaged by these services and the systems they provide involve a contract of sale whose completion requires that the goods are carried by sea from the seller to the buyer (between the two ports of places agreed by them), and in which a bill of lading may be issued (either to the seller or to the buyer, in their feasible capacity as shipper or consignee under a contract of carriage) and subsequently transferred (See generally, Jan Ramberg, *International Commercial Transactions*, Kluwer Law International-Norstedts Juridik-International Chamber of Commerce, Stockholm, 1998, at 37-38; Guillermo Jiménez, *Export-Import Basics*, International Chamber of Commerce (ICC Publication No. 543): Paris 1997, at 19 et seq.).

Two prominent examples are the already defunct Seadocs project (started under the initiative of the Independent Tanker Owners Association and Chase Manhattan Bank; See Boris Kozolchyk, *Evolution and Present State of the Ocean Bill of Lading from a Banking Perspective*, 23 J. MAR. L. & COM. 161, 227 (1992), and the Bill of Lading Registry Organization (BOLERO) system. Although with a very different scheme, both of them tried to reproduce all functions attached to the use of bills of lading, including transfer of ownership on the goods traded. From an operational point of view, it is worth mentioning their reliance on closed systems for multilateral communications, access to which would be restricted on grounds of user identification means.

For that purpose, the BOLERO system started by relying on a sort of contract “role game” and designation scheme, in which users would have one or more roles, each different role attaching certain rights. The contractual structure that the BOLERO system rests upon is based on English law. Transfer of personal rights to obtain delivery of the goods is based on novation of contract upon consent of the parties involved (and trough the role allocation mechanism, based on designation), as per the declarations exchanged in accordance with the contract rules. Transfer of indirect possession of the goods, and of property rights therewith, is based on the attornment made by the carrier, through a declaration done by one of the entities administering the system acting as its agent (See Bolero Rulebook, (Bolero International Limited, First Ed., September 1999): APPENDIX TO BOLERO RULEBOOK: OPERATING PROCEDURES 1-2, 31-36, 43-44, 57-58, 60, et. seq. 95 (2d ed. 1999) (Bolero International Limited 1999), available at http://www.boleroassociation.org/dow_docs.htm (last visited on January 2, 2011): *Legal Aspects of a Bolero Bill of Lading*, BOLERO International Ltd. 1999, pp. 1-2, and n.6, available at http://www.bolero.net/Newsdownloads/articlesordownloads.aspx, last visited on January 2, 2011). Strictly speaking, therefore (and since English law does not foresee the use of bills of lading in electronic form),
In any case, however, these systems provided a first example of the wishes and hopes of the industries concerned when implementing what was thought to be a legally viable substitute for paper negotiable instruments, their use and the regime applicable thereto: to enable the transfer of rights in conditions of legal certainty and title or interest assurance as close as possible to paper-based transferability or negotiability.\textsuperscript{14}

All initial legislative efforts done at the national and international levels have largely kept this idea as a basic assumption, as inferred from the law on transferable or negotiable documents or instruments. However, they have reflected such principle in varying ways, and the measures taken in the law for its implementation also show some differences. In some cases, also with some variations, the rules have to a significant extent stuck to the idea that the transfer of rights thereby achieved is essentially dependent on the issuance and transfer of a single (original or otherwise legally relevant) document that carries the right or rights with it wherever it goes. The 1996 UNCITRAL Model Law on Electronic Commerce,\textsuperscript{15} for instance and following both the minimalist or purely enabling approach\textsuperscript{16} that it is based upon as well as the functional there is no issuance of a bill of lading as such, and yet its functions are reproduced (see comments by Miriam Goldby, “Legislating to facilitate the use of electronic transferable records: A case study Reforming the law to facilitate the use of electronic bills of lading in the United Kingdom”, Paper prepared for the UN\textsuperscript{C}ITRAL Colloquium on Electronic Commerce, New York 14th to 16th February 2011, 3-5).

\textsuperscript{14} The embodiment of rights in pieces of paper, and the transfer of rights upon transfer thereof (first applied in practice, and then recognized and protected by the law), do respond, among other things, to the need of prospective transferees (or in some cases secured parties) to ensure perfection of valid title or superior interest upon the document and the rights, based on possession of the (single) original document (or the single set of original documents; see Robert Charles Clark, Abstract Rights versus Paper Rights under Article 9 of the Uniform Commercial Code, 84 Yale L.J. 445, 445, 476-77 (1974-75), in the analysis of the priority rank of multiple and conflicting secured creditors under the (then outstanding revision of) Art. 9 UCC; James Steven Rogers, cit. note 1, 205].


\textsuperscript{16} The basic aim of the Model Law, like other UNCITRAL instruments on electronic commerce, is to provide recognition to the use of electronic documents (and signatures) and enable their use with legal (contractual) purposes. Its rules are based on principles that prevent discrimination between functionally equivalent media, or, in other words, which recognize electronic documents and signatures the same effects recognized to paper ones, as long as they prove to fulfill the same functions, but avoiding references to the use of any specific technology for achieving such effects (See comments by Susanna Frederick Fischer, Saving Rosencrantz and Guildenstern in a Virtual World? A Comparative Look at Recent Global Electronic Signature Legislation, 7 B.U. J. Sci. & Tech. L. 229, 235-37 (2001), (regarding the law on electronic signatures)).
equivalence principle,\textsuperscript{17} addressed the replication of the formal conditions for the transfer of rights under transferable or negotiable documents by requiring, for the recognition of the legal effects sought, a reliable assurance that the electronic document employed is rendered unique;\textsuperscript{18} a requirement that has come to be called “uniqueness” of the document.

A similar, but clearly more elaborated approach is found in the various instruments that in the U.S. address the use of transferable electronic records,\textsuperscript{19} electronic documents of title\textsuperscript{20} and electronic chattel paper.\textsuperscript{21} These provisions have in each case a different purpose, but what all of them have in common is that they were produced to enable the migration to the electronic environment of processes that in the paper-based universe rest on possession of the document for the transfer of rights or for perfection of security interests. Promissory notes and documents of title issued in negotiable form, while embodying rights that are different in contents, serve the transfer of such rights through the


\textsuperscript{18} Part Two MLEC, entitled “Electronic commerce in specific areas”, focuses on the use of electronic means in the framework of contracts of the carriage of goods. Among its provisions, art. 17 (“Transport documents”) states that “if a right is to be granted to, or an obligation is to be acquired by, one person and no other person, and if the law requires that, in order to effect this, the right or obligation must be conveyed to that person by the transfer, or use of, a paper document, that requirement is met if the right or obligation is conveyed by using one or more data messages, provided that a reliable method is used to render such data message or messages unique”.

\textsuperscript{19} § 16 Uniform Electronic Transactions Act 1999 (hereinafter UETA) allows the issuance of transferable records in electronic form. UETA defines electronic transferable records as electronic records that would be a note under Art. 3 or a document under Art. 7 of the Uniform Commercial Code (hereinafter U.C.C.). The 2004 revision of Art. 7, however, regulates the issuance and transfer of electronic documents of title—see the next footnote—, and gives preference to its provisions to the extent that there is a conflict between them and UETA (U.C.C. § 7-103 (2003), para. (d)). Likewise, the Electronic Signatures in National and Global Commerce Act (15 U.S.C. §§ 7001-7031, hereinafter E-Sign) addresses electronic transferable records in § 7021. The E-Sign provisions are nonetheless restricted to electronic transferable records issued as a note in the context of secured transactions relating to real property. The provisions of the E-Sign were approved among other reasons for enabling the use of electronic promissory notes with a view to their transfer in the mortgage secondary market, but also limited their scope to notes secured by real property on grounds of the several existing concerns relating to the feasible (unfair or unscrupulous) use of negotiable instruments in consumer transactions. See Jane K. Winn, What is a Transferable Record and Who Cares?, 7 B.U. J. SCI. & TECH. L. 203, 207 (2001). A concern that is in fact the focus of part of the criticism vested in negotiability and the results that protection of the “holder in due course” may lead to, and which resulted in the limitation of the application of such doctrine in consumer lending. See Rosenthal, supra note 2, at 377: See also Kurt Eggert, Not Dead Yet: The Surprising Survival of Negotiability, 66 ARK. L. REV. 145, 172-73, 181 (2013).

\textsuperscript{20} U.C.C. § 7 (Rev. 2004), which addresses warehouse receipts and bills of lading issued in electronic form.

\textsuperscript{21} U.C.C. § 9 (Rev. 2010) (particularly § 9-102 (a) (11), (31) and (70)).
transfer of the document. The rules that apply to chattel paper in the Uniform Commercial Code share with negotiability their reliance on the transfer of possession of the document or documentary set for assignment of, and perfection of a security interest on the rights to payment evidenced thereby, with the corresponding security interests on the personal property (of the underlying debtor in a lease or sale transaction) securing payment.\(^{22}\)

The rules on electronic transferable records or documents of title and electronic chattel paper were devised to a certain extent to preserve the logical structure of the paper-based provisions. They parallel those provisions by providing a substitute for possession in the electronic environment that is referred to as control of the document.\(^{23}\) Control, therefore, is a condition for gaining the status of holder of a negotiable or transferable document or record, or for perfection of a security interest in the chattel paper as secured party.\(^{24}\) Transfer of the document or record, and perfection of a security right upon chattel paper, requires in all cases transfer of control over the documents. The definitions of control used in these provisions vary in terminology in accordance with their different scope, but they essentially require in all cases that the method employed by the parties for communications and for the use or management of electronic documents reliably establish the person claiming to have control, or claiming to be the secured party, as the person to which the document or record has been issued or transferred, or the person to whom the electronic chattel paper has been assigned.\(^{25}\) A safe harbor is also provided by these rules by setting certain conditions whose satisfaction grounds recognition of the existence of control. These conditions, however and keeping consistent with the idea that control would be the functional equivalent to possession (or possession and endorsement), in a way resemble those created in the physical world by possession of a paper document. Thus, they require that the method or system used by the parties is such that the record (or the document or records comprised in the chattel paper) is “created, stored, and assigned” in a manner that allows identifying a single authoritative copy of the record that is unique and (unless otherwise specified) unalterable, and which can be readily distinguished from other (non-authoritative) copies.\(^{26}\)


\(^{23}\) See Unif. Electronic Transactions Act § 16(b) (1999); Electronic Signatures in National and Global Commerce Act § 7021(b): U.C.C. § 7-106(a) (Rev. 2004); U.C.C. § 9-105(a) (Rev. 2010).

\(^{24}\) See Unif. Electronic Transactions Act § 16 (d) and (e) (1999); Electronic Signatures in National and Global Commerce Act § 7021(d) and (e): U.C.C. § 7-501 (Rev. 2004), as well as U.C.C. § 1-201(5), (14) and (20); U.C.C. §§ 9-207 and 9-314 (Rev. 2010).

\(^{25}\) See supra note 23 and accompanying rules.

\(^{26}\) U.C.C. § 9-105(b) (1) and (5); Unif. Electronic Transactions Act § 16(c) (1) and (5) (1999); Electronic Signatures in National and Global Commerce Act § 7021(c) (1) and (5) (Rev. 2004); U.C.C.§ 7-106(b)(1) and (5).
authoritative copy identifies the person asserting control as the person to whom the record has been issued or most recently transferred (or assigned, in the case of electronic chattel paper);\(^{27}\) the record is “communicated to and maintained” by the person asserting control “or its designated custodian”;\(^{28}\) whereby any amendment done in the record can be readily identified as either authorized or non-authorized; \(^{29}\) and whereby copies or amendments that change the identity of the assignee or transferee can only be made with the consent of the person in control.\(^{30}\) In order to enforce its rights under the record or document, the person claiming to have control must prove such circumstance by any appropriate means, including giving other persons access to the record and related information.\(^{31}\)

Being significantly loyal to the paper-based logic (at least when tendering guidance through the safe harbor test aimed at setting different requirements for control), the legal scheme followed in the U.S. examples is largely neutral as compared to other existing legislation. The rules enacted in Japan with the purpose to address electronic substitutes or equivalents to transferable or negotiable instruments, for instance, show a clearly different approach that, even if very interesting in some regards, relies on a markedly regulatory-based policy. The Japanese legislation defines and regulates Electronic Recorded Monetary Claims (ERMCs) as a specific type of right to payment of a certain sum of money. When compared to previous ones, these rules show a basic but important difference. They do not simply aim at providing a framework for enabling the use of electronic transferable or negotiable records by superimposing to the existing law the provisions needed for achieving media neutrality. They rather implement a full formal and substantive framework for the transfer or negotiation of rights in the electronic medium in conditions akin or equal to negotiability.\(^{32}\) The resulting substantive legal framework is consequently adjusted to the

\(^{27}\) U.C.C. § 9-105(b) (2) (Rev. 2010); Unif. Electronic Transactions Act § 16(c) (2) (1999); Electronic Signatures in National and Global Commerce Act § 7021(c) (2) (Rev. 2004); U.C.C. § 7-106 (b) (2) (Rev. 2004).

\(^{28}\) U.C.C. § 9-105 (b) (3) (Rev. 2010); Unif. Electronic Transactions Act § 16 (c) (3) (1999); Electronic Signatures in National and Global Commerce Act § 7021 (c) (3) (Rev. 2004); U.C.C. § 7-106 (b) (3) (Rev. 2004).

\(^{29}\) U.C.C. § 9-105 (b) (6) (Rev. 2010); Unif. Electronic Transactions Act § 16 (c) (6) (1999); Electronic Signatures in National and Global Commerce Act § 7021 (c) (6) (Rev. 2004); U.C.C. § 7-106 (b) (6) (Rev. 2004).

\(^{30}\) U.C.C. § 9-105 (b) (4) (Rev. 2010); Unif. Electronic Transactions Act § 16 (c) (4) (1999); Electronic Signatures in National and Global Commerce Act § 7021 (c) (4) (Rev 2004); U.C.C. § 7-106 (b) (4) (Rev. 2004).

\(^{31}\) Unif. Electronic Transactions Act § 16 (f) (1999); Electronic Signatures in National and Global Commerce Act § 7021 (f) (Rev. 2004).

\(^{32}\) ERMCs, as defined and regulated in the ERMC Act are aimed at providing an alternative to paper drafts and promissory notes in the course of financial services specifically targeted at small and medium sized enterprises. See Electronically Recorded Monetary Claims – A New Financial Means for Raising Funds, Financial Services Agency – Ministry of Justice (Japan), available at http://www.fsa.go.jp/ordinary/densi02-en.pdf (last visited on Feb. 15, 2013).
features of the electronic space, thereby avoiding all paper-biased limitations. The interesting aspect of the Japanese rules in this regard, therefore, is that their logic and drafting focus on the abstract right itself, rather than on the document for that purpose issued (ERMCs may be accrued, and transferred or assigned only in electronic form). A more thorough picture of this framework, however, reveals that the transfer of rights envisaged in the law is fully dependent on the creation of electronic records and on the exchange of information through the system employed for the management of such records, in a way that in practice results in an operational scheme that, under different notions, is very similar to the one framed in the idea of an electronic equivalent of a transferable instrument and the notion of control. Hence, for the accrual of the right as such (and the application of the corresponding regime), an electronic record must be generated with that specific purpose.\textsuperscript{33} Likewise, the transfer of ERMCs requires a declaration for that purpose done through an “assignment record.”\textsuperscript{34} Similarly, perfection of a security interest (pledge) requires a “pledge creation record,”\textsuperscript{35} and the introduction of guarantors’ obligations under the record requires the corresponding “guaranty record.”\textsuperscript{36} Finally, for the valid payment of an ERMC a “payment record” must also be done,\textsuperscript{37} all of them adding to the original contents of the accrual record and to the history trail of the ERMC.

The effects of the transfer of an ERMC (as the right or rights evidenced in the monetary claim record) are in principle those also foreseen for rights embodied in negotiable documents. Therefore, the holder of an ERMC\textsuperscript{38} may acquire it, with certain exceptions (which in the end determine to what extent it is a negotiable right), free of defenses and of third party claims.\textsuperscript{39}

\textsuperscript{33} Art. 2 para. (1) ERMC Act defines ERMCs as “monetary claims for which electronic records (...) are required for their accrual and assignment”. The Act also defines “Monetary Claims Record” as “the record of the Electronically Recorded Monetary Claim that accrue with the accrual record (...)” (Art. 2, para. (4)). Art. 15, finally, provides that “Electronically Recorded Monetary Claims (...) accrue by way of making an accrual record”. The Act also requires certain minimum information to be introduced in the contents of the accrual Monetary Claims Record (the “Recorded Matters”); see definition in Art. 2 para. (5), which include a promise to pay a certain amount of money (“a statement to the effect that the obligor shall pay a certain amount of money”), the date of payment, the name and address of the obligee and the obligor and the date of the electronic record [see Art. 16, para. (1), subparas. (i), (ii), (iii), (v) and (viii)].

\textsuperscript{34} See ERMC Act, art. 17 “the assignment of Electronically Recorded Monetary Claims shall not be effective unless (an) assignment record is made”; see also art. 18, para. (1) (stating the information (Recorded Matters) that the “assignment record” must include).

\textsuperscript{35} ERMC Act art. 36 and 37.

\textsuperscript{36} ERMC Act art. 31 and 32.

\textsuperscript{37} ERMC Act art. 24.

\textsuperscript{38} ERMC Act art. 2, para. (1) (defining “Electronic Recorded Person” as “the person recorded in the Monetary Claims Record as the obligee or pledgee of the electronically Recorded Monetary Claims”).

\textsuperscript{39} ERMC Act art. 2, para. (2) (“[T]he Electronically Recorded Person shall be presumed to legitimately hold the right to the Electronically Recorded Monetary Claim pertaining to the Electronic Record in question”: ERMC Act art. 19, para. (1) (“[A] person recorded as the assignee of the Electronically Recorded Monetary Claims (...) shall
The legislative approach that has resulted in the regime of ERMCs offers certain advantages. Like other legal schemes providing for the transfer of rights in accordance with negotiability principles (whether based on the use of paper or of electronic records), the legislation aims at covering the title assurance needs that such principles, and the practice that gave rise to them, try to respond to. Without prejudice of the rules that in fact determine to what extent the holder acquires rights free of defenses or claims (or a certain priority rank), one of the main concerns of the rules is (like in the U.S. examples) to ensure that, whatever legal effects are recognized to the ERMC and its transfer, they are grounded on a reliable identification of the holder or obligee, and in general terms on the assurance of the authenticity of the information in the records employed. The Japanese law in this respect is based on a fully regulatory approach, which namely tilts on the public designation as “Electronic Monetary Claims Recording Institutions” of service providers meeting certain requirements. Given the weight that ERMCs are expected to have in the context of services for access to finance, the rules in this regard are very much shaped like a prudential framework whose purpose is to ensure the integrity of all systems employed and the financial soundness and technological and organizational capabilities of entities involved in the provision of these services. At a substantive level,

acquire said Electronically Recorded Monetary Claims; provided however that this does not apply to cases in which the person acted with knowledge or gross negligence); ERMC Act art. 20, para. (1) (“[The] obligor in the accrual record (...) may not assert a defense arising from an in (sic) personal relationship with the person who assigned said Electronically Recorded Monetary Claims to the obligee of those claims, against the obligee of the Electronically Recorded Monetary Claims (...) provided, however, that this shall not apply in case where said obligee acquired those Electronically Recorded Monetary Claims knowing that said obligor would be harmed”); see also ERMC Act art. 12-13, 19, para. (2), (setting some exceptions to the presumption of title set in para. (1), and 20, para. (2), likewise laying down exceptions to the rule in para. (1) of the same article).

In other words, on a reasonable assurance that all the information exchanged and included in the accrual and in subsequent records possibly generated for the transfer of the ERMC, or for perfection of security rights thereupon, or for the addition of other obligors (guarantors), and for payment, is authentic (it has been done by the purported originator or signatory in each case relevant—the obligor, assignor or transferor, guarantor, holder or Electronically Recorded Person, etc.—, and keeps its integrity and original contents). Other than for the benefit of possible transferees or pledgees (See again ERMC Act art. 9, 19, 20, and 38), such rules work also for the protection of obligors, for payment to the presumed legitimate holder entails valid payment and releases the obligor in good faith from its obligation (See also ERMC Act art. 21).

See ERMC Act art. 2, para. (2).

See namely ERMC Act art. 51 - 53; See also Order for Enforcement of the Electronically Recorded Monetary Claims Act (Cabinet Order No. 325 of October 22, 2008, English translation, available at http://www.japaneselawtranslation.go.jp/law/detail/?ft=1&re=02&dn=1&x=-561&y=-316&co=01&ky=electronically+recorded+monetary+claims&page=4, last
however, the validity and recognition of ERMCs as such, as well as of any actions for their transfer or use, are subject to the need to resort to the services of an Electronic Monetary Claims Recording Institution.\footnote{See ERMC Act art. 6 and 7 (In addition to all previous formal conditions for the valid accrual and transfer of an ERMC, relating in particular to the need to use electronic means (electronic records) and to the requirements focusing on its contents, ERMCs must be created through the services provided by an Electronic Monetary Claims Recording Institution, and in accordance with its operational rules (which must be also reviewed by the competent authority for the designation of the Institution as such). The law even specifies that all electronic records created for the accrual and life of an ERMC must be recorded in a registry maintained by an Electronic Monetary Claims Recording Institution using a magnetic disk or other approved equally secure technology) See also ERMC Act art. 2, para. (3) and art. 3.}

Besides by its different conceptual approach, the basis of the framework implemented by the ERMC Act is clearly characterized by the fact that service providers acting in the market, and in an indirect way the technology and systems employed in the provision of the services, will be determined by the competent public authority. Regulatory-based policies and their true effectiveness with regard to the goals that they pursue (i.e., promotion of trust by way of ensuring security and integrity in electronic communications and the authenticity of information exchanged) have been many times questioned \footnote{See Amelia H. Boss, Searching for Security in the Law of Electronic Commerce, 23 NOVA L. REV. 585, 589 (1999); Fischer, supra note 16, at 230 (regarding electronic signatures); Helen Nissenbaum, Securing Trust Online: Wisdom or Oxymoron?, 81 B.U. L. REV. 635, 654 (2001). A policy like the one implemented by the Japanese ERMC Act could hypothetically be applied in a technology neutral manner, since it is precisely based on the assessment of entities (service providers) and the technology they employ under a certain standard of reliability. However, in practice it is likely to result in an in fact highly prescriptive environment, which in addition is to be combined with a set of rules that does not work upon the basis of presumptions of authenticity (like in many cases the rules on e-signatures do), but fully subjects the validity of ERMCs, and therefore the effectiveness of transactions involving such an asset, to the use of the designated services.} Without prejudice of the effects that such a policy may possibly have on the operation of the market, and their (in practice) non-technology neutral outcomes, the framework of the ERMCs, at least, somehow envisions what has been one of the most common practices in this field.

Services for the use of electronic transferable (or negotiable) records or rights have been traditionally classified in token and registry systems on grounds of the architecture of the method employed for their issuance and transfer. Token systems are based on the idea that a single token, used as the single legally relevant evidence of title or holdership, may be used between transferor and prospective transferee of a record or a right (or in general as between any parties involved in the life of such an asset) in a similar way as paper-made tokens (transferable or negotiable documents), which we can recognize as

visited on September 23, 2013), which restricts access to the market of these services to financial institutions (see art. 13).
original documents. Given the difficulties entailed in creating and recognizing a unique electronic record as the legally relevant token that can be transferred from one person to another, systems based on the use of a token have been understood as based on the idea that the record identifies its holder (the person entitled to the right or rights) in a reliable manner.\textsuperscript{45} The architecture of registry systems is based on the creation of a registry in which holdership of, or title to a document or right would be registered, and which would equally work as the single legally relevant evidence of holdership or title.\textsuperscript{46} In any imaginable scenario involving this kind of transaction, and to a significant extent due to the technology mediated nature of the electronic space and transactions, experience shows that the exchange of transferable records or rights entails a need to resort to third party services providers. Service providers in this field may intervene as mere licensors of the technology and procedures used by the parties for the transfer or negotiation process.\textsuperscript{47} Existing practice however

\textsuperscript{45} Although the so-called token systems may hypothetically rely on the actual transfer of electronic documents between different information systems, this category has been rather understood as focusing on the preservation of the record by a third party service provider, who would keep the record as a “depository” or “custodian” of the person identified as holder at each point in time in the record, and who would manage such record in accordance with the instructions received by the holder (or by other person feasibly authorized to access the record for modifying or adding to its content). Rather than through the exchange of the record itself, these systems would be based on restrictions to access to documents and the capability to alter their contents (See generally R. David Whitaker, \textit{Rules Under the Uniform Electronic Transactions Act for an Electronic Equivalent to a Negotiable Promissory Note}, 55 Bus. Law. 437 (1999); see also Possible future work on electronic commerce – Recommendations for future work of Working Group IV (Electronic Commerce) submitted by the United States of America, U.N. Doc. A/CN.9/681, para. 21).


\textsuperscript{47} This would hypothetically be the case of technologies allowing the transfer of records between different persons, devices or information systems, so that only one legally relevant copy exists and may be, not only recognized or identified as such, but also kept in an information system under the control of a purported or identified holder (in a –then– so-called token system), or where one of the parties involved in the creation and transfer of the record (e.g., the obligor) provides also the technology and procedure for its management, even if on an outsourced basis and by previously relying on a service provider (in a privately operated –de-centralized– registry. See George F. Chandler III, \textit{Marine Electronic Commerce for the Twenty First Century}, 22 Tul. Mar. L.J. 463, 472 (1998) (classifying different types of registries with regard to the use of electronic bills of lading). This latter architecture may be recognized also in some electronic money services, where the e-money issuer would keep the holder’s wallet (and therefore a record or registry of the holder’s rights, represented in value or monetary units), whereas the holder would identify itself as such (i.e., as the owner of the currency).
relies on the intervention of service providers as trusted third parties. As providers of the technology and procedures used, their services are based on the provision and the operation of (usually) closed information systems for multilateral centralized communications, one of whose greatest priorities is to preserve trust among participants by ensuring integrity of communications and authenticity of the information exchanged therein. Although in this classification token systems were somehow thought of as the mirror image of the paper-based processes even before they existed in practice, models relying on the intervention of a trusted third party have also been to some extent reactive to this approach.\textsuperscript{48} Practice has shown that in other frequent cases the system is shaped as a central title and transactions registry operated by the (trusted) third party service provider.

The Japanese legislation is based on the assumption that services for the use of ERMCs will be based on the creation of central registries, in which all records needed for their use will be recorded, and under which title to or holdership of an ERMC will have to be determined.\textsuperscript{49} The rules that resort to the notion of

\textsuperscript{48} Trusted third party service providers in this context would provide the technology, systems and procedures for creating the record (or records) used, for its preservation in the appropriate conditions of security and reliability, and for administering access thereto and the capability to anyhow alter its legally relevant contents: for which reasons such systems are called “e-vault” systems. See supra note 45. A similar, although in some points very different architecture may be also recognized in the system for the exchange of bitcoins. As a system for the use of electronic currency without the need to resort to intermediaries from a financial point of view, the bitcoins architecture and infrastructure present many particularities, but in the end it is based on technologies and procedures that are maintained and operated in a decentralized manner, by different persons or entities that contribute to the integrity of the bitcoin economy: who for that reason, and even if in fact reliance is largely put in the software and hardware supporting the system, may be held as trust intermediaries or trusted third parties from a transaction-specific point of view (and as trust constituents from an architectural point of view). The bitcoin system is supported by certain open-source software, which is operated, other than by users (holders of bitcoins), by a structure of decentralized nodes in a peer-to-peer structure. The nodes, using the bitcoin client software, hold the wallet of the different users (therefore, record of their credit in bitcoins), who for completing a transaction involving payments in bitcoins would rely on encrypted communications, by using their respective (and automatically generated) private key of a given pair (the receiver or payee, for identification purposes, and the sender or payer also for identification purposes, including the verification of its “ownership” of the needed bitcoins). The orders thus exchanged through the said communications would then result in the corresponding debit and credit annotations or records in their respective wallets and nodes. The system also relies of the multilateral verification and confirmation of all transactions by each of the different nodes (clients) for keeping the integrity of all payments and avoiding errors or failures, which entails among other things tracking the path followed by each and every bitcoin. Joshua J. Doguet, The Nature of the Form: Legal and Regulatory Issues Surrounding the Bitcoin Digital Currency System, 73 LA. L. REV. 1119, 1125-28 (2013).

\textsuperscript{49} See ERMC Act art. 2, para. (3); ERMC Act art. 3. Korean legislation on bills of lading also relies on such an approach, with the important difference that it only provides for the licensing or recognition
control as the equivalent to possession (or possession and endorsement) were, on the other hand, devised precisely for supporting all different systems (whether token or registry-based) that could foreseeably achieve control of transferable records and its ultimate purpose, to reliably identify the person claiming to have control as the person to whom the record has been issued or most recently transferred.\(^{50}\)

There are two issues that must be highlighted at this point, for they very clearly reveal how the practice and the law ought to symbiotically coexist, so that legal rules recognize and preserve accepted (secure, reliable) practices, and the market, by disclosing good and accepted practices, guides the law for the recognition of legal effects. This has precisely been one of the main difficulties faced in the regulation of electronic transferable records, whose legal framework in the U.S. started to be interpreted while practice was still arising.\(^{51}\) The first of them is that, in the use of electronic transferable records or in the electronic transfer of rights in equal or similar conditions, the parties involved must (and in practice always do) agree on the methods that will be employed for communications with that specific purpose. We have a clear precedent also in the practice based on paper, where traders actually started to reify rights in pieces of paper with the purpose to complete their transfer in certain conditions, after which the law recognized such practice and attached to it certain consequences. The methods used in processes for the transfer of rights in these contexts, however, require a more complex choice, for such processes may involve multiple transactions in multiparty relations, which has induced resorting to third party service providers in the way explained above, and not simply relying on electronic documents and signatures. This need, other than reflected in practice, is also implied in the rules dealing with negotiable or transferable electronic records,\(^{52}\) including regulatory-based legal frameworks, where the parties are simply compelled to choose one of the recognized service providers.

Second, even though the transfer of rights or records entails several different questions that must be taken into account by the parties involved, and by the law when setting the legal effects of the parties’ actions, a key element in these processes is the reliability of the technology and procedures used for ensuring the authenticity of the information exchanged, and to that extent the existence of the rights or the records as such and their legal recognition and effects, as well as the proper

\(^{50}\) See Official Comment to § 16 UETA, para. 3; Official Comment to § 7-106 UCC, paras. 3, 5.


identification of the person entitled thereto, the holder. The reliability of the method employed for communications determines both the choices made by the parties and the legal effects attached thereto, all of which in fact conditions the effectiveness of the system envisaged as a title assurance procedure (with the material or substantive effects that the law may attach to it), particularly for prospective transferees, and for the benefit (and protection) of obligors. Both the above referenced rules (each of them with a different approach), and the practices developed thereunder reflect such concern, each of them in a different way.

The rules based on the notion of control, which resort to this notion as a substitute for possession, focus on the reliability of the identification of the holder by the record or the method used (an identification that presupposes, and therefore requires, a reliable assurance that the record, including any electronic signatures, besides complying with contents or information requirements in accordance to the applicable law, can be deemed authentic). Likewise, although the safe harbor test that the rules also set in some respects and to a certain extent mirrors the situation created with the use of paper original documents (uniqueness of a single legally relevant copy, recognition of amendments as authorized or unauthorized, storage or maintenance by the holder —person asserting control— or its designated custodian), its practical application has similarly focused on the level of assurance of the authenticity of information that the procedure used is capable to achieve.53

53 The evolution of § 9-105 is revealing in this regard. Its first formulation did not include the current para. (a), which was added in the 2010 revision following the examples in the UETA, E-Sign and Art. 7-106 UCC; and only para. (b) set the threshold for control. In light of its possibly too high (or simply maybe not so technology-neutral) standard, a rule based on the reliability of the information identifying the secured party as the person in control was introduced as a general principle. See Jane K. Winn, Electronic Chattel Paper: Invitation Accepted, 46 GONZ. L. REV. 407, 411 (2010-11). Different technical standards have been developed by the industries concerned regarding methods for storage of records and related information with a view to achieve control, in light of the requirements of the safe harbor test, including message format. An interesting indication of how such harbor test is being interpreted can be found in the Framework for Control over Electronic Chattel Paper – Compliance with UCC § 9-105, by the Working Group on Transferability of Financial Assets Joint Working Group of the Committee on Cyberspace Law, the Committee on the Uniform Commercial Code of the American Bar Association Section of Business Law and The Open Group Security Forum), 61 BUS. LAW. 721 (2005-06). Such Framework for Control was produced with the aim to provide guidance to developers of tools and services for the use of electronic chattel paper on a technologically neutral manner (see p. 722). Although it focuses on the different elements of para. (b) of § 9-105 (by then the only existing notion of control in Art. 9 UCC) by in many cases relying to some extent on the architecture of control systems and environments, and their operational capability to manage records in certain conditions (726-29), it essentially translates a significant part of its requirements into a question of reliability of the systems and procedures for ensuring the authenticity of the information available to users (see pp. 737-38, referring to the identification of a copy of the documents as the uniquely legally relevant or single authoritative one, pp. 739-41, relating to recognition of authorized amendments and their traceability, p. 742, on the identification of the secured party and assignments of the electronic
Reliability of a procedure or method is objectively assessed or measured in accordance to different criteria that relate to the technology and the systems employed for the management of records or information in electronic form, as well as the service provider and its technological, human and financial capabilities. In the case of some experiences, such as in the context of the use of electronic notes in electronic mortgages transactions under the umbrella of the notion of control, prospective purchasers of e-notes identify and set standards for communications, systems and procedures employed by service providers, and tend to establish a trust framework through the pre-approval of service providers, or agreements previously concluded with them for future purchases (including technical and operational specifications, as well as rights and obligations), thereby giving a clear indication of what is considered reliable.54

Regulatory-based models, as previously stated, respond to a policy based on the identification of reliable technologies, systems, procedures and service providers, and their designation as such for conditioning recognition of legal effects to their use. In the context of electronic records or electronically recorded rights, and regardless of how biased the law may be from the point of view of the architecture of systems or methods employed, the cornerstone of the system is reliably ensuring the authenticity of the information concerned (contents of records, signatures of issuers and obligors), including the identification of a person as the holder or pledgee of the rights or records, in accordance with the described policy.

One of the lessons taught by the foregoing is that, although architectures tend to ensure a certain threshold of security, trustworthiness and, in general, reliability, their structural differences should be irrelevant from a legal point of view. In this and other aspects of electronic commerce laws, the key element for the recognition of certain effects or statuses, such as title to a right or document, is reliability of the methods employed by the parties involved in a transaction for ensuring the authenticity of the relevant information.

III. SOME THOUGHTS ON THE UNCITRAL PROJECT ON ELECTRONIC TRANSFERABLE RECORDS

The instrument on electronic transferable records that is currently under discussion in the working group on electronic commerce of UNCITRAL and the debates and works already undertaken refer to many of the issues that a legal regime for such kind of documents or records should probably cover. Our purpose in this section, however and in light of previous

chattel paper), as a precondition for the level of trust that decisions involving electronic chattel paper (like electronic transferable documents or records) require (see p. 722).

experiences and rules (and the remarks made thereupon, among other things), will be to focus only on some of them, and namely on the ones that involve the policy choices that may determine the final look of such an instrument, and consequently its overall reach and usefulness.

A. THE NOTION OF ELECTRONIC TRANSFERABLE RECORD

The UNCITRAL instrument is for the time being shaped as a model law, following previous instruments of the Commission on electronic commerce. A final decision on the format that the rules may have has been postponed until the group comes to a more defined agreement on their precise scope and intention. The reason is that such scope and intent have been the subject of a certain debate in the first steps of the negotiation. The progress made up until now with respect to this issue is largely defined by the assumption that the role of UNCITRAL in the filed of electronic commerce law must focus on the production of rules that enable the use of electronic means with legal and contractual purposes, and therefore, and with regard to negotiable or transferable documents, the resulting instrument should achieve the same end. This approach entails certain limitations that nonetheless adequately respond to the mandate that the working group has, and which exclude from the scope of the work and of the instrument all issues related to the substantive rules and outcomes of the transfer of rights under transferable or negotiable documents, including questions

55 See Draft Provisions on Electronic Transferable Records, U.N. Docs. A/CN.9/WG.IV/WP.124 and A/CN.9/WG.IV/WP.124/Add.1 (Sept. 2013), available at http://www.uncitral.org/uncitral/en/commission/working_groups/4Electonic_Commerce.html (last visited on November 1, 2013). The provisions included in this draft are still subject to further discussions during forthcoming sessions of Working Group IV, and they shouldn’t be taken as final. Some of the draft provisions that the current draft contains, however, already reflect the policy choices that are likely to define the final document.


59 Although the mandate given by UNCITRAL’s plenary to Working Group IV was not very explicit in this regard [simply instructing to start working on electronic transferable records –see again Report of the United Nations Commission on International Trade Law. Forty-fourth session (27 June-8 July 2011), U.N. Doc. A/66/17, at paras. 232-40], the Working Group, consistently with several proposals previously done and the work that preceded such decision, interpreted the mandate as confined to rules on the use of electronic records and means with the said purpose, leaving outside of the scope of the works to be undertaken any issues relating to substantive law, much like under previous UNCITRAL’s instruments on electronic commerce –Report of Working
relating to protection of holders from previous underlying defenses or third party claims under rules on negotiability. Resembling the above-referred provisions adopted in the U.S. in this field, the rules of a possible future instrument, therefore, will be expected to complement the ones providing for the substantive framework for the transfer of rights under transferable or negotiable documents in national laws.

While this idea suggests that any resulting provisions should strictly abide by the principles followed in other previous electronic commerce rules emanated from UNICTRAL, and namely functional equivalence and non alteration of preexisting substantive law, the ideas exchanged during negotiations and the current drafting of some provisions already imply that such policy lines may have a somehow particular reflection in this field, at least with regard to the material scope of application of this (for the time being) model law. The instrument’s material scope of application, even within the just referred limitations, is essentially determined by the notion of electronic transferable record that the rules must unavoidably lay down as a starting point. There are some difficulties that the instrument faces with regard to this question. National rules share most of the basic elements that provide the formal basis for the transfer of rights under transferable or negotiable documents (use of written documents and transfer through delivery, or delivery plus endorsement), and the formulation of the said notion that the instrument includes seeks to reflect in a neutral manner this preexisting area of transnational convergence. However, in existing laws there are transferable or negotiable documents of a varying nature and regime, among other things on grounds of the right that they incorporate, some of which, in addition and in spite of being considered negotiable documents, are beyond the envisaged scope of application of the model law. The instrument purports to apply only to transferable records that are issued or transferred within the context of a particular transaction and on an individual basis, between the parties thereto. For that reason, other than the referred definition, for refining the scope of application of its rules the instrument limits the rights that may

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61 The current draft text aims at reflecting that in any case electronic transferable records are electronic documents that incorporate the right to claim performance of an obligation, which can be transferred by transferring the record (see Report of Working Group IV (Electronic Commerce) on the work of its forty-seventh session (New York, 13-17 May 2013), U.N. Doc. A/CN.9/768, paras. 28-31). The wording used in the definition puts the emphasis on the record as the central piece of the notion (“electronic transferable record” means a record used in an electronic environment that is capable of transferring the right to performance of obligation incorporated in the record through the transfer of that record” –see Draft provisions on electronic transferable records, U.N. Docs. A/CN.9/WG.IV/124, at 4, and remarks in paras. 14-15).
be incorporated in an electronic transferable record. Likewise, it expressly excludes from its scope of application documents or records that are issued in large emissions (en masse), and namely instruments such as shares, bonds or financial derivatives, which are in many cases qualified as securities in national rules and have already been dematerialized in the law (and in practice). The most obvious examples that would fit into the referred notions and the resulting scope of the works currently underway would be traditional negotiable documents, such as bills of exchange, promissory notes and documents of title, although other transferable (may be non-negotiable) documents or records would also fall under the referred rules (e.g., insurance policies or certificates, commercial invoices, or other written instruments whose transfer would result in the transfer of the rights evidenced therein, even if under the law of assignment).

Whereas apparently following the philosophy focused on preexisting practices and rules based on paper, and even though in many cases the draft rules refer to paper-based instruments and to the law that applies thereto, the structure described actually aims at going beyond them and generally embracing (or at least preserving the possibility to encompass) electronic records that may be issued as transferable, regardless of whether they exist in the paper-based law that its provisions would complement. In accordance with the definition provided, the instrument would include any electronic records that incorporate a right to claim performance of an obligation, and according to which the said

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62 See the draft definition of “performance of obligation” as “the delivery of goods or the payment of a sum of money as specified in a paper-based transferable document or instrument or an electronic transferable record.”


64 In most cases the draft text naturally responds to the policy aimed at enabling the use of electronic records for the issuance of documents that in the law require the issuance of a paper writing, since there is a significant chance that in many countries, specially those where such documents are still employed, the law and the market may rely on their continued use (both for cross-border and for domestic transactions—see comments with regard to the U.S. by Patricia Brumfield Fry, Negotiating Bit by Bits: Introducing the Symposium on Negotiability in an Electronic Environment, 31 Idaho L. Rev. 679, 680 (1994-95); Kurt Eggert, supra note 19). For that purpose, it provides a definition of paper-based transferable document or instrument (draft article 3: “a paper-based transferable document or instrument means a transferable document or instrument issued on paper that entitles the bearer or beneficiary to claim the performance of obligation specified in the paper-based transferable document or instrument”). It also starts by expressly referring all matters not addressed in its provisions to any preexisting law that would apply to an electronic transferable record, in light of its nature and contents, as the twin of a paper-based document. And likewise, the instrument is in many cases concerned with expressly setting the conditions for compliance with requirements in preexisting paper-based law, under the functional equivalence approach (see, e.g., draft article 15, on the information that may be included in an electronic transferable record; draft articles 16, 18, 19 and 20, respectively on compliance with possession, delivery, presentation and endorsement requirements; draft article 26, para. 2, on termination of the document; draft article 27, on security interests; and draft article 28 on document’s retention duties).
right can be transferred by transferring the record. Other than
the electronic replicas or paper documents, the resulting scheme
would thus include instruments or records that (within the above-
referred limits and features) are only issued in electronic form, or
are exclusively regulated in the law in electronic form\(^{65}\). Such a
feature, if preserved, would, in our view, significantly increase the
usefulness of the resulting instrument. As a model law (and
provided it retains such a format), it would be expected to provide
a model as defined as possible for the regulation of electronic
transferable records and the transfer of rights thereunder, and to
assist and tender guidance to States on the problems and
alternatives that a legal framework addressing the said matters
would entail, among other things, on grounds of the experience
accrued with preexisting legal notions. As an instrument focusing
on transactions undertaken in the electronic space, it should also
take into account emerging rules and practices that precisely
focus on the transfer of rights with similar or equal purposes (and
in some cases effects) as those contemplated in the law for paper
documents.\(^{66}\)

\(^{65}\) The option for an open definition of electronic transferable
record was taken by the working group precisely for departing from an
approach strictly based on preexisting paper–based law – see Report of
Working Group IV (Electronic Commerce) on the work of its forty-fifth
session (Vienna, 10-14 October 2011), U.N. Doc. A/CN.9/737, para. 22;
Report of Working Group IV (Electronic Commerce) on the work of its
A/CN.9/761, paras. 18-19; Report of Working Group IV (Electronic
Commerce) on the work of its forty-seventh session (New York, 13-17

\(^{66}\) Besides Electronically Recorded Monetary Claims, which provide
an example of how the transfer of rights in the electronic environment
may be approached in the future, a further indication in that regard may
be found in how financial services in international trade may evolve and
are already evolving. Payment promises or obligations in this field, such
as the ones stemming from letter of credit contracts or guaranties, may
be, not only issued as transferable, but in fact more easily transferred by
using electronic means, which may have an impact on how they can be
used in light of the financial needs of beneficiaries. This may actually be
done, regardless of the feasible use of drafts in the context of letters of
credit, by relying on the transaction or contract documents in fully
electronic transactions. Besides this, financial practices in international
trade have started changing since some years ago, among other reasons,
preferring for avoiding the shortcomings of traditional services and
procedures based on paper, which, even if in some regards are more
conservative for risk mitigation, have proved to be more expensive and
error-prone. Seller-centered strategies for trade finance, and namely
those based on documentary letter of credit services, are being replaced
by buyer-centric supply chain finance strategies, based on open account
relations as well as on the support that big buyers are providing to sellers
(their suppliers) in covering their liquidity needs, for instance, through
reverse factoring schemes procured by buyers and therefore based on
their financial staunchness. Such services will sometimes entail the
transfer of rights for discount purposes, with or without recourse
(depending on the terms of the service), or the use of rights as collateral,
all of which will be done electronically, in some cases relying on the use of
transferable records (drafts, notes or invoices – in cases where receivables
are used as collateral, depending on the law applicable to security
interests thereupon and perfection thereof). In this context, for instance,
bank payment obligations are being used for settlement purposes
between banks involved in supply chain finance services. Bank payment
obligations have been increasingly supported by SWIFT (Society for
If it aims at setting a basic framework for electronic transferable records which do not enjoy the application of specific preexisting rules that address negotiable or transferable documents, the instrument would also have to solve certain basic issues, as well as provide guidance as to what law would apply to the electronic transfer of rights achieved thereunder. Among such basic issues prominently stands how the rights in an electronically transferable record would be actually transferred, and how the transferee would have to prove its condition as such, a question for which the instrument already relies on the notion of control.

Worldwide Interbank Financial Telecommunication) and the International Chamber of Commerce, through the identification of relevant standards, and through the recent issuance of the Uniform Rules on Bank Payment Obligations (URBPO, ICC Publication No. 750E). In the rules, which follow the established practice, a Bank Payment Obligation (BPO) is defined as “an irrevocable and independent undertaking of an Obligor Bank to pay or incur a deferred payment obligation and pay at maturity a specified amount to a Recipient Bank (...)” subject to certain conditions. The obligor bank (the seller’s bank) would actually assume such an obligation upon communication by the seller of its compliance with the conditions relating to the underlying sales or supply transaction, provided such compliance information accords to the terms agreed with the buyer and communicated by both parties to the obligor and the recipient bank (the buyer’s bank), or are otherwise accepted by the buyer—which in the framework devised for the URBPO is based on a matching process, that may or may not be automated depending on whether the seller has complied with the agreed terms or there are variations that need the buyer’s approval (see also in particular the definitions of “Baseline,” “Data Match,” “Data Mismatch,” “Data Set,” “Established Baseline,” “Obligor Bank,” “Recipient Bank,” “Seller’s Bank,” “Transaction Matching Application”, in art. 3, as well as art. 6, para. a, which lays down the principle of independency of the BPO with respect to any underlying transactions between buyer and seller, as well as between any of them with any involved bank, and art. 10, on the undertaking by the Obligor Bank). Although the URBPO limit their application to inter-bank relations, it is expected that they are used also in relations between banks and their customers in this same scenario. Likewise, from a functional point of view, they are already being accepted as collateral by banks, and they are also expected to be used as electronically recorded transferable rights, but for that purpose rely on a mechanism based on the amendment of the terms of the BPO (for replacing or modifying the identity of the Recipient Bank) upon acceptance of the involved banks (see art. 11 and art. 16, para. a, stating that a Recipient Bank may also assign the proceeds under a BPO). The URBPO (which are to be contractually incorporated to the terms of the BPO) state that BPOs are subject to the law of the place of the branch or office of the Obligor Bank. See Educational Report – Observations on the Evolution of Trade Finance and Introduction to the Bank Payment Obligation, OPUS Advisory Services International Inc. & SWIFT, at 5-17, 42-59 (March 2013), available at http://www.swift.com/assets/corporates/documents/business_areas/trade_opus_swift_observations_2013.pdf, last visited on Oct. 26, 2013.

A feasible choice would, for instance, consist of a reference to the law on the ordinary assignment of rights. Such a practical possibility is also foreseen by the previously referred rules on electronic transferable records in the US [see § 16, paras. (d) and (e) UETA: § 7021, paras. (d) and (e) E-Sign], as well as under the ERMC Act, which allows the exclusion of the application of the rules for the protection of the Electronically Recorded Person from underlying previous defenses or third party claims. See art. 16, para. (2), subpars. (viii) and (x), art. 19, para. (2), subpara. (i), art. 20, para. (2), subpara. (i) ERMC Act.
B. THE TRANSFER OF RIGHTS UNDER AN ELECTRONIC TRANSFERABLE RECORD AND THE NOTION OF CONTROL

The transfer of rights and the formal allocation of title thereupon in the UNCITRAL instrument are based on the notion of control. The decision to resort to this notion, and the logical structure that it leads to, were adopted at a pretty early stage in the creation of the draft provisions. Such a policy choice to a large extent results from the limitations of the scope of the works underway. There are two feasible approaches for structuring the formal protocol for the transfer of rights in this scenario, as illustrated by the laws referenced in previous pages. One focuses on the record and its transfer as a means for transferring the rights evidenced by the record. The other one focuses on the right and the formal (electronic recording or writing) requirements needed for its valid accrual and its subsequent transfer. In the context of UNCITRAL's activity, clearly the first approach suits best the purpose of a model law or other instrument whose aim is to exclusively deal with the formal aspects of the process for the transfer of rights, as well as both complement previously existing rules on transferable paper documents and provide guidance and the basis for the regulation of new ones (endemic to the electronic space). A drafting structure based on the abstract right would probably entail re-thinking how the formulation of many substantive rules should be adapted to the new formal structure, which is something beyond the mandate that UNCITRAL Working Group IV has received.

On the other hand, the differences between the approaches based on the idea of control and the alternative focus on the abstract right and the electronic formal process for its transfer may even be of a purely semantic nature. At the drafting level, it all depends on how the notion of control, as the basis for the transfer of the record and the formal allocation of title upon the rights therein, is defined. At the level of practice, there is a significant chance that procedures and technologies developed under each of these systems do not actually differ, provided the rules are technologically and architecturally neutral enough (as they ought to be).

The notion of control, which conditions the whole life cycle of electronic transferable records (their issuance, transfer and payment or enforcement), whether they are issued as the twin of a paper transferable document or not, has been (and will probably

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69 In any case, in the UNCITRAL instrument control is used as the basis for the identification of the holder (see definition of the term in draft article 3), and in fact the validity of the electronic transferable record as such requires that it is subject to control of the holder (at each point in time) from its issuance until it is cancelled (see definitions of “issuance” and “issuer” in draft art. 3, as well as draft art. 14, para. 3). Likewise, in any case, for the transfer of the record the transfer of control over it is needed (see definition of “transfer” in draft art. 3, and draft art. 21, para. 1). Additionally, where the electronic transferable record is
continue to be) one of the most debated issues, if not the most.\textsuperscript{70} Its current formulation resembles the structure found in the provisions addressing this concept in U.S. law and uniform instruments\textsuperscript{71}, but, depending on the choices finally made, it may even further stick to the idea that electronic records may or should be exchanged and used like paper ones, and therefore control requirements should focus on the ability of the holder to manage and dispose of the record, the assurance that the record is unique or that a single relevant copy must be readily identifiable, or that the record must be kept by the person claiming to have control.\textsuperscript{72}

issued as the parallel of a paper transferable or negotiable document regulated in the law, control is relied upon for establishing compliance with delivery, presentation and transfer requirements (See supra note 64).


\textsuperscript{71} Draft provisions on electronic transferable records, U.N. Doc. A/CN.9/WG.IV/WP.124/Add.1), draft art. 17 states:

“1. A person has control of an electronic transferable record if a method employed for the [use] [management] of electronic transferable records reliably establishes that person as [the person which, directly or indirectly, has the de facto power over the electronic transferable record] [the person to which the electronic transferable record was issued or transferred].

2. A method satisfies paragraph 1, and a person is deemed to have control of an electronic transferable record, if the electronic transferable record is issued and transferred in such a manner that:

[(a) the uniqueness and integrity of the electronic transferable record are preserved in accordance with draft articles 11 and 12;

(b) the electronic transferable record identifies the person asserting control as:

(i) the person to which the record was issued or

(ii) the person to which record was most recently transferred; and

(c) the electronic transferable record is maintained by the person asserting control].”

The brackets indicate that the text therein is presented in different alternatives or in general for discussion, on grounds of previous debates and agreements.

\textsuperscript{72} The provision in draft art. 17, as its text expresses, is to be complemented with draft arts. 11 and 12, in Draft provisions on electronic transferable records, U.N. Doc. A/CN.9/WG.IV/WP.124, which set the requirements that the method used for communications ensure that the record is rendered unique and that the integrity of the information included in the record is preserved. All these provisions also imply that the parties wishing to issue and transfer electronic transferable records must agree on the methods used for that purpose, which requires their previous agreement, as it actually takes place in practice and under other previously referred rules. Finally, another element of this scheme relates to the amendments done in the record. Amendments to an electronic transferable record may need to be done for different purposes: for its transfer or pledge (or perfection of security rights), for adding the identity of further obligors, for amending its contents in accordance with the will of parties involved (such as the holder or existing obligors), etc. Draft art. 22, in Draft provisions on electronic transferable records, U.N. Docs. A/CN.9/WG.IV/WP.124/Add.1, addresses amendments in the record, basically requiring that any amendments done are readily identifiable and qualified as such.
When used as the central piece of the scheme for the electronic transfer of rights through the use of electronic records, the danger in focusing too much on purely documentary features is to end up by requiring that electronic records have the same features or capabilities that paper documents have in a material sense, and on which the (paper-based) law in this context relies upon (features that in most cases are essentially related to their tangible nature). Such excess would actually amount to neglect recognizing legal effects to the use of electronic records when they perform the required legally relevant functions (which is what functional equivalence in fact dictates). The function performed by possession of a paper document in the paper-based practice and legislation (or possession plus endorsement) is reliably identifying the person presumptively entitled to a certain right as such, as the holder of the document. Consequently, control should be deemed achieved when the method used for the issuance or transfer of the electronic transferable record reliably identifies the person claiming to have control as the holder or as the person entitled to the right evidenced by the record.

The notion of control as a reliable identification of the holder of the document and of the corresponding rights has been very much present in the discussions leading to the current drafting of the UNCITRAL instrument. In our view, however, up until now its formulation has missed the point that such a reliable

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74 American Bar Association Cyberspace Committee Working Group On Transferable Records, Emulating Documentary Tokens In An Electronic Environment: Practical Models For Control and Priority of Interests in Transferable Records and Electronic Chattel Paper, 59 BUS. LAW. 379, 380 (2003). As clear examples of this idea in the field of negotiable instruments we may quote several rules. See e.g., Geneva Convention Providing a Uniform Law for Bills of Exchange and Promissory Notes, Annex 1, art. 16 (7 June 1930) (stating, “The possessor of a bill of exchange is deemed to be the lawful holder if he establishes his title to the bill through an uninterrupted series of endorsements, even if the last endorsement is in blank. (...) Where a person has been dispossessed of a bill of exchange, in any manner whatsoever, the holder who establishes his right thereto in the manner mentioned in the preceding paragraph is not bound to give up the bill unless he has acquired it in bad faith, or unless in acquiring it he has been guilty of gross negligence.”); See also U.N. Convention on International Bills of Exchange and International Promissory Notes, Dec. 9, 1988, art. 15, para. 1. (stating, “A person is a holder if he is: (a) The payee in possession of the instrument or (b) In possession of an instrument which has been endorsed to him, or on which the last endorsement is in blank, and on which there appears an uninterrupted series of endorsements, even if any endorsement was forged or was signed by an agent without authority”); while Art. 5, para. f defines “holder” as the person in possession of an instrument in accordance with article 15.

identification function necessarily depends to a full extent on the information exchanged by the parties in the use of transferable documents or the transfer of rights process (in accordance to the method for communications chosen by them), and therefore on how reliably the authenticity of such information (its authentic and original character, whether resulting from its creation or from subsequent amendments, and its integrity) can be established by any interested parties (obligors, prospective transferees or pledgees, etc.).

The analysis of the different existing practices aimed at enabling the transfer of rights online in conditions similar to the ones provided by transferable or negotiable documents, as well as by using transferable records for that purpose where the law so allows, shows that, in a blunt reflection of the information-dependent character of the electronic space and of electronic transactions, all processes, regardless of the architecture behind them, are focused on reliably ensuring the authenticity of the information exchanged and reliably identifying one person as the holder of the rights or documents. These are the most essential conditions that trust by parties in the system, and their confidence in that transactions undertaken therein will be valid, require. As previously stated, such level of reliability and trust is actually one of the elements with respect to which trusted third parties prove to play a crucial role, but in fact any technologies, procedures and architectures resorted to, rather than being a goal in themselves, are means put at the service of the reliable designation of one person as the holder, and in general of the goal to ensure the authenticity of all information exchanged with regard to the rights or documents (which is what users actually assess before entering into any transaction, rather than the precise architecture supporting it or its details, which may change from time to time). From this perspective, and even though all processes for the transfer of rights naturally have a documentary basis and rely on the use of electronic records (including those framed in the law of negotiability, also when things turn into a question of evidence), the record inevitably loses leadership, and the focus is on the right itself as stemming from the records and the information exchanged. From that particular point of view, and as previously stated, practices do not greatly differ, whether developed under the approach based on control or under the approach based on the regulation of electronic transferable or negotiable rights. A need often felt when producing rules based on the reliability of information recorded electronically is to set a safe harbor test in order to provide guidance as to compliance with the rule. Even if such a provision


77 Rogers, supra note 1, at 224; see also our remarks in Manuel Alba Fernández, Documentos de transporte y negociabilidad en un entorno electrónico – Segunda parte, 264-65 Revista de Derecho Mercantil 489, 529-32 (2007), in the context of electronic negotiable bills of lading.

78 Other than the U.S. provisions on control, as well as draft art. 17 of the UNCITRAL instrument (see e.g., UNCITRAL MODEL LAW ON ELECTRONIC SIGNATURES, art. 6, paras. 1, 3-4 (2001).
does not exclude the possibility to otherwise comply with the
general threshold of reliability, again, if it focuses too much on
documentary architectural elements it may also have a distorting
effect in favor of certain practices, to the detriment of others. Reliability of information (reliable assurance of its authenticity)
as a requirement for legal effects should obviously treat
differently different technologies and procedures differently, but
not discriminate between the ones that, with different
architectures, are equally reliable and achieve the same ends.

IV. CONCLUSION

The two questions that have been presented in the
previous pages were selected as two good examples of how the
discussion and the drafting of the UNCITRAL project on
electronic transferable records in some respects place
transferability of rights and records in the electronic space at a
crossroads. The choices made in the course of such work will
determine the future usefulness of any resulting instrument. The
ambitions of such an instrument should be to provide a
framework that adequately addresses the needs of businesses and
provides guidance, both to legislators and to the market as to how
to address the main problems entailed in transferring or
negotiating records and rights in the electronic space. Transferability and negotiability of documents is one of those
fields in which form has heavily overshadowed substance, and
the transposition of principles in this context requires a
significant effort for carefully selecting the truly relevant
elements of the phenomena addressed.

Such an effort should focus on keeping the virtues of the
paper-based rules that ground transferability or negotiability as a
scheme for title or rights allocation, but also on doing away with
the vices of the paper medium for preserving the virtues of the
electronic one. It should also take into account that new
technologies and media are likely to result in changes in conduct
and practices for actually achieving the same or similar ends. The
challenge faced when drafting legal rules is to avoid the risk of

79 For instance, requirements such as the uniqueness of the record,
or that the record is actually stored, maintained or kept by the person
claiming to have control may be hardly compatible with some data
structures or their dynamic features, which, even if framed in procedures
that suitably ensure the authenticity of the information managed and
communicated, do not even rely on a single copy of a given record, or at
each point in time combine arrays or blocks of different data stored
separately for actually communicating or presenting a record (see A.B.A.
CYBERSPACE COMM. WORKING GROUP ON TRANSFERABLE RECORDS, at 381:
Jane K. Winn, Electronic Chattel Paper: Invitation Accepted, 46 GONZ. L.
REV. 407, 421 (2010-11)). Likewise, the rule linking control of the record
with de facto power over it (draft art. 17 of the draft instrument) seems
to likewise focus on physical or material elements that in electronic
transactions, for the reasons stated, become useless, if not harmful.

80 See Lyria Bennett Moses, Recurring Dilemmas: the Law’s Race
to Keep up with Technological Change, 2007 U. ILL. J.L. TECH. & POLY
239, 239 (2007).

81 David Frisch and Henry D. Gabriel, Much Ado About Nothing:
Achieving Essential Negotiability in an Electronic Environment, 31
In this scenario, a positive trend must be seen in the fact that the UNCITRAL instrument tends, for the time being, to focus not only on preexisting paper-based examples of transferable documents (even if they logically capture much attention), but on electronic transferable records in general, on grounds of the basic features that all of them share, which in the end may extend the benefits of the provisions to be produced to any processes relying on the electronic transfer, assignment or negotiation of rights. It remains to be seen whether this attitude is also followed with regard to the notion of control, the probably most relevant element of the devised legal framework, and the basis of such framework as a system for title or rights allocation. In spite of the limitations that a future UNCITRAL instrument almost by definition will have, as previously explained, the opportunity may be even taken for providing guidance on how the rules may be devised for taking advantage of electronic means and their capabilities in this field. Everything, finally, with the purpose to make the most out of such an effort.

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83 Ubiquity of persons, information and access, for instance, allows breaking many limitations that the paper imposes, and foreseeing, not only the inclusion of multiple obligors (as in currently existing rules based on paper), but also multiple payees, as well as perfection, not only of a single security interest, such as a pledge, but also of other junior security interests and claims, as well as the transfer of a pledged record; or the split (or division) of electronic transferable records (all of which is for instance contemplated in the Japanese ERMC Act, and in some cases is being also discussed in the context of the UNCITRAL project).