

The Electronic Trade Documents Bill and the 2003 amendments to §7 of the Uniform Commercial Code: Do they do the same thing?

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A. Introduction

In 2003, §7 of the Uniform Commercial Code (UCC)¹ was revised and amended in order to take electronic documents of title into account. Although no equivalent revisions were made to the Federal Uniform Bills of Lading Act of 1916 (known as the 'Pomerene Act'), the §7 amendments reflect the provisions of the Uniform Electronic Transactions Act 1999 (UETA),² §16, on transferable records. UETA was not adopted in the State of New York, however New York's iteration of the UCC does recognise electronic documents of title. The §7 amendments also reflect §§9–105 UCC concerning control of electronic chattel paper, applicable to bills of exchange, among other instruments.³ Several definitions in §1 UCC were revised simultaneously, including the definitions of 'bearer', 'delivery', 'document of title', and 'holder' all of which were revised to include references to the notion of control.⁴ The references below will be to the UCC as adopted in the state of New York.⁵

20 years later, the Electronic Trade Documents Bill (ETDB) is going through the process of enactment in the UK Parliament and it is expected that it will become law before the end of the year.⁶ The Bill's purpose is to recognise that documents used in trade or trade finance that function on the basis of possession when issued on paper are capable of being issued and used electronically with identical legal effect, so long as they fulfil certain requirements. Electronic documents that satisfy the criteria constitute "electronic trade documents" (ETDs). In order to achieve this, the Bill adopts a distinct approach from that adopted in the amendments to the UCC, providing that electronic trade documents are possessable. A distinct notion of control features in the ETDB, in that controllability is one of the requirements that an electronic document has to fulfil in order to fall within the definition of an ETD.

¹ The Uniform Commercial Code (UCC) is a model law jointly administered and promulgated by the National Conference of Commissioners on Uniform State Laws (NCCUSL) and the American Law Institute (ALI), with the object of promoting uniformity in the commercial law of the fifty US states. As a model law, it is subject to voluntary adoption by the individual states.

² The Act is a model law adopted by the NCCUSL and adopted by 47 of the US states, the exceptions being Illinois, New York and Washington.

³ See New York City Bar, Committee on Commercial Law and Uniform State Law, *Report on Revised Article 7 of the Uniform Commercial Code*, December 2011, available electronically at <https://www2.nycbar.org/pdf/report/uploads/20072201-ReportonRevisedArticle7oftheUniformCommercialCode.pdf> [accessed 3 November 2020].

⁴ See DL Kershen, 'Article 7: Documents of Title—2003 Developments' (2004) 59 *The Business Lawyer* 1629, 1630.

⁵ Available online at <https://www.nysenate.gov/legislation/laws/UCC> [accessed 11.04.2023].

⁶ Available online at <https://bills.parliament.uk/bills/3344> [accessed 11.04.2023].

This paper contrasts the two approaches, identifying both common ground and differences. It concludes that while the distinct concepts of control are adopted and despite the differences in the way in which control is used, an electronic system for the issue and use of these documents that complies with US law is also likely to satisfy the requirements of UK law and vice versa.

B. What are the functions in practice of “Electronic Trade Documents”?

The basic function of most documents is to provide evidence enabling the determination of a legal position. A document evidences legally relevant facts and/or intentions as they stood at a particular point in time. The documents with which we are concerned are distinct from other documents because they go well beyond providing this kind of evidence. They also provide evidence of who has the right to claim performance of the obligation recorded in the document, in a situation where that right is being transferred from person to person. Thus, they avoid the need to create new evidence every time the person who has the right to claim performance of the obligation changes. Therefore, possession of the document (whether by itself or together with other facts) provides reliable evidence of who has the right to claim performance of the obligation recorded in it. Transfer of the document achieves a legally recognised transfer of the right itself. They are therefore said to provide an “embodiment” of the obligation and of the right to claim performance of it.

C. Basic underpinning notions

Certain basic notions, set out in this section, underpin both pieces of legislation. These basic notions capture features inherent to paper that are not equally inherent to information in electronic form, and that therefore need to be built in in order to enable an electronic document to do the same things as a paper one that functions on the basis of possession. A paper trade document generally retains its integrity because it is composed of permanent marks on paper. The paper document also has its own identity: it exists as a thing, distinct from all other things. Therefore, a person who has the document can easily show that they have the document, exclude others from it, and transfer it to another person (whereupon they will no longer have it). Because these features are not necessarily inherent to information in electronic form, the information has to be stored and structured so as to give it these features if it is to perform the same functions and achieve the same effects as its paper counterpart.

The basic notions underpinning legislation in this field therefore translate to the following: (i) the document must contain information that makes it a document of a certain type (e.g. a bill of lading or a bill of exchange); (ii) the document must be identified (i.e. given its own identity); (iii) the document's integrity must be ensured; (iv) the document must be capable of being controlled exclusively by one person; (v) the person in possession of the document must be divested of it upon transferring it to another. These notions appear in the definitions of “document of title” and “control” found in §1-021(b)(16) and §7-106 of the UCC, and in the gateway criteria for a document to be an electronic trade document under

clause 2 of the ETDB. The way in which each notion is provided for in the law is discussed below.

D. Key provisions

The key provisions setting out the major underpinning notions of the legislation are set out in this section. Reference to various parts of these provisions will be made in the subsequent sections of this paper.

Under §1-021(b)(16) of the UCC:

“Document of title” means a record (A) 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 (B) 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.⁷

The state of having control is defined in §7-106(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*. Having such control makes one a “holder” for the purposes of the UCC.⁸

§7-106 also contains a “safe harbour”⁹ provision (paragraph (b)), according to which:

Such a requirement is satisfied, and a person is deemed to have control of an electronic document of title, if the document is created, stored, and assigned¹⁰ 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 (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 assignee¹¹ of the authoritative copy can be made only with the consent of the person asserting control;

⁷ Emphasis added.

⁸ See §1-021(b)(21)(c).

⁹ J K Winn, ‘Electronic Chattel Paper: Invitation Accepted’ (2010) 46 Gonz L Rev 407, 423.

¹⁰ The use of the word “assigned” is puzzling as paper bills of lading are “negotiated” not assigned. The most plausible explanation for the inclusion of this word is the provision’s inspiration, i.e. §9-105 of the UCC on control of electronic chattel paper.

¹¹ See n 10.

- 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 inspiration for this part of the provision on control is §9-105 of the UCC on control of electronic chattel paper (ECP) over which special property rights may be acquired by a creditor in possession of the chattel paper marked "original".¹² The concept of control 'uses a classical model of closed loop control systems engineering and applies it to the objective of a secured party exercising restraining or directing influence over ECP.'¹³ The main requirements that emerge from §7-106 are the need to "singularize" the record and to identify reliably the person in control of it. Compliance with these requirements makes the electronic record function at law as a document of title.

The underpinning notions appear in clauses 1 and 2 of the ETDB Bill. These provide as follows:

1 Definition of "paper trade document"

- (1) A document is a "paper trade document" for the purposes of this Act if—
 - (a) it is in paper form,
 - (b) it is a document of a type commonly used in at least one part of the United Kingdom in connection with—
 - (i) trade in or transport of goods, or
 - (ii) financing such trade or transport, and
 - (c) possession of the document is required as a matter of law or commercial custom, usage or practice for a person to claim performance of an obligation.
- (2) The following are examples of documents that are commonly used as mentioned in subsection (1)(b)—
 - (a) a bill of exchange;
 - (b) a promissory note;
 - (c) a bill of lading;
 - (d) a ship's delivery order;
 - (e) a warehouse receipt;
 - (f) a mate's receipt;
 - (g) a marine insurance policy;
 - (h) a cargo insurance certificate.

¹² For a discussion of control as understood under the UCC, see Working Group on Transferability of Financial Assets (American Bar Association and Open Group Security Forum), 'Framework for Control over Electronic Chattel Paper: Compliance with UCC §9-105' (2006) *61 The Business Lawyer* 2. In this article the process whereby a security right over electronic chattel paper is perfected, is described as follows: 'In the world of tangible chattel paper, multiple pieces of paper could make up the chattel paper (such as a note and a separate security agreement). There are often multiple copies of the same item of chattel paper. One of those items is typically marked "original" and the other copies marked "copy." While filing an effective financing statement in the appropriate place may perfect a security interest in chattel paper under UCC § 9-310, a possessor of tangible chattel paper can obtain superior rights in the chattel paper under UCC § 9-330. To obtain those superior rights, the possessor must possess the copy of the tangible chattel paper marked "original.".... What makes the tangible copy of an item of chattel paper "single," "authoritative," "unique," and "identifiable" is the ability to mark it as the "original." For [electronic chattel paper] ECP, the assumption was that technological systems would be developed that would permit an electronic copy to be tagged as the "original," thus making it distinguishable from other non-authoritative copies.'

¹³ ABA (n 12).

2 Definition of "electronic trade document"

- (1) This section applies where information in electronic form is information that, if contained in a document in paper form, would lead to the document being a paper trade document.
- (2) The information, together with any other information with which it is logically associated that is also in electronic form, constitutes an "electronic trade document" for the purposes of this Act if a reliable system is used to—
 - (a) identify the document so that it can be distinguished from any copies,
 - (b) protect the document against unauthorised alteration,
 - (c) secure that it is not possible for more than one person to exercise control of the document at any one time,
 - (d) allow any person who is able to exercise control of the document to demonstrate that the person is able to do so, and
 - (e) secure that a transfer of the document has effect to deprive any person who was able to exercise control of the document immediately before the transfer of the ability to do so (unless the person is able to exercise control by virtue of being a transferee).

E. Scope of application

As can be seen from the above provisions while this particular section of the UCC covers only documents of title to goods, the ETDB covers also negotiable instruments and assignable insurance documents. Both pieces of legislation however extend their application beyond a strictly legal understanding of documents of title to documents that perform relevant functions "in the normal course of business or financing" (UCC §1-021(b)(16)) or "as a matter of custom, usage or practice" (ETDB cl 1(1)(c)).

The list of documents of title to goods listed in both pieces of legislation is very similar and both lists merely serve to give examples of document types, and are not exhaustive lists of documents that may be covered by the legislation.

It is made explicit in clause 2(1) of the ETDB that in order to be an electronic trade document (and thus covered by the Bill) the electronic document must contain the information that would make it a document of the type defined in clause 1, were it issued in paper form. There is no need for an explicit provision on this in the UCC as the definition of "document of title" is not restricted to paper documents, as is the case in clause 1 of the ETDB which defines "paper trade document".

F. Identification of the document

In the UCC, the notion of identification of the document is captured in the safe harbour provision, §7-106(b)(1), which explicitly refers to "a single authoritative copy ... which is unique [and] identifiable...". Indeed, once the document has an identity it can be associated with a person and therefore perform the functions of a document of title.

Under English law the understanding of a concept of document is broad. Section 13 of the Civil Evidence Act 1995 and Rule 31.4 of the Civil Procedure Rules 1998 both provide that

“document” means anything in which information of any description is recorded”. Section 7C of the Electronic Communications Act 2000 defines a document as “anything stored in electronic form, including text or sound, and visual or audiovisual recording”. In defining an electronic trade document, the Bill adds to this “any other information with which it is logically associated” in order to capture the composite nature of an electronic trade document (including a human-readable component and a data structure).

This is an acknowledgement that a method must be found of giving a structure of some permanence to information in electronic form, as paper does, giving it a specific identity, so as to fulfil the requirement in clause 2(2)(a), namely “identify[ing] the document so that it can be distinguished from any copies”. The Bill, like the UCC, does not prescribe the use of any particular technology and merely specifies the outcomes to be achieved. However, based on currently available techniques, cryptographic hashing provides one way of achieving these outcomes. Cryptographic hashing forms a “data structure”, consisting of functional code, which is logically associated with (and specifically identifies) human readable information.

G. Controllability of the document

The §1-201(b)(16) definition posits the UCC notion of “control” as an alternative to possession. The UCC notion of “control” is key to making electronic records legally equivalent to paper documents of title, because having the type of control specified in the UCC is one of the ways a person can be considered a “holder” for the purposes of the legislation.¹⁴

UCC §7-106(a) states that a person has “control” of an electronic document of title only if the system “reliably establishes that person as the person to which the electronic document was issued or transferred”. The concepts of issue and transfer are undefined in the UCC but may be understood as referring to actions creating legal effects between a document’s issuer and the person to whom it is issued and between the transferor and transferee of a document, whereby the latter in each case acquires rights in the document.

Adopting control as an alternative to possession meant that amendments to other UCC provisions was necessary. In particular, certain notions such as delivery and indorsement, conceptually tied to the paper medium, needed to be reconceptualised to accommodate control. Accordingly, amendments were made to §§7-500 et seq., which deal with negotiation of a document of title. Section 7-501(b) introduced new rules applicable to the negotiation of an electronic document of title (specifically, sub-paragraph (2)):

- (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.

¹⁴ See §1-201(b)(21)(C).

'Delivery' is defined by §1-201(b)(15) as follows: "'Delivery" with respect to an electronic document of title means voluntary transfer of control and with respect to an instrument, a tangible document of title, or chattel paper, means voluntary transfer of possession.' Section 7-501(b)(3) defines 'due negotiation' of a document as negotiation occurring *in the manner provided in §7-501(b)(1) and (2)*, making "delivery" of the electronic document (and thus transfer of control) key to achieving the effects of due negotiation, set out in Section 7-502(b).¹⁵

These amendments were necessary because under the UCC electronic documents of title operate in parallel to paper ones, in legal terms. In particular, it is noteworthy that the indorsement requirement was done away with for the purposes of electronic documents of title. Indeed, the New York City Bar Committee on Commercial Law and Uniform State Law observes that '[c]ontrol of an electronic document of title is the conceptual equivalent of possession *and indorsement* of a tangible document of title.'¹⁶ It would therefore seem that the fact of being in control of itself may import more in legal terms than the fact of being in physical possession. In the latter case, if the document is an order rather than a bearer document, indorsement of the document is an additional requirement to make one its holder.

Based on the above analysis one may conclude that, although described as an "analogue" to possession,¹⁷ "control" insofar as it relates to documents of title under US law is a juristic concept rather than an equivalent to factual possession.

The UK Bill also uses a concept of control to address "the possession problem". Possession is key to the functioning of the types of document covered in clause 1 of the Bill (collectively referred to as "paper trade documents"). To take the bill of lading as an example, the Carriage of Goods by Sea Act 1924, s 5(2) defines "holder" for its purposes as "a person with possession of the bill...". Similarly, for the purposes of the Factors Act 1889, a document of title can be transferred by delivery or indorsement.¹⁸ Delivery is defined in the Sale of Goods Act 1979 as the "voluntary transfer of possession from one person or another".¹⁹ The possession problem arises because in English law as it currently stands, only tangible things are possessable, so that, if property is not tangible, it is automatically disqualified from

¹⁵ Additional requirements are that negotiation must be to a holder that purchases the document in good faith without notice of any defence 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.

¹⁶ See New York City Bar (n 3), 4.

¹⁷ Winn (n 9), 415 citing U.C.C. § 9-327 cmt. 5 (Article 9 Revisions Draft 1997).

¹⁸ Factors Act 1889, s.11: "For the purposes of this Act, the transfer of a document may be by endorsement, or, where the document is by custom or by its express terms transferable by delivery, or makes the goods deliverable to the bearer, then by delivery." In practice, an indorsement is an annotation on the back of a document instructing that the obligation recorded therein be performed to the order of a named person or simply "to order", which then must be signed and is usually completed by delivery.

¹⁹ Factors Act 1889, s.1(2): "A person shall be deemed to be in possession of goods or of the documents of title to goods, where the goods or documents are in his actual custody or are held by any other person subject to his control or for him or on his behalf." In *Forsythe International (UK) Ltd v Silver Shipping Ltd (The Saetta)* [1993] 2 Lloyd's Rep 268, it was held that this definition applies for the purposes of the Sale of Goods Act 1979; however, see *Michael Gerson (Leasing) Ltd v Wilkinson* [2001] QB 514, [34–35] and LCCP 254, [5.82, fn.71].

being a thing in possession.²⁰ In view of this legal position it is not possible, under current law, for an electronic document to function in the same way as paper trade documents.²¹

Clause 3 of the Bill therefore provides that if the gateway criteria in clause 2(2) are met, making the document an electronic trade document, the document is deemed to be possessable at law:

3 Possession, indorsement and effect of electronic trade documents

- (1) A person may possess, indorse and part with possession of an electronic trade document.
- (2) An electronic trade document has the same effect as an equivalent paper trade document.
- (3) Anything done in relation to an electronic trade document has the same effect (if any) in relation to the document as it would have in relation to an equivalent paper trade document.

....

It should be noted that clause 3 makes no reference to control. Indeed, in contrast with the UCC, the Bill does not seek to answer the question “who is in possession of an ETD?” Instead, it answers the question, “what is required to make an electronic document possessable?” It answers this question by setting out, in clause 2 the gateway criteria that must be fulfilled for a document to fall within the definition of an ETD. The former question, i.e. “who is in possession?”, a question of fact, is left to be answered according to the circumstances of the case.

An important element in these gateway criteria is the notion of exclusive control. The combined effect of clause 2(2)(c) and (e) is to establish that the document must be capable of exclusive control, as would be the case with a paper document. These paragraphs provide that the electronic system must secure that it is not possible for more than one person to exercise control of the document at any one time, and that a transfer of the document has the effect of depriving any person who was able to exercise control of the document immediately before the transfer of the ability to do so (unless the person is able to exercise control by virtue of being a transferee). Thus, the notion of control is used to require that, for an electronic document to be considered an ETD at law, it be given features that echo features inherent to paper which make a paper document possessable.

An important difference between the concept of control in the UCC and that in the UK Bill is that in the latter, control refers to a state of fact rather than a juristic concept which makes a person the holder of a document at law (as in the UCC). Clause 2(3)(a) of the Bill defines what it means to “exercise control” and makes it clear that the Bill is concerned with control as a matter of fact, rather than control as a legal right: “a person exercises control of a

²⁰ See in particular, *OBG Ltd v Allan* [2007] UKHL 21; [2008] AC 1; [2007] Bus LR 1600 and *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281; [2015] QB 41.

²¹ See fuller discussion in Miriam Goldby and Weishi Yang ‘Solving the Possession Problem: An Examination of the Law Commission’s Proposal on Electronic Trade Documents’ [2021] *Lloyd’s Maritime and Commercial Law Quarterly* 605, 607-610.

document when the person uses, transfers or otherwise disposes of the document (whether or not the person has the legal right to do so)....”²²

Unlike the UCC, therefore, the ETDB leaves the question whether or not a person able to exercise control over the document is also its legal holder to be determined according to the circumstances of the case. In practice, in the vast majority of cases, it is likely that the two will coincide, but the ETDB's approach achieves uniformity in the legal treatment of paper and electronic documents and ensures that the basis upon which parties transact remains unchanged following the transition from the paper to the electronic medium. This can be said to reduce the legal risks associated with the transition.

H. Reliability

In the UCC, control by a person must be “reliably” established. Reliability is determined by reference to the “control environment” surrounding the control system, i.e. one needs to look at the system as a whole to establish whether it confers control reliably.²³ A control environment is made up of contextual factors, namely the people managing and using the system, the technological and human processes for managing and using the system and the technology used to run the system.²⁴ §7-106 implies that the consequence of not adopting a reliable method is that one would not be considered at law to have control. Thus the law is said indirectly to perform a regulatory function²⁵ because reliability must be objectively determined.²⁶ There are those who argue that this introduces an element of uncertainty for holders of electronic documents of title, in that, other than the safe harbour provision, the UCC provides no guidance on how reliability is to be demonstrated.²⁷ However, as noted by Goldby and Yang, ‘if the effect of having control means that one acquires rights which are enforceable against third parties, it would appear fair and just to require that control be established reliably.’²⁸

In this regard it is worthwhile to bear in mind that “reliable” does not mean the same as “infallible”. According to the ABA:

‘It is important to note that a Control System and its Control Environment need not protect against all possible exploitations of the Control System.... Determining whether the elements of control are satisfied requires a factual analysis of the Control System and Control Environment to determine whether the two, working together, create a sufficient degree of confidence in their integrity and capacity to perform the functions for which they were

²² “Use” in this definition covers interactions with the document that do not constitute transfer or disposal e.g. presenting a document without transferring it or merely retaining it to preclude others from transferring or otherwise using it. But it does not include merely reading or viewing the document (clause 2(4)).

²³ ABA (n 12). See also discussion of the background to the requirements in UCC §9-105 in Winn (n 9).

²⁴ ABA (n 12). See also discussion of the background to the requirements in UCC §9-105 in Winn (n 9).

²⁵ Winn (n 9), 419.

²⁶ [A]chieving control under [UCC § 9-105] requires more than the agreement of the interested parties that the elements of control are satisfied.’ U.C.C. § 9-105 cmt. 4(2005).

²⁷ With respect to UCC §9-105, it was observed by the ABA (n 12) that ‘[a]lthough the trustworthiness and integrity of the system for maintaining the ECP records are critical to the control concept, Revised Article 9 does not dictate how the trustworthiness or integrity of such a system should be demonstrated.’

²⁸ Goldby and Wang (n 21), 614.

designed. However, the requirements are not so stringent as to demand from Control Systems and Control Environments absolute perfection. UCC § 9-105 allows for the frailties of both human and machine processes and systems.²⁹

At the time the UCC amendments were adopted, a registry system was really the only way in which the requirements could be satisfied (as reflected in the safe harbour provision),³⁰ however it is not unlikely that a blockchain-based system would be deemed a reliable way of singularising the electronic record and of identifying the person to which the electronic record was issued or transferred, although a permissioned system with identified users may be more readily considered to satisfy these requirements.

The UK Bill similarly requires that a “reliable system” be used to meet the gateway criteria in clause 2(2). Unlike the UCC, however, the ETDB does include a list of indicators of reliability designed to provide high level guidance to system designers and users, as well as dispute adjudicators and resolvers, to determine whether the system is reliable. Clause 2(5) provides as follows:

2 Definition of “electronic trade document”

...

- (5) When determining whether a system is reliable for the purposes of subsection (2), the matters that may be taken into account include—
- (a) any rules of the system that apply to its operation;
 - (b) any measures taken to secure the integrity of information held on the system;
 - (c) any measures taken to prevent unauthorised access to and use of the system;
 - (d) the security of the hardware and software used by the system;
 - (e) the regularity of and extent of any audit of the system by an independent body;
 - (f) any assessment of the reliability of the system made by a body with supervisory or regulatory functions;
 - (g) the provisions of any voluntary scheme or industry standard that apply in relation to the system.

The provision gives some guidance on how to determine the system’s reliability (which is a question of fact to be objectively determined in each case)³¹ while at the same time avoiding the risk of being overly prescriptive. A landmark case decided recently in the English courts, where the court had to make evidence-based determinations on the

²⁹ ABA (n 12). Similarly, according to UNCITRAL, Legal Issues Relating to the Use of Electronic Transferable Records: Note by the Secretariat, Note A/CN.9/WG.IV/WP.118 (17 August 2012), para 57, available online from <http://www.uncitral.org> [accessed 4 November 2020]: ‘It is important to stress that the determination of the factual existence of those elements establishing control should not aim at absolute perfection: rather, it is a matter of achieving a sufficient degree of reliability. That determination should examine the intersection of law and technology to ascertain whether the system used, in its human and technological components and in the related processes, offers that sufficient level of reliability.’

³⁰ See Winn (n 9), 424.

³¹ Law Commission of England and Wales, *Electronic Trade Documents: Report and Bill*, Law Com No. 405, HC 1188, 15th March 2022, para 6.53.

reliability of an electronic system, can provide more insight on what the process of applying clause 2(5) might look like in practice.³²

H. Conclusion

While there are appreciable differences between the approach adopted in the UCC and that adopted in the ETDB, in this author's view, it is unlikely that a system that satisfies the requirements of one will not also be viewed as satisfying the requirements of the other. In particular, there appears to be little difference in their approaches to reliability, although the ETDB provides more explicit guidance on how reliability is to be determined. While the UCC adopts a juristic notion of control as a legal alternative to possession, the ETDB uses the notion of controllability as a pre-condition to recognising that an electronic document may be possessed, enabling the application of existing legal rules on the use of paper documents of title to electronic equivalents. In practice it is unlikely that the different approaches will require any distinctions in system design: the factual link between a person and a document will still ultimately need to be established reliably by the system being used.

³² *Bates v Post Office Ltd (No 6) ("Horizon Issues")* [2019] EWHC 3408 (QB). See also Law Com No. 405 (n 31), paras 6.45 – 6.46.