LAWTECH UK

Legal Statement

on the issuance and transfer of digital securities under English private law

LAWTECH UK PANEL

Ministry of Justice

TECH NATION

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Foreword

by Sir Geoffrey Vos, Master of the Rolls

The UK Jurisdiction Taskforce aims to provide market confidence and legal certainty in the digital space. It started by publishing its first *Legal Statement on the Status of Cryptoassets and Smart Contracts* under English law in November 2019. In April 2021 it published its Digital Dispute Resolution Rules intended for on-chain digital relationships.

I am now delighted to welcome the UKJT's latest legal statement, which addresses the critical question of whether equity, debt or other securities can be validly issued and transferred under English law using blockchain systems.

This second Legal Statement has been prepared by Lawrence Akka KC, David Quest KC, Richard Hay, Matthew Lavy and Sam Goodman, all of whom are true experts. It is not my role as a judge, nor that of the UKJT or its parent, Lawtech UK, to endorse the contents of the Legal Statement. Instead, the UKJT has promoted public and private consultation to ensure that the drafting team were answering the most pressing legal questions.

As proved to be the case with the now well-established first Legal Statement, it is likely that some of the matters covered will, in the future, be the subject of judicial decision. I hope that, in the meantime, this document will provide much needed market and legal confidence for the benefit of the global financial services industry.

This Legal Statement concludes that English law can accommodate digital bonds circulated on a public blockchain without custodians, and the on-chain transfer of digital equity securities, even if a fully decentralised blockchain cannot currently be used as a register of members.

I am sure that this Legal Statement will reinforce the reality that the common law in general and English law in particular can respond in a flexible and consistent manner to new commercial situations.

I offer my congratulations and thanks to all those who have worked so hard to achieve this great step forward.

Introduction

1 In November 2019, the UKJT published its legal statement on cryptoassets and smart contracts (the "**First Legal Statement**").[1] The aim of this First Legal Statement was to address areas of perceived legal uncertainty relating to the characterisation of cryptoassets and smart contracts, and thereby help to build market confidence in England and Wales as a jurisdiction for developing and operating assets and arrangements based on distributed ledger technology ("**DLT**"). To that end, the First Legal Statement provided an analysis of (amongst other things) how cryptoassets could readily be treated as property in English law and how smart contracts could give rise to legally binding rights and obligations.

2 The analysis in the First Legal Statement of cryptoassets as property has subsequently been adopted by the English Courts[2] and courts elsewhere in the world.[3] The proposition that a cryptoasset can be the subject of proprietary legal remedies is now well-established, at least so far as the law of England and Wales is concerned.

3 We are now three years on from publication of the First Legal Statement. The UKJT's Digital Dispute Resolution Rules to support arbitration of on-chain digital relationships and smart contracts have been developed, and the market in DLT-based assets and technologies has continued to mature. Against this background the UKJT has decided that it may be helpful to consider questions concerning the issuance and transfer of equity and contractual securities on DLT-based systems, and has therefore asked us to address them in a legal statement (this "**Legal Statement**"). In this Legal Statement we consider those questions, so that those seeking to constitute and transfer what we have termed 'Digital Securities' under English law[4] can do so with confidence as to its application.

4 Although a company's place of incorporation may in some cases restrict the ability of parties to choose the law applicable to their securities transactions, with debt and other contractual securities in particular there can be freedom of choice for issuers. English law is a preferred legal system for constituting traditional debt securities in the Euromarket, and parties may wish to issue Digital Securities under English law where they have that choice.

5 A factor sometimes perceived to weigh against the choice of English law is the existence in some other jurisdictions of recently introduced legislation specifically designed to support Digital Securities.[5] This has typically been well received by the market, in part owing to the perceived legal certainty that it provides.

6 But English law (like other common law systems) does not necessarily require statutory intervention in order to support new asset classes or financial structures. As we have seen recently with cryptoassets, and as has been demonstrated over past decades and centuries with numerous once-novel asset classes, the common law has inherent flexibility that allows it to adapt to accommodate commercial need.[6] As we explain below, the most common use cases for Digital Securities can indeed easily be accommodated within existing English legal frameworks.

7 As with the First Legal Statement, this document is not intended to be a detailed academic paper or to contain a comprehensive discussion of the law relating to contractual or equity securities. Instead, our aim again has been to address the questions we were asked in an accessible manner, though of course this particular field has some inevitable complexity. We focus on those aspects of Digital Securities that are potentially novel and distinctive and discuss the extent to which we consider that general legal principles apply.

8 We are very grateful to those academics, lawyers and market participants who have written on this subject matter before us, though we are not able to summarise all of those views here. In particular, we have received and considered several detailed responses to the public consultation referred to below. We have also been greatly assisted by, and have built upon, the thorough work done recently by the Law Commission of England and Wales concerning digital assets.[7]

9 Finally, again as with the First Legal Statement, we make no comment here on how the law should develop in the future–we have considered only what it is at present. Therefore, insofar as future reform is thought to be desirable, we hope our conclusions can form a useful foundation.

THE PUBLIC CONSULTATION

10 This Legal Statement follows a public consultation, the aim of which was to ensure that so far as possible the questions which we have been asked to address are those with which key stakeholders are most concerned. The Public Consultation[8] therefore invited comments on the questions posed, together with views as to whether there were any material issues of concern to stakeholders in relation to the issuance and transfer of Digital Securities under English private law that were not captured in those questions.

11 The responses to the consultation did not suggest that material change was needed to the questions as posed in the Consultation Paper. However, in providing our answers we have sought to take account of a number of issues which have been raised by respondents to the extent that we have thought it appropriate to do so in the light of the scope and aims of this project.

SCOPE

12 As was made clear in the Consultation Paper, this Legal Statement is focused squarely on the question of whether English private law can support the issuance and transfer of equity or debt and other contractual securities using a system deploying blockchain or DLT. Thus, the overarching questions posed concern how Digital Securities might be validly issued and transferred under English law, together with ancillary questions concerning whether (and if so how) rules of English law which govern the issue or transfer of securities might apply to Digital Securities and whether (and if so how) blockchain and DLT might legally be used for any necessary registers. This Legal Statement is not concerned with conventional securities whose performance is linked to or collateralised by digital assets.

13 As with the First Legal Statement, there are a number of areas of law which have intentionally been deemed out of scope. In particular, although we do address regulatory aspects to some extent, we do not address the entire regulatory regime associated with issuing and dealing in securities. It is more appropriate for regulation to follow the logically prior substantive legal issues. We have also not addressed questions of choice of law or private international law issues more generally. That is because although private international law issues are of understandable concern to some stakeholders, they are not matters exclusively, or even primarily, for English law, and the key problems that arise in this area affect all jurisdictions and systems of law.

14 The UKJT continues to take the view that matters of taxation, criminal law, partnership law, data protection, intellectual property, consumer protection, settlement finality, regulatory capital, anti-money laundering and counter-terrorist financing are best dealt with by other bodies or organisations. We therefore do not touch on such matters here.

15 Finally, because the law can be highly fact-sensitive, we are unable to deal here with areas where too many potential factual scenarios would need to be considered in or for us to provide any helpful answers. This Legal Statement is not intended to be legal advice, for which readers should consult a lawyer, and nothing in it should be relied upon as being relevant to any particular circumstances.

STRUCTURE OF THIS STATEMENT

16 The questions we have answered and our conclusions are set out below, following an introduction to a number of general issues. Following the structure of the Consultation Paper, the questions fall under four broad themes: (i) issuance and transfer of Digital Securities; (ii) stapling of interests; (iii) formalities; and (iv) corporate requirements for UK companies.

17 We have provided a number of references in the endnotes for those who would like more detail.

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Summary

18 Many digital bond use cases, particularly those involving permissioned, centrally managed, blockchains or DLT-based systems, where all participants are contractually bound to a common rulebook, are unproblematic and unlikely to give rise to novel legal issues. More challenging are digital bonds intended to be capable of circulation on a public blockchain without custodians or any other form of intermediation. Two issues arise here. First, a mechanism is needed to ensure that the holder from time to time has rights as against the issuer, and that payment by the issuer to the holder amounts to full discharge of the issuer's debt or other obligation; secondly, the bond holder from time to time needs to be protected from assertion of superior title by a prior bond holder–there must be negotiability or equivalent protections for innocent acquirers. In our view, English law can readily accommodate the first requirement, for example, through the use of a deed poll. Regarding the second requirement, we see no reason why transferable cryptoasset tokens intended to represent digital bonds should not be treated as negotiable in the same way that a conventional bearer instrument would be; but, in any case, the practical effects of negotiability can reliably be emulated through suitable drafting of the bond's terms.

19 Digital equity securities of UK companies are more challenging than debt securities because of the need to comply with requirements in the Companies Act 2006 (the "**Companies Act**" or "**CA**") for share transfer and registration. The statutory requirement for the issue of share certificates can be dispensed with by the company's articles of association, but the statutory requirements for registers of members, and for instruments of transfer (as a means for transferring legal title), as yet cannot. We see no impediment in principle to using a permissioned blockchain or DLT-based system as a register, though any such system would need to be designed to capture all the necessary statutory information and would need to be capable of producing that information in hardcopy form. By contrast, on the current state of the law, we consider it unlikely to be feasible to use a fully decentralised ledger as a register of members, because the company would be unlikely to have sufficient control over it to perform its statutory maintenance obligations. As for transfer of digital equity securities, a purely on-chain system would face the difficulty that, without specific functionality, a blockchain does not itself generate a "proper instrument of transfer" as required under the Companies Act because of the practical issues arising from the current HM Revenue and Customs ("**HMRC**") arrangements for payment of stamp duty. But we can see no objection in principle to DLT-based share transfers, provided that the system is designed to emit electronic transfer forms capable of being submitted to HMRC.

20 We do not believe that digital securities linked to proprietary rights in other assets give rise to any particular legal novelty, beyond those issues that arise in relation to contractual securities. Given that such securities would typically be expected to involve the use of trusts (as indeed might some forms of intermediated debt securities) there is a possibility that digital proprietary securities will give rise to transactions involving the transfer of beneficial interests under a trust and therefore engage section 53(1)(c) of the Law of Property Act 1925 (the "Law of Property Act"). The issue of section 53(1)(c) is not however unique to Digital Securities and, in any event, where it arises, we see no particular difficulty; the statutory requirement for writing and signatures can readily be met with a purely digital blockchain or DLT-based system.

Legal Statement

SECURITIES – WHAT ARE THEY?

21 The meaning of 'securities' has varied over time and can depend on the context in which the term is used. Securities, as the name suggests, were originally thought to refer to transferable secured debt obligations, but the association with a secured claim has now been lost.[14] Instead, the courts have remarked that the term 'securities' does not have a fixed legal meaning which attaches to all uses of the term, but instead its meaning depends on the context.[15]

22 On that basis, at a general level, securities can be thought of as unitised, transferable interests in, or obligations of, an issuer that are issued and transferred to investors as a means of raising capital. English law applicable to securities is well-established, both in statute and judicial precedent, and courts and practitioners are very familiar with the legal issues raised by the structuring, issuance and trading of securities. The starting point of our analysis is therefore, as it was in the First Legal Statement, to identify what, if anything, might genuinely be novel and distinctive from a legal perspective about the use of blockchain and DLT in such structures.

23 We have considered below three types of securities:[16] (i) debt and related contractual securities, usually referred to as *bonds*, *debentures* or *notes*[17] (we use the term bonds); (ii) proprietary securitisations of assets;[18] and (iii) equity securities, in the form of shares in a UK company.

24 For discussion purposes, we have presented some simple models for different types of security. We recognise that, in reality, parties may use much more sophisticated structures, but the models assist in the analysis of the principles and the identification of any legal problems. For further reference, we present at Appendix 4 details of models that have been used or proposed in real scenarios.

25 There is already provision for the transfer of securities by electronic means in the Uncertificated Securities Regulations 2001[19] (**"USRs"**). The USRs create a statutory scheme for uncertificated securities, but only those transferred in an electronic system operated by a designated operator. At present the only such operator is Euroclear UK & International (the operator of CREST). However, the USRs are not an exclusive scheme for electronic transfer of securities, and they do not preclude the issuance of Digital Securities outside CREST.[20] One advantage of the USRs is that they dispense with various formalities that may arise under other enactments or rules of law.[21]

For a Digital Security that is not issued under the USRs it will be necessary to ensure either that those formalities do not apply to the type of security in question or that those formalities are complied with. We consider potentially applicable formalities below.

DIGITAL BONDS

Overview

26 In broad terms, a bond is a contractual debt or (in some cases) other obligation of the issuer on agreed terms.[22] It differs from a simple obligation in that it is unitised and transferable.[23] We refer to the person with the right to performance under the bond at a particular time as the *holder* of the bond.

27 Bonds can be issued in different forms. One option is bearer form. A bearer bond is represented by a physical (paper) instrument, known as a bearer instrument. The person in possession of the bearer instrument is the holder; and the bond and the rights under it are transferable by transferring possession of the instrument. In modern times, however, bearer bonds are invariably *immobilised*; instruments representing the entire debt are held by a custodian, and investors participate in the bond indirectly by acquiring and trading equitable or contractual rights against the custodian, generally via a chain of intermediaries.

28 Another option is traditional registered form, whereby the issuer, or another designated person on the issuer's behalf, keeps a register of holders, and transfers are effected by (or on behalf of) the issuer updating its register in accordance with its statutory and/or contractual obligations.

29 It is also possible to issue bonds through a relevant system approved under the USRs. This is different from traditional registered form, in that a register maintained by a third-party operator (acting in a principal capacity in discharge of a statutory duty, rather than on behalf of the issuer) determines the holder of the bonds.

30 Contractual securities may also be issued in a form whereby the holder is identified by reference to neither possession of a physical instrument, nor a register maintained by or on behalf of the issuer. For example, bonds may be issued in a form whereby the holder is identified by reference to records maintained by a third-party (acting in a principal capacity), including outside the USRs regime. Such securities would not be bearer securities or traditional registered securities.

31 Blockchain or DLT could facilitate the issue of bonds in any of these forms. For example, the issuer could use cryptoasset tokens[24] on a blockchain, instead of physical bearer instruments. Or it could issue a bond using a blockchain or DLT-based system as a register or record of interests, instead of a conventional database. We refer to these as *digital bonds*.

32 Various potential advantages of digital bonds over conventional structures have been suggested. For example:

(a) Using a token on a blockchain enables remote transfers and avoids the need to arrange physical custody and transport of valuable bearer instruments.

(b) Using a blockchain as, or in place of, a register potentially reduces the cost, time and risk of relying on a central registrar or other intermediary, and can promote resilience.

(c) The administrative work of validating, reconciling and processing transfers can be distributed over a network of participants.

(d) If a digital bond is payable in cryptocurrency or another digital asset, then payments by or to the holders can also be made on a blockchain.

(e) Using a distributed ledger as a source of information to which all participants have real time access can facilitate the use of smart contracts to automate settlement or trading.

33 It is important to emphasise that, despite the technological novelty of some cryptographic authentication and distributed validation techniques, a blockchain is ultimately just a type of electronic database. Conventional registered bond structures already use electronic databases to record and effect bond transfers without any difficulty, and for many use cases the introduction of DLT and blockchain technologies gives rise to no particularly novel legal issues. Further, English commercial law has accommodated numerous novel business and investment structures over the years, and one would not expect any difficulty in principle in adapting to a new kind of record-keeping for bonds (which are fundamentally creatures of contract). For those reasons, we have focused most of our analysis on tokenised structures, where the holder of the security is intended to obtain property rights in the token itself, rather than structures that use DLT simply as an alternative form of electronic register.

34 There are three distinctive features of some digital bonds that require particular consideration. First, they may be distributed and decentralised, so that no one person is responsible for or in control of the data; consensus rules determine which version of the data is definitive. Secondly, the data stored on a DLT system can, depending on the precise features of the system, give rise to an object of property, conceptualised as a token. Such a token is subject to proprietary rights or interests separate from the contractual right to payment under the bond, and issues may arise if the proprietary and contractual rights are vested in different persons. Thirdly, DLT systems may be pseudonymous: cryptoassets can be associated with address-identifiers so that the personal identity of participants need not be recorded.

35 Of course, not all DLT systems have those features. Digital bonds could use centrally managed blockchains,[25] where each participant is required as a condition of access to sign up to a set of rules that is expressly contractually binding on all participants and on the system manager (a *rulebook* system). The use of blockchain may provide commercially important operational efficiencies in such structures, but the legal issues are relatively straightforward. The participants and system manager can all be in contractual relationships. That may result in a complex network of contracts but a court would enforce the terms of those contracts as it would any other contract. We therefore focus primarily on more decentralised structures (such as that outlined in model 1 of Appendix 4), since it is there that legal difficulties, if there are any, would be most apparent.

36 For discussion purposes, we first consider the following model of a digital bond.[26]

Isabel PLC wishes to raise £10,000,000 through the issue of digital bonds. It creates one million tokens on a public, decentralised blockchain and offers them for sale at £10 each, promising to redeem its tokens by paying holders £11 each in one year's time. Each token is transferable in accordance with the protocol of the blockchain and can be redeemed by transferring it back to Isabel PLC.

37 This model emulates the essential features (for present purposes) of a conventional (zero-coupon) bearer bond, using tokens instead of paper instruments.

38 Although we have considered here a model involving a UK company, our conclusions would apply equally with regard to any legal entity issuing a bond governed by English law.[27]

Negotiability

39 A key property of conventional bearer bonds is that they are *negotiable instruments*,[28] meaning, broadly speaking, (i) that they may be transferred by physical delivery (or, in the case of an instrument payable to order, by endorsement and delivery) without the need for a separate written document of transfer or notice to the issuer, and (ii) that a transferee may take the bonds free of any defects in the title of the transferor or of prior transferors, provided that is consistent with the intention of the transferor and the transferee has taken the instrument in good faith for value and without notice of any previous defect in title.

40 That makes the bond easily tradeable, even in the absence of any central intermediary, and so an attractive investment. We have therefore considered whether digital bonds involving transferable tokens (as in the example) can be structured so that they are negotiable in that sense, or at least so that they operate in an essentially similar way.

41 Consider first, by reference to our model, an initial purchaser of a token from Isabel–Alice, say. Alice's position is straightforward. She is party to a contract directly with Isabel, which is enforceable in accordance with its terms. English law requires no formalities for such a contract,[29] the terms of which can be offered and accepted electronically, for example by publishing them on Isabel's website or incorporating them in human-readable form with the token data.

42 Consider next a secondary purchaser–Bob, say–who acquires his token from Alice, perhaps via a chain of intermediate holders. Bob's position is less straightforward because he is not automatically party to any contract directly with Isabel (in legal terms, he has no *privity* with Isabel) so some other legal method is required to give him the right to enforce payment.

43 The privity problem is not unique to digital bonds; it arises in conventional bond structures too. Several techniques are currently used to deal with this issue in practice, and we return to them in the context of 'Stapling' below.[30] One technique, for example, would be for the issuer to make its promise of payment by way of an instrument known as a *deed poll*,[31] rather than by simple contract. A deed poll is a promise by the maker that can be enforced by a person without being a party to the deed, provided that they are named or sufficiently identified as the person for whose benefit the promise is made.[32]

44 We see no difficulty in establishing a digital bond using an electronic deed poll. Unlike a normal contract, there are certain formalities associated with the execution of a deed, but they can easily be accommodated within a digital system. A deed must be in writing and signed by the maker, but both the writing and the signature can be in electronic form[33]–and so could, for example, be incorporated within the token. A deed can be executed by a UK company by the signature of two authorised signatories, in which case there is no need for the signatures to be witnessed (which might be inconvenient in a wholly digital structure).[34] For foreign corporations the formalities are, as a matter of English law, simpler (acknowledging that there may be certain formalities or requirements that need to be considered under the issuer's local law).

45 The other techniques we discuss under 'Stapling', such as the Contracts (Rights of Third Parties) Act 1999 (the "**Third Party Rights Act**") and an open offer, might also be used to make Isabel's promise enforceable by Bob. However, some are potentially less satisfactory because they might require more careful structuring in order to prevent Isabel from revoking her promise, at least as regards future purchasers, which would affect the transferability (and therefore negotiability) of the bond. By contrast, a deed poll is in its nature irrevocable.[35] That said, issues of that kind also arise in conventional bond structures and do not appear to have been a barrier to market development.

46 In our example, if Isabel's promise of payment is made by deed poll and extends to any person in control of a token, then Bob, as just such a person, is sufficiently identified to be able to enforce it. (By control here, we mean practical control, rather than a right of control; Bob demonstrates his practical control of a token by transferring it to Isabel on redemption, using the private key, just as the holder of a bearer bond demonstrates its possession by physically presenting the instrument to the issuer.)

47 An advantage of the deed poll structure is that Bob's right to payment is his own personal right under the deed, arising by virtue of him acquiring control of a token and so joining the class of beneficiaries of the deed. It is not a right acquired by way of assignment from Alice or other intermediate holders. That is significant because, if he were claiming against Isabel as assignee, Bob's right would be subject to any defences available to Isabel against Alice. It also means there is no need to satisfy the formalities required by English law for a legal assignment.[36]

48 As mentioned above, one potentially distinctive feature of the use of a tokenised DLT bond structure is that the token might constitute a distinct object of property in English law. It is this token that allows for the possibility of a digital bond being negotiable, as is the case for a conventional bearer bond. However, unless and until a digital bond is recognised as negotiable, this could theoretically create a problem if, say, Bob claims to be entitled to payment under the bond as the controller of the token, but Alice claims to be the true owner of the token on the ground (for example) it was misappropriated from her in circumstances where she retained legal title.[37] This risk of decoupling does not arise in relation to negotiable instruments, such as conventional bearer bonds, for the reasons outlined in paragraph 53 below.

49 The position as between Bob and Isabel can be addressed by suitable drafting of Isabel's obligations under the terms of issue. For example, the terms could provide that Bob's right to enforce the bond against Isabel will not be dependent on proving that he has legal title to the token but that he has control of it. In that case, Bob need not be concerned with the legal validity of prior transfers of the token or defects in title of prior holders, at least as against Isabel.

50 The structure also provides certainty to Isabel that it can, by paying Bob, fully discharge its debt under its bond. If, but only if, Bob can transfer the token for redemption is Isabel then entitled and obliged to pay him. Subject again to suitable drafting, Isabel need not be concerned with how Bob came to be in control of the token or whether he has legal title to the token. And, once the token has been redeemed, no other claim could be made, because (unless Isabel reissues it) no other person could acquire control of the token.

51 Drafting the issuer's obligations in this way may not be a complete solution, however, as it does not necessarily protect Bob against claims from third parties. If Bob's title to the token is defective, then there is a risk that the true owner might try to recover the token or any money paid on its redemption. The fact that the token was transferred on the blockchain into Bob's control does not guarantee him indefeasible legal title in the general law. For example, title may not pass on a non-consensual transfer, and title may revert to a previous owner on the rescission of a consensual but voidable transfer. Suppose Alice was the victim of a hacking attack by Chuck, who obtained Alice's private key and used it to transfer Alice's token to Bob. Alice might argue that she retained the legal title in the token since Chuck, having no legal right to do so, could not effectively convey it to Bob. Alice could make the same argument even if the token had passed through intermediate holders before reaching Bob, on the basis that none of those holders could acquire title directly or indirectly from Chuck because he had no title to give (usually referred to by the Latin *maxim nemo dat quod non habet*).

52 As we discussed in the First Legal Statement,[38] we do not think that the *nemo dat* rule applies to cryptoassets of the type there considered. This is because a transaction in those systems creates a new asset in the hands of the recipient, with a new legal title, which is not affected by defects in the title of the transferor.[39] If a cryptoasset was structured so as not to result in the creation of a new asset in the hands of the recipient on transfer, the *nemo dat* rule will be relevant, all else being equal. In any event, Bob could be assured, if not otherwise the case, that his ability to control and use his token was not vulnerable to a claim by Alice through one of the legal routes described in paragraphs 53 – 58 below. Each such route would protect Bob even if (unknown to Bob) the token had been misappropriated from Alice, and even if he had acquired his token from a person who, for some reason, lacked legal title.

53 As outlined above, the *nemo dat* rule does not apply to conventional bearer bonds as they are negotiable instruments. Because of that status, a transferee generally takes free of any defects in the title of the transferor, provided that the transferee is a bona fide purchaser for value. A bearer bond has negotiable status by virtue of mercantile custom.[40] Moreover, conventional bearer bonds are documentary intangibles. As such, the bond is embodied in the physical document in which it is recorded and the two are incapable of becoming decoupled upon transfer.

54 We do not see any reason why a digital token used to represent a digital bond should be treated any differently from a paper instrument used to represent a conventional bond. Although historically only tangible things have acquired negotiable status, digital tokens that qualify as objects of property are as much property as paper instruments, and, if there is evidence that the tokens are treated as negotiable in the market in which they are

traded, then a court should recognise and give effect to that practice. It is no bar to the recognition of a market custom for these purposes that it is recent, provided the custom is established.[41]

55 In any event, a bond is a contractual arrangement between issuer and holders, and we see no reason why the legal effects of negotiability cannot be emulated in a straightforward way by appropriate drafting and structuring.

56 For example, Isabel could issue its tokens on terms that they are intended to be treated as negotiable and that no controller of a token could assert a superior legal title against any subsequent controller. In the example above, we consider that Bob could then meet any claim by Alice with an argument that: (i) because she acquired her token on those terms, Alice should be treated as representing or agreeing for the benefit of her successors that she will not resile from them; (ii) that he, Bob, acquired the token on that basis; and (iii) that Alice is therefore precluded from denying his title to the token.[42] Bob's position could be bolstered, for example, by the use of the Third Party Rights Act or a multilateral contractual framework (as discussed below) to give him the benefit of Alice's agreement with Isabel not to assert superior title.

57 The extent of the protection conferred on subsequent controllers, being a matter of the terms of the bond, would be for the issuer to decide when issuing the bond. For example, Isabel might limit protection to a person who acquired the token in good faith and for value, for consistency with conventional negotiable instruments.

58 Bob might still be at risk of an equitable claim by Alice, who might argue that he holds the token on constructive trust for her, for example if he received the token with knowledge of Chuck's wrongdoing. However, there is no need to make any special provision for that situation, which would be resolved in same way that it would on a disputed transfer of a conventional asset. In particular, if Bob purchased the token in good faith without notice of the defect, then he would acquire title free of any equitable interest of Alice.

Pseudonymity

59 As already mentioned, a distinctive feature of some blockchains is that they can be used pseudonymously. That raises an issue about compliance with regulations that require identification of counterparties for the purpose of preventing money laundering.

60 However, the fact that Isabel may issue bonds using a pseudonymous blockchain does not mean that transactions in the bonds must also be pseudonymous. Isabel could require Alice to identify herself as a condition of the initial sale of the token to her and could require Bob to identify himself as a condition of redemption. And Alice and Bob could require identification of each other as a condition of the sale from one to the other.

61 In the case of a real digital bond, identity verification is likely to be managed by a trusted external party. For example, participation in the bond (or access to the blockchain) may be limited to persons who have been whitelisted by a registrar or third-party operator. Identity information is held by the registrar/operator off the blockchain.

62 Many different methods of identity verification could be devised. We do not see that regulatory identification requirements are an obstacle to digital bonds.

Forks

63 A feature of a blockchain is that it may be subject to a *fork*, where there are inconsistent versions in circulation. That may be temporary, while a consensus forms around one version, or permanent, for example if participants cannot agree on a change to the protocol. That means that there may be uncertainty as to which token the rights comprising the digital bond are stapled to (i.e. at which network address it resides) and so who controls it. We do not see that as a problem in practice, however, since any uncertainty can be resolved in the terms of the issue. For example, Isabel might require that a token can only be redeemed by a holder who has held it in a specified number of sequential blocks; and it might reserve to itself a discretion to choose which fork of the blockchain is definitive.

Intermediaries

64 Many conventional bond structures have intermediaries between the issuer and the ultimate bond holders. This has important practical and regulatory advantages. In particular, the issuer is not exposed to a large number of individual claims but can deal only with the intermediary, who acts on behalf of the bond holders collectively.

65 There may also be regulatory reasons for the involvement of a third party, either as an intermediary holder of the bond or as a record keeper, responsible for recording transactions. For example, under the Regulation[43] governing Central Securities Depositories ("**CSDs**"), where a transaction in transferable securities takes place on a "trading venue" the securities must be "recorded in book-entry form in a CSD".[44] A few alternative structures for incorporating a CSD into a Digital Securities structure are set out in models 3 – 6 of Appendix 4. Whereas models 3 – 5 contemplate that the CSD or another entity will act as an intermediary in the structure, model 6 involves the CSD acting as record keeper at the top tier level, without any intermediation of holding as such.

66 We can easily adjust our model to introduce an intermediary by, for example, providing for Isabel to make her promise of payment to Trevor, a trustee, who holds the benefit of it on trust for controllers of the tokens in proportionate shares (or who issues his own back-to-back promise of payment to them).[45] That model can be seen as a particular case of the asset securitisation model discussed below, with the asset being the receivable from Isabel.

Registered and similar models

67 Isabel might instead dispense with transferable tokens and seek to use a blockchain or a distributed ledger as a register or record of interests, directing its promise of payment to any person recorded on the ledger as a bond holder.

68 This type of model may be favoured for various reasons. In particular, it might allow for a registrar or third-party to have ultimate control over the register or record (even if the register/record is generally updated on a decentralised basis), including to rectify any errors. Such a power may, depending on the structure, be incompatible with the recognition of any tokens deployed in the system as the object of property.

69 For some structures, this may be necessary in order to meet a legal or regulatory requirement. For example, as discussed further below, if the issuer maintains a register of debenture holders, it is required by the Companies Act to maintain a degree of control over that register.[46] For digital bonds there is generally no legal obligation on a bond issuer to keep a register of bond holders, so the distributed ledger could either constitute a traditional register for bonds in registered form or a mere record of holders for bonds that are not in registered form. As discussed below, for digital shares, which must be in registered form, the distributed ledger would need to constitute a register.

70 The prospect of gaining negotiable status is likely to be limited to systems involving tokens capable of being the object of property rights in the hands of the holders of the securities, as powers of a registrar or third-party to amend or rectify the underlying records are likely to be repugnant to the concept of negotiability. That is no different from the position for traditional registered securities, which are not negotiable instruments. That said, as we have noted, our view is that it is possible to create equivalent outcomes in a straightforward way through suitable drafting. This is discussed further in paragraphs 55 to 58.

DIGITAL PROPRIETARY SECURITIES

71 A different model is required for securitisation of proprietary interests in an asset:

Isabel PLC wishes to raise £10,000,000 through the issue of Digital Securities in a plot of land. It creates one million tokens on a blockchain and offers them for sale at £10 each, on terms that each token gives the right to a proportionate (one millionth) share in the land.

72 It is generally not possible, or not feasible, to unitise the legal title to an asset.[47] A digital securitisation can instead be achieved by putting the asset into trust for the benefit of the controllers of the tokens. In the example above, Isabel could itself act as trustee or (more likely in a real-life system) it could transfer the asset to Trevor, a third-party trustee.

73 A proprietary securitisation would normally be combined with some form of bond or payment obligation. The trust would provide for the circumstances in which the trustee can or must liquidate the asset and distribute the proceeds to the beneficiaries.

74 The analysis of this model is largely the same as for a digital bond. A declaration of trust by Trevor takes the place of the deed poll (or other stapling mechanism), and the right conferred on the controller of the token is the right to a beneficial interest in the trust property. An arrangement of that kind has sufficient certainty of intention, subject matter and objects and so satisfies the essential requirements for a valid express trust.

75 The use of a trust structure raises a particular question: since the transfer of a token is intended to effect a transfer of the beneficial interest under the trust, is it necessary, and is it possible, to comply with the requirements of section 53(1)(c) of the Law of Property Act? We return to that question below.[48]

DIGITAL EQUITY (SHARE) SECURITIES

76 Consider this model:

Isabel PLC wishes to raise £10,000,000 through the issue of digital shares. It creates one million tokens[49] on a blockchain and offers them for sale at £10 each, on terms (as recorded in its articles of association) that each token represents the rights associated with one share in Isabel PLC.

77 Shares are different from debt securities. They are interests in a company's share capital.[50] Shareholders typically have a range of rights, such as the right to vote and the right to participate in dividends and other distributions,[51] and sometimes also obligations, such as an obligation to contribute if the company is wound up. Shares are not creatures of normal contract. The relationship between shareholders and the company is largely

governed by the company's articles of association–a 'statutory contract of a special nature with its own distinctive features'[52]–and the shareholders may have additional contractual or equitable obligations amongst themselves.

78 At first sight, the model above appears similar to the digital bond model, except that the rights associated with a token may be rights to participate in distributions and dividends from Isabel, and potentially to vote, rather than a mere right to payment from Isabel. However, digital shares in a UK company present more of a challenge than digital bonds. This is because of the different nature of the relationship between a company and its shareholders, and the need to comply with the requirements of the Companies Act.

79 The three principal issues arising in connection with digital shares concern the statutory requirements for registration, certification and transfer.

80 Notably, a UK company is required to maintain a register of members and may only register transfers as prescribed in the Companies Act. In addition, UK companies are now prohibited from issuing warrants that entitle the bearer to the specified shares.[53] We address registration and transfer issues further below.

81 As to certification, a company is generally required to issue a certificate on allotment or transfer of a share,[54] and such a certificate constitutes evidence of the title of the relevant member.[55]

82 The Companies Act does not prescribe any particular form for a share certificate, but in general a document that is required to be in writing and signed can take electronic form and can be signed electronically. There is therefore no objection in principle to an electronic share certificate. However, there should be an identifiable electronic document that constitutes the certificate and that is capable of being delivered (electronically) by Isabel to the relevant token holder or member. Since certification is a separate requirement from registration, it is unlikely to be sufficient that the membership information is available as mere data on a blockchain; it would probably be necessary for the system to be configured so as to generate and issue a specific electronic but human-readable document that can be treated as the certificate.

83 Alternatively, and more easily, Isabel could simply dispense with share certificates, for example by provision in its articles.[56]

STAPLING

84 In the context of this Legal Statement, stapling refers to a legal mechanism whereby the holder of a legal right or interest in an asset is identified by reference to a cryptoasset, or to another digital object of property or a ledger record that is not itself an object of property (in the case of registered or similar structures).

85 Most, if not all, Digital Securities models currently contemplated in the market that provide the holder with legally enforceable rights or interests involve some means of stapling.[57]

86 Many of the proposed potential efficiency gains of Digital Securities arise from the possibility that upon transfer of a digital asset or record, the rights or interests associated with it (i.e. the actual security) might simultaneously and automatically be transferred, without the need for further act or formality. Where rights or interests are stapled to an asset, the required result is for the rights or interests to be transferred to the transferee of the asset. Where rights or interests are stapled to a ledger record, the required result is that the rights or interests are transferred to the person in whose favour the securities are recorded on the relevant ledger.[58]

87 Without an effective stapling mechanism, any system of Digital Securities would require a separate and distinct transfer mechanism (and any formalities associated with that mechanism) in order to effect a transfer of the underlying rights or interests upon transfer of the digital asset or update of the digital record. That would inevitably add complexity and administrative overhead. Moreover, requirements that cannot be performed electronically or are otherwise unduly burdensome will often undermine the use case. Notably, any procedure that needs to be carried out by the issuer after issue and at the time of transfer will reduce significantly the transferability of the instrument. Likewise, legal requirements involving physical witnessing are not amenable to execution electronically.

Stapling mechanisms

88 There are several potentially effective mechanisms available under English law to staple legal interests in securities. In addition to the statutory mechanisms provided for in the Companies Act and the USRs, these include:

(a) Deed poll

(b) Third Party Rights Act

(c) Open offer

(d) Advance consent to transfer by way of novation

(e) Multilateral contractual framework

89 The effect of a digital security acquiring negotiable status, whether by statute or custom, is also to staple the relevant claim to the token. The focus of this section, however, is on steps that can be taken to achieve an effective stapling mechanism, even absent (or prior to) a digital security acquiring negotiable status.

Deed poll

90 We have already referred to deeds poll above.[59] As issuer, Isabel might execute a deed poll under which it unilaterally undertakes to perform the obligations comprising the securities in favour of each person identified from time to time by reference to a system, or other set of criteria.

91 In the present context, the point to note is that whilst the execution of a deed poll requires formalities and this may impose a degree of friction into the system, that arises only at the outset when the security is issued. And as we have said, we see no fundamental legal barrier to creating integrated paperless solutions, and thereby keeping even that initial friction to a minimum.

92 A deed poll will not solve every stapling problem. Importantly, this mechanism (in isolation) does not allow for the *investors* (as opposed to the issuer) to undertake any contractual obligations, either to the issuer (which in any case is uncommon) or to the other investors (for example to agree a legal framework to govern transfers). Whether this is problematic or, on the contrary, desirable, will depend on the circumstances.

Third Party Rights Act

93 A similar outcome can be achieved without the use of a deed poll, by virtue of the Third Party Rights Act. For example, Isabel could agree contractually with one or more people to whom the security is first issued to perform the obligations comprising the securities in favour of each identified investor, in accordance with the Third Party Rights Act.

94 Provided that the requirements under the Third Party Rights Act are met,[60] each such identified person will be entitled to enforce the obligations.

95 The Third Party Rights Act explicitly allows the third parties who are intended to be benefitted, to be identified as members of a class,[61] which we expect could be defined to include each potential investor.

96 As with a deed poll, this mechanism allows investors to benefit from rights granted under the securities without executing any documentation or otherwise entering into any additional contractual arrangements with the issuer. The issuer can in certain circumstances be prevented from amending or rescinding the relevant term of the contract.[62]

97 Given this, we expect that it should be possible to structure an arrangement so as to preclude revocation in practice, not least because a purported transferor (who will have communicated its assent to the issuer and acted in reliance on the terms of the contract) will generally be motivated to object to a revocation, as that would have the effect of undermining the transferability of the instrument.

98 Unlike a deed poll, the terms of the securities can be set out in a simple contract. This avoids the formalities associated with deeds.

99 Agreement to the terms of the contract and intention to create legal relations by the issuer and its counterparties will need to be evidenced somehow. This may be done by a written contract (in digital form) or by other means. There is no general requirement under English law for a simple contract to be signed, but a signature may be digital in any event.

100 Again, this mechanism (in isolation) does not allow for any obligations to be placed on the investors, so it may not be appropriate in cases where that is required.

Open offer

101 A third option involves creating a direct contractual agreement between the issuer and each investor separately, through an open offer made by the issuer. This is an application of the principle established in *Carlill v Carbolic Smoke Ball Company*[63] that a person may validly and effectively offer to contract with any person who cares to fulfil such obligations as are specified in that offer.

102 Isabel could, for example, offer to contract, on the basis of a set of pre-established terms of issue (in digital form), with any person who agrees to a transaction resulting in the transfer of securities to that person through the system. On normal contractual principles, agreement to the transaction on those terms would amount to acceptance of the offer and, provided there was an intention to create legal relations (something that will readily be inferred in the context of a transfer of securities), this will result in a binding contract between the issuer and the transferee. A signature is not required to evidence the agreement; the conduct in accepting the offer is sufficient.

103 The terms of the issue could be drafted so as to ensure that the issuer and each investor are released from their obligations to one another upon the relevant securities ceasing to be recorded to that investor's wallet.

104 Establishing a direct contractual relationship between the issuer and each investor enables obligations to be placed on the investors (in favour of the issuer). This could be helpful in certain circumstances. For example, obtaining certain representations or undertakings from the investors could help the issuer in complying with its regulatory (including risk management) obligations and managing liability. It also provides a mechanism for investors to accept a set of rules that govern transfers under the system, albeit that these rules would only be enforceable by the issuer, and not by the other investors.

105 A Digital Securities arrangement adopting the open offer model of stapling would need to be designed to ensure both that the transferee (or an agent of the transferee) is the person who effects the transaction and that a

transfer can never be effected by or on behalf of a transferee who cannot be shown to be aware of the unilateral offer. Otherwise, a transferee could validly claim ignorance of the contractual terms and profess not to be bound by them. In practice, this concern is likely to be mitigated considerably in structures where the transferee's rights as well as any obligations are conferred solely by the contract–a transferee who argues that they are not bound by the contract may find it difficult to enforce or further deal with their interests in it. This is likely to be the case in most (if not all) Digital Security structures.

106 In principle, an issuer is free to revoke an offer at any time before it is accepted. However, it should be possible to structure an arrangement to preclude revocation in practice. This could be done, for example, by the issuer making a representation that it will not revoke the contract, which can be enforced by the transferor (who will be party to the contract prior to the transfer and generally motivated to object to revocation on the basis that it would undermine transferability), or some other party that is privy to the contract.

Advance consent to transfer by way of novation

107 Another method that can be used to establish a direct contractual relationship between the issuer and each investor is advance consent from the issuer, provided as part of the terms of the security itself, for transfers to take effect by way of novation.

108 Novation is a legal mechanism by which rights and obligations under a contract can be transferred. It can take many forms, but its most straightforward involves extinguishing the contract between the issuer and the transferor and establishing a new contract between the issuer and the transferee on the same terms as the original contract (except, of course, as to the parties). This requires the consent of all existing parties (i.e. the issuer and the transferor) as well as the new party (i.e. the transferee).

109 However, there is clear case law confirming that a party may provide this consent in advance, including by prescribing a transfer mechanism within the documentation that permits transfers by way of novation to any person (or any person that meets certain qualification criteria).[64]

110 The consent of the transferor and transferee will need to be evidenced, by electronic documentation or otherwise. But there are no formalities as such, and this mechanism may prove useful in some real-world scenarios.

Multilateral contractual framework

111 A fifth option is to establish a multilateral contractual framework between the issuer, any third-party operator and all of the investors in the system (or any subset of that group).

112 A multilateral contractual framework does not require a new contract to be executed by all parties each time a new investor joins the system. Rather, it can be achieved by applying the principle established in the case of *Clarke v Dunraven (The Satanita)*[65] that contractual arrangements may arise between people who each agree to be bound by a common rulebook, even where they do not know each other's identity when they agree to be bound by the rules.

113 This would enable a contractual framework established by or on behalf of the issuer, or by a third-party system operator, to bind each investor that joins the system, provided that there is evidence of that investor agreeing to the terms and intending to create legal relations on the basis of them. Such evidence could again exist in digital form.

114 A multilateral contractual framework, where investors have rights and obligations as against each other, allows the parties to agree a bespoke set of rules applicable to transfers within the system. This could be used, for example, to afford certain protections to innocent acquirers in respect of instruments that are not otherwise negotiable.

115 A contractual relationship can also be established between the investors and a third-party operator, such as a central securities depository or custodian, which does not act on behalf of the issuer.

116 A multilateral contractual framework could be used to embed the terms of the securities or, alternatively, to supplement separate securities contracts in respect of each issue.

117 The use of a multilateral contractual framework does not require every entity in a system to be contractually bound to one another. For example, the rules may be structured so that issuers have obligations to holders but not vice versa.

Summary

118 In short, English law provides several mechanisms that could be used for stapling legal interests to cryptoassets or to ledger entries that are not themselves assets. Some of these permit not only the conferring of rights but also the imposition of obligations on holders of securities, which may be helpful for certain structures. Generally, it will be possible to structure arrangements using any of these mechanisms so as to ensure that future purchasers are in practice protected against the risk of the issuer revoking or amending its obligations. As to the risks of potential claims from third parties on innocent acquirers and the potential for detachment of the stapled interest, see the discussion on Negotiability in paragraphs 39 to 58 above.

FORMALITIES: THE DISPOSITION OF AN EQUITABLE INTEREST[66]

119 As discussed above, for practical and regulatory reasons, many conventional bond structures have intermediaries between the issuer and the ultimate bond holders. Or the security may be proprietary in nature. In such circumstances, under English law one or more of the intermediaries may be a trustee, and the ultimate holder will be a beneficiary under a trust, with what is known as an 'equitable interest'.[67]

120 Section 53(1)(c) of the Law of Property Act says that

a disposition of an equitable interest or trust subsisting at the time of the disposition, must be in writing signed by the person disposing of the same, or by his agent thereunto lawfully authorised in writing or by will.

121 This means that, in these circumstances, the ultimate holder can only 'dispose' of her interest by signed writing–an oral disposition will be void.

122 The subsection is designed to reduce the risk of fraud, by ensuring that there is sufficient record of dispositions. As Lord Upjohn said in *Vandervell v Inland Revenue Commissioners*:[68]

the object of the section, as was the object of the old Statute of Frauds, is to prevent hidden oral transactions in equitable interests in fraud of those truly entitled, and making it difficult, if not impossible, for the trustees to ascertain who are in truth his beneficiaries.

123 There is little case law on the meaning of the subsection either as to the meaning of "disposition", or as to the extent of the requirement for writing. Perhaps this is because it appears to give rise to few, problems in practice[69]

124 What judicial guidance there is on the meaning of "disposition" leads us to the following conclusions:

(a) The word "disposition" bears its ordinary meaning, not some narrower, legal, definition.[70] In the rather different context of the Insolvency Act 1986, however, the Supreme Court has pointed out that its ordinary meaning is perhaps not that clear: it could "embrace destruction or extinction of an interest" or it could be that it refers to "a transfer by a disponor to a disponee of the relevant property (here the beneficial interest)".[71] However, "all depends on the statutory context and how they apply to the facts of the particular case."[72] The Law of Property Act itself says that "'disposition' includes a conveyance and also a devise, bequest, or an appointment of property contained in a will; and 'dispose of' has a corresponding meaning"[73] and in our view it is likely that in its context s 53(1)(ii) is referring, in essence, to the transfer, not to the destruction, of an interest.[74]

(b) Where nominees hold shares on trust for a beneficiary, a direction by the beneficiary to them to hold the shares on trust for someone else instead, is not a disposition by her of her equitable interest.[75]

(c) Where a beneficiary creates a sub-trust of her beneficial entitlement in favour of someone else, then there is probably no disposal.

(d) *"when the beneficial owner owns the whole beneficial estate and is in a position to give directions to his bare trustee with regard to the legal as well as the equitable estate there can be no possible ground for invoking the section where the beneficial owner wants to deal with the legal estate as well as the equitable estate"*[76]

(e) If Deb owes a debt to Alice, and Alice transfers an interest in that debt to Bob by equitable assignment, then s 53(1)(c) does not apply because there was no 'subsisting' equitable interest–the equitable interest is created only when the assignment takes place. But if Bob subsequently assigns his interest to Chuck, then it does.[77]

(f) Although an instruction (for value) by Alice to a custodian to transfer her equitable interest in shares to Bob, would be a disposal, it might be said to be outside the scope of s 53(1)(c), because there would be "no question of any untoward or secret dealing".[78]

(g) It seems to be that, depending on the circumstances, a transfer by way of novation would not involve a disposition, as this involves a dealing in the legal as opposed to equitable interest.[79]

125 In the circumstances discussed at paragraph 36 above, on one view Bob acquires rights against Isabel PLC, not because Alice has disposed of any interest to Bob, but because Isabel has promised that it will pay its debt to anyone that presents a token to it. Alice's transfer of that token to Bob has enabled him to make a claim against Isabel because he is able to satisfy the conditions for payment by presenting his token. But it seems to us that Alice has not on any normal meaning of the word "disposed" of any equitable interest to him. This is very similar to the position where there are changes in the membership of a club:[80] new joiners become entitled to an equitable share in the club's property, without the need for writing.[81]

126 Even if there would otherwise be a disposition, s 53(1)(c) does not apply in certain circumstances. Occasionally, it is disapplied by statute.[82] And, by reason of s 53(2) of the Law of Property Act, it "does not affect the creation or operation of resulting, implied or constructive trusts." A constructive trust is a trust which arises by operation of law, often because property has been acquired in unfair circumstances.[83] So it makes sense that where the law decides that circumstances are such that unfairness should be remedied by a finding of constructive trust, that trust cannot be defeated merely because a disposition is not in writing.

127 This matters in this context because, except in cases where a transfer is made gratuitously, the transferee's interest may in any event be protected by a constructive trust. For example, even where an agreement to transfer

an equitable interest in the shares of a private company (other than gratuitously) is not in writing, that interest can pass immediately upon the making of the agreement by reason of a constructive trust, and s 53(1)(c) does not apply.[84]

128 In light of all this, we acknowledge that there is room for debate about whether certain types of transfer involve 'dispositions' for the purposes of the subsection, and whether and when the subsection applies at all. These issues are not however specific to digital assets, but apply more generally in the context of intermediated securities.[85] We do not consider that there is any more uncertainty in this context than in relation to the transfer of intermediated assets more generally.

129 That said, in our view, s 53(1)(c) has no application to negotiable instruments. Furthermore, in relation to a Digital Security where the obligation under the security is expressed as being payable to the holder, but with a beneficial interest running in parallel, a transfer of the Digital Security will not involve the disposition of a beneficial interest notwithstanding that the transferor ceases to be a beneficiary, and the transferee becomes a beneficiary from the moment of the transfer.

Writing requirement

130 Notwithstanding the above, we do not believe that s 53(1)(c) poses any problem in relation to Digital Securities. That is because we see no reason why the requirements in s 53(1)(c) for writing and signature cannot be fulfilled by electronic documents and digital signatures in any event. In the First Legal Statement, we said that

(a) our view is that a statutory signature requirement is highly likely to be capable of being met by means of a private key. That is because an electronic signature which is intended to authenticate a document will generally satisfy a statutory signature requirement, and a digital signature produced using public-key cryptography is just a particular type of electronic signature;[86]

(b) relevant code which can be said to be representing or reproducing words and be made visible on a screen or printout is likely to fulfil a statutory writing requirement.[87]

131 And we agree with the Law Commission's more recent view that:[88]

We are not aware of the details of the technological systems by which transfers of intermediated securities are executed. It is likely that they will differ between intermediaries. However, the common law takes a pragmatic approach to electronic execution of transactions.

132 We do not think it necessary to consider in this context the particular purpose of the writing requirement in s 53(1)(c), about which there may be some debate.[89] That is because we consider that an electronic document, with a digital signature which is intended to authenticate it, is perfectly capable of satisfying the statutory requirement, whatever its original intended purpose. That said, if the purpose is to ensure certainty as to who is entitled to payment or to prevent fraud or concealed dealings, then recording transfers on a blockchain in a way that is immutable, authenticated and visible seems as good as or better than using traditional paper documents.

133 Further, and although this will be implementation specific, in many circumstances an authenticated instruction to transfer an equitable interest will be given by a customer via a website (or otherwise involving prose, rather than code) to transfer an interest from Alice to Bob, and that would itself be capable of amounting to sufficient signed writing.

134 As we said in the First Legal Statement,[90] our reasoning is slightly different from that expressed by the Law Commission in 2001.[91] We do not take the view that an electronic message which is not intended to be read by any person is for that reason not "in writing". Provided that relevant code (or indeed any representation of information, including at its lowest level by way of the properties of electrons in magnetic media or other computer storage) constitutes a sufficiently permanent record capable of being interpreted by a human, albeit with computational aid, it is capable of fulfilling a writing requirement.[92]

135 As Lord Justice Moore-Bick has said, albeit in a different context:[93]

I fully accept that entering information into an electronic data storage system results in an alteration to the physical characteristics of the equipment. It is unnecessary to discuss the details of the processes by which information is stored in, and retrieved from, computers. It is sufficient for present purposes to say that in one way or another (depending on the storage medium) physical changes are brought about in the storage medium which embody the entry of the information and enable it to be recalled. In that sense the process is similar to making a manuscript entry in a ledger: there is a physical change in the condition of the ledger by the application of ink to a sheet of paper.

136 In the context, the Law Commission has said[94]

As a further alternative to complete non-intervention and express statutory reform, we suggest clear, authoritative legal guidance either from the courts or in the form of nonbinding guidance from a panel of industry experts, legal practitioners, academics, and judges. This would be an effective alternative solution that could be helpful in reducing any perceived uncertainty in this respect.

137 We hope that this Legal Statement might fulfil that purpose.

FORMAL QUESTIONS: ISSUANCE, STAPLING AND TRANSFERS

138 In light of what we have said above, we can answer the formal questions concerning issuance, stapling and transfers as follows:

(1) Can Digital Securities be validly issued under English law using a blockchain or DLT-based system?

139 Yes, we see no difficulty in principle in Digital Securities (whether debt, proprietary or equity securities) being issued, by UK or foreign companies, and governed by English law, using a blockchain or DLT-based system. The relevant legal features of traditional (paper based or registered) securities can be replicated by the use of appropriate legal structuring techniques. Certain legal formalities and requirements may need to be complied with by UK companies, depending on the precise model, but generally these can be met through electronic means.

(2) In what legal form(s) are Digital Securities capable of being issued, in addition to registered form?

140 We see no difficulty in a contractual security being stapled to a digital token and passing with control of the token, rather than through the update of a register maintained by or on behalf of the issuer (as per the traditional registered model).

141 Certain contractual securities may also be issued in a form whereby the holder is identified by reference to records maintained by a third-party operator (acting in a principal capacity and not on behalf of the issuer). This form differs from traditional registered form.

142 On the other hand, shares in a UK company may only be issued in traditional registered form or in accordance with the USRs, due to requirements applicable to UK issuers under the Companies Act.

(3) Can a blockchain or DLT-based system be used as a register of Digital Securities?

143 Yes. Fundamentally, a blockchain is a database and can be used as a register similarly to any other database (that includes a public blockchain in circumstances where the registrar or third-party operator has ultimate control of the register or record, as envisaged in model 2 of Appendix 4). However, a fully decentralised and permissionless ledger probably cannot be used as a statutory company register of a UK company because the company is unlikely to have sufficient control over it to comply with its maintenance obligations. A blockchain or DLT-based register would need to be supplemented with a mechanism to produce hardcopy versions and to emit instruments of transfer capable of being submitted to HMRC for stamping.

(4) Is a blockchain or DLT-based system for Digital Securities required to comply with the requirements of the Uncertificated Securities Regulations 2001?

144 For securities in respect of which the issuer is not required to maintain a register and register transfers in accordance with the Companies Act (i.e. most contractual securities and English law governed securities of foreign companies), holders may be identified by reference to a system operated by a third-party (acting in a principal capacity) outside the USRs. In this case, the system need not comply with the requirements of the USRs.

145 In relation to other securities (including shares in a UK company), compliance with the USRs is only required where there is a need to enable title to units of a security to be evidenced otherwise than by a certificate or transferred otherwise than by a written instrument. Both a certificate and a written instrument can be electronic (and there may be no need for a certificate at all if it has been dispensed with in the company's articles). So if the blockchain or DLT-based system provides for electronic written instruments and certificates to be issued and processed if necessary, then it need not comply with the USRs.

(5) By which mechanisms can rights and interests (including legal and equitable interests) be legally stapled to a cryptoasset or other entry in a blockchain or DLT-based system in order validly to constitute a digital security?

146 Deeds poll, the Third Party Rights Act, open offers, novation with advance consent and multilateral contractual frameworks are examples of mechanisms that can be used to staple rights and interests to a cryptoasset or other entry in a blockchain or DLT-based system. The particular use case will determine which mechanism is most suitable.

(6) Are Digital Securities capable of having the effects of a negotiable instrument? If so, in what circumstances could a digital security instrument acquire negotiable status?

147 Digital securities involving transferable tokens (themselves being objects of property rights) may become negotiable through a mercantile custom to that effect in England. It is no bar to the recognition of a market custom for these purposes that it is recent, provided the custom is established.

148 Digital securities in registered or similar form will not be negotiable, any more than is the case for traditional registered securities.

149 The practical effects of negotiability can also be emulated through the use of legal structuring techniques.

(7) By which mechanism (such as negotiation, legal assignment, novation or equitable assignment) are rights to Digital Securities capable of being transferred by reference to a blockchain or DLT-based system?

150 The precise mechanism will depend on the precise nature of the Digital Securities and the stapling techniques used.

151 As for traditional negotiable instruments, negotiable Digital Securities are transferred by way of negotiation. We refer to our responses to question (5) above in relation to Digital Securities that are not negotiable (as the mechanism of transfer derives from the stapling mechanism), and question (8) below with regard to legal assignment.

(8) Would a transfer of Digital Securities necessarily be required to meet the requirements of section 136(1) or section 53(1)(c) of the Law of Property Act 1925? If those requirements apply, is a blockchain or DLT-based system capable of meeting them?

152 A transfer of Digital Securities would not be required to meet the requirements of section 136(1) provided it did not involve a legal assignment (which we consider to be readily avoidable). In principle, the notice requirement under section 136(1) could be met if the system was so designed.

153 The requirements of section 53(1)(c) are of potential relevance only in the context of certain structures, notably where underlying property is held on trust for the benefit of the participants in the system. We consider that in most such cases, transfers can be structured so as not to involve dispositions under section 53(1)(c). That section will also not apply to the transfer of a negotiable Digital Security or where the obligation under the Digital Security is expressed as being payable to the holder, but with a beneficial interest running in parallel.

154 In any event, where that statutory provision is engaged, we see no difficulty with its requirements being complied with through use of a suitably designed DLT-system and the "signatures" inherent in public key cryptography.

CORPORATE REQUIREMENTS

155 As mentioned at the outset, digital shares in UK companies raise a number of specific questions relating to corporate requirements, imposed by the Companies Act.

(9) In relation to transfers of Digital Securities, is a "proper instrument of transfer" for the purposes of s 770 Companies Act 2006 required? If so, what may amount to such an instrument in the context of a blockchain or DLT-based system?

156 s 770 of the CA says:

770 Registration of transfer

(1) A company may not register a transfer of shares in or debentures of the company unless–

(a) a proper instrument of transfer has been delivered to it, or

(b) the transfer–

(i) is an exempt transfer within the Stock Transfer Act 1982 (c. 41), or

(ii) is in accordance with regulations under Chapter 2 of this Part.

(2) Subsection (1) does not affect any power of the company to register as shareholder or debenture holder a person to whom the right to any shares in or debentures of the company has been transmitted by operation of law.

(3) If an election under Chapter 2A of Part 8 is in force in respect of the company, references in this section to registering a transfer (or a person) are to be read as references to delivering particulars of that transfer (or person) to the registrar under that Chapter.

157 Our view is that a "*proper instrument of transfer*" would be required in order to have a transfer of Digital Securities registered by the relevant company. That registration will often, but not always, be necessary to effect a transfer of legal title. This will depend upon the nature of the security being transferred.[95]

158 That is the result of s 770(1) of the CA, which says that a company may not register a transfer unless either: (1) a "*proper instrument of transfer* has been delivered to it"; or (2) one of the exceptions in s 770(1)(b) of the CA applies. Neither of the exceptions contained in s 770(1)(b) of the CA would presently apply to a transfer of Digital Securities.

159 There are a number of cases in which the English courts have considered the meaning of "proper instrument of transfer" (or its identically worded predecessors in earlier versions of the CA).

160 In *Re Greene*, Harman J considered that the requirement for a "*proper instrument of transfer*" in what was then section 63 of the Companies Act 1929 was aimed at ending: "*the prevalent practice of providing for the oral transfer of shares to the great detriment of the Revenue*".[96]

161 In *Re Paradise Motor Co. Ltd* Danckwerts LJ (delivering the judgment of the Court) considered that the requirement for a "*proper instrument of transfer*" in what was then section 75 of the Companies Act 1948 should be interpreted as referring to "*an instrument such as will attract stamp duty under the relevant fiscal legislation*"[97] and that the key was "*to make sure that there was an instrument which could be stamped with stamp duty*".[98]

162 In *Nisbet v Shepherd*, Leggatt LJ (with whom Hoffman LJ and Balcombe LJ agreed) followed *Re Paradise Motor Co. Ltd* and held that "*'proper' meant no more than 'appropriate' or 'suitable'. What it [has] to be suitable for [is] stamping*".[99]

163 It is therefore clear that a "*proper instrument of transfer*" in s 770 of the CA refers to a document which can be stamped by HMRC. Indeed, only "*stamped*" instruments of transfer are required to be registered by the relevant company (see s 776(2) of the CA).

164 This definition therefore requires some consideration of exactly *which* documents can be stamped by HMRC.

165 The process of stamping has recently been changed by HMRC.[100] With effect from on 19 July 2021, the process for stamping instruments is that: (1) a party must electronically submit the relevant instrument to HMRC and confirm that stamp duty has been paid (or identify any relief claimed); and (2) in place of a physical stamp, HMRC issues a letter confirming that duty has been paid or a claim for relief has been adjudicated.[101] It is inherent in that process that HMRC must recognise the relevant instrument as transferring an interest in property, otherwise the duty/relief would not be applicable.

166 As to what may amount to "*a proper instrument of transfer*" in the context of a blockchain or DLT-based system, this will therefore be any document: (1) which can be submitted to HMRC electronically; (2) which HMRC will recognise as transferring an interest in property; and (3) which is executed and dated.[102] As explained above, the instrument will be considered stamped when HMRC issues a letter confirming that duty has been paid or any claim for relief has been adjudicated.

167 There is no mandatory template to be used for the document to be submitted to HMRC, but it would appear sensible, unless and until HMRC changes its practice, for the blockchain or DLT-based system to be paired with software which produces a document that is as close as possible to a standard stock transfer form so as to minimise delays in processing. The alternative, of course, is to obtain advance agreement from HMRC that it will recognise a particular form of document.

168 The one caveat to the analysis above concerns the position where the relevant transfer is exempt from stamp duty. In those circumstances, HMRC has made clear that it does not require any documentation to be submitted by the parties.[103] There does not appear to be any guidance in the case law as to the type of instrument that will amount to a "*proper instrument of transfer*" when the relevant transfer is exempt from stamp duty. In the absence of any such guidance, our view is that where the relevant transfer is exempt from stamp duty, the requirement for a "*proper instrument of transfer*" would be interpreted by a judge as requiring an instrument that is capable of recording the key details of the transfer as needed in order to give effect to that transfer. We reach that view because that is the ordinary meaning of the words used in the statute.[104]

(10) Can a blockchain or DLT-based system serve as a register of members or debenture holders for the purposes of compliance with s 113 and 743 CA?

169 Under ss 113 and 114 of the CA, a company must keep a register of its members, which must be available for inspection at its registered office. The register may be kept in electronic form provided that the information in it is adequately recorded for further reference and is capable of being reproduced in hard copy form (s 1135). A company is not required to keep a register of its debenture holders, but to the extent it does, it must comply with certain requirements as set out under s 743.

170 s 113 of the CA says:

(1) Every company must keep a register of its members.

(2) There must be entered in the register–

(a) the names and addresses of the members,

(b) the date on which each person was registered as a member, and

(c) the date at which any person ceased to be a member.

(3) In the case of a company having a share capital, there must be entered in the register, with the names and addresses of the members, a statement of–

(a) the shares held by each member, distinguishing each share–

(i) by its number (so long as the share has a number), and

(ii) where the company has more than one class of issued shares, by its class, and

(b) the amount paid or agreed to be considered as paid on the shares of each member.

(4) If the company has converted any of its shares into stock, and given notice of the conversion to the registrar, the register of members must show the amount and class of stock held by each member instead of the amount of shares and the particulars relating to shares specified above.

(5) In the case of joint holders of shares or stock in a company, the company's register of members must state the names of each joint holder.

In other respects joint holders are regarded for the purposes of this Chapter as a single member (so that the register must show a single address).

(6) In the case of a company that does not have a share capital but has more than one class of members, there must be entered in the register, with the names and addresses of the members, a statement of the class to which each member belongs.

(7) If a company makes default in complying with this section an offence is committed by–

(a) the company, and

(b) every officer of the company who is in default.

(8) A person guilty of an offence under this section is liable on summary conviction to a fine not exceeding level 3 on the standard scale and, for continued contravention, a daily default fine not exceeding one-tenth of level 3 on the standard scale.

171 s 743 of the CA says:

Register of debenture holders

(1) Any register of debenture holders of a company that is kept by the company must be kept available for inspection–

(a) at the company's registered office, or

(b) at a place specified in regulations under section 1136.

(2) A company must give notice to the registrar of the place where any such register is kept available for inspection and of any change in that place.

(3) No such notice is required if the register has, at all times since it came into existence, been kept available for inspection at the company's registered office.

(4) If a company makes default for 14 days in complying with subsection (2), an offence is committed by–

(a) the company, and

(b) every officer of the company who is in default.

(5) A person guilty of an offence under this section is liable on summary conviction to a fine not exceeding level 3 on the standard scale and, for continued contravention, a daily default fine not exceeding one-tenth of level 3 on the standard scale.

(6) References in this section to a register of debenture holders include a duplicate–

(a) of a register of debenture holders that is kept outside the United Kingdom, or

(b) of any part of such a register.

172 Our view is that, provided the conditions outlined below are fulfilled, a blockchain or DLT-based system could serve as a register of members or debenture holders for the purposes of compliance with s 113 and 743 of the CA.

173 The starting point is s 1134 of the CA, which provides that the term "*company records*" in the CA shall include "*any register…required* [by the CA] *to be kept by a company*".

174 This is important because s 1135 of the CA expressly provides that "*company records…may be kept in hard copy or electronic form*". Accordingly, the fact that a blockchain or DLT-based system is in electronic form presents no problem of principle.

175 However, there are three conditions which we think a blockchain or DLT-based system would need to fulfil in order to serve as a register of members or debenture holders for the purposes of compliance with s 113 and 743 of the CA.

176 First, s 1135(2) of the CA provides that where company records are held in electronic form "*they must be capable of being produced in hard copy form*". Therefore, the blockchain or DLT-based system would need to be able to produce hard copy (and intelligible) printouts of the data contained in the system.

177 Secondly, the sub-sections to both s 113 and s 743 of the CA contain a number of specific details which a register of members or debenture holders respectively must contain. The blockchain or DLT-based system would obviously need to be able to record those details. It would not be necessary for all of those details to be stored "on-chain" (i.e. on the relevant blockchain itself) provided that the relevant system could facilitate their storage "off-chain". Indeed, we can see that for some of the details required by s 113 and s 743 of the CA (such as names and addresses of share/debenture holders) it may be desirable for that information to be stored "off-chain".

178 Thirdly, various provisions of the CA make clear that a company cannot just *store* a register, but must in fact maintain it, including by making amendments where necessary. These maintenance obligations include, for example, the following: (1) a duty to register certain transfers of shares or debentures;[105] (2) the right to refuse to register certain transfers of shares or debentures;[106] (3) permission to remove certain stale entries on the register;[107] (4) a duty to rectify the register when ordered by the Court to do so;[108] and (5) a duty to guard against and facilitate the discovery of falsification.[109]

179 The result is that unless a blockchain or DLT-based system affords the company the power to fulfil its duties of maintenance over the register, it will not be able to serve as a register of members or debenture holders for the purposes of compliance with s 113 and 743 of the CA. It follows that a fully decentralised and permissionless blockchain or DLT-based system would not be acceptable. However, a permissioned system, or a system where the company retains ultimate control over the record (for example, by a special private "master" key) could be. This could include, for example, a permissioned arrangement deployed on a public blockchain, as illustrated in model 2 of Appendix 4.

(11) Is an allotment of shares or debentures capable of being registered by means of a blockchain or DLT-based system, for the purposes of s 554 and s 741 CA?

180 s 554 of the CA says:

Registration of allotment

(1) A company must register an allotment of shares as soon as practicable and in any event within two months after the date of the allotment.

(2) This does not apply if the company has issued a share warrant in respect of the shares (see section 779).

(2A) If an election is in force under Chapter 2A of Part 8, the obligation under subsection (1) to register the allotment of shares is replaced by an obligation to deliver particulars of the allotment of shares to the registrar in accordance with that Chapter.

(3) If a company fails to comply with this section, an offence is committed by–

(a) the company, and

(b) every officer of the company who is in default.

(4) A person guilty of an offence under this section is liable on summary conviction to a fine not exceeding level 3 on the standard scale and, for continued contravention, a daily default fine not exceeding one-tenth of level 3 on the standard scale.

(5) For the company's duties as to the issue of share certificates etc, see Part 21 (certification and transfer of securities).

181 s 741 of the CA says:

(1) A company must register an allotment of debentures as soon as practicable and in any event within two months after the date of the allotment.

(2) If a company fails to comply with this section, an offence is committed by–

(a) the company, and

(b) every officer of the company who is in default.

(3) A person guilty of an offence under this section is liable on summary conviction to a fine not exceeding level 3 on the standard scale and, for continued contravention, a daily default fine not exceeding one-tenth of level 3 on the standard scale.

(4) For the duties of the company as to the issue of the debentures, or certificates of debenture stock, see Part 21 (certification and transfer of securities)

182 Our view is that an allotment of shares or debentures is capable of being registered by means of a blockchain or DLT-based system for the purposes of s 554 and s 741 of the CA, provided that the registration occurs on a register

which fulfils the requirements of s 113 and s 743 of the CA (addressed under question 10 above).

(12) Can a DLT-based system serving as a register of members or register of debenture holders meet the requirements that the register be available for inspection in the registered office or single alternative inspection location of an issuer?

183 The CA requires that a register of members and any register of debenture holders (as well as various other company records) must be "*kept available for inspection* [by the relevant company] - *at its registered office*".[110]

184 s 1136(1) of the CA permits the Secretary of State to:

"*make provision by regulations specifying places other than a company's registered office at which company records required to be kept available for inspection under a relevant provision may be so kept in compliance with that provision*"

185 On 1 October 2009, the Secretary of State exercised that power and introduced the Companies (Company Records) Regulations 2008[111] (the "**Records Regulation**").

186 Regulation 3 of the Records Regulation permits those companies that are required by the CA to keep certain records available for inspection at their registered office to keep them available for inspection at an alternative place, namely a "*single alternative inspection location*".

187 The requirements for a "*single alternative inspection location*" are set out in Regulation 3 as follows:

(3) The specified place in respect of the relevant provisions listed in section 1136(2) of the Act–

(a) is a place that is situated in the part of the United Kingdom in which the company is registered;

(b) must be the same place for all the relevant provisions; and

(c) must have been notified to the registrar as being the company's alternative inspection location.

188 Our view is that a DLT-based system *can* meet the requirement that a register of members and any register of debenture holders be kept available for inspection at the issuer's registered office/single alternative inspection location.

189 In particular, the requirement in the CA that certain documents must be "*kept available for inspection*" at a company's registered office marked a departure from the 1985 predecessor to the CA, which required that certain documents had to actually be "*kept*" at a company's registered office.[112]

190 As the Explanatory Memorandum to the Records Regulation states, the "*difference is likely to be significant for records kept electronically*" and that "*the* [CA's] *provision relating to the location where the records may be inspected, rather than to where they are kept…will provide greater flexibility to companies whose records are kept electronically.*"[113]

191 We agree. The transition from a place of storage to a place of inspection made clear that records can be viewed at a place even if they are not physically present there.

192 Accordingly, a company can keep a DLT-based system "*available for inspection*" at its registered office or single alternative inspection location by maintaining a device that has access to the DLT-based system at the relevant office/location.

Appendices

APPENDIX 1 - ILLUSTRATIVE EXAMPLES

Key

Network = blockchain or DLT network, including a private and/or permissioned sub-network on a wider public network

Node = instances of the system-specific software being run on some form of computer. This enables the computer to process and communicate information to other nodes. Different nodes may have different roles (eg running protocol, validation of transactions, maintaining the ledger).

Public address = a unique sequence of characters used to identify an "account" on the (on-chain) ledger.

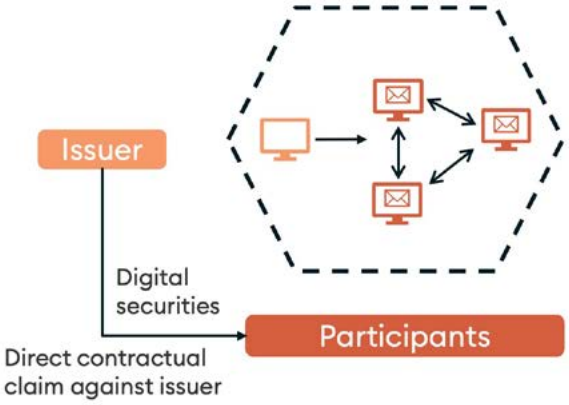
On-chain ledger = the digital records maintained on the distributed ledger. This is accessible to everyone who has access to the protocol.

Off-chain ledger = central records maintained outside the distributed ledger. This may be accessible only to a limited group of participants.

Direct issuance; decentralised transaction validation; no trusted third party

Under this model, the issuer and participants are connected directly on the network. The issuer treats the distributed ledger as its register (if the intention is to create registered securities) or otherwise staples legal rights constituting securities to tokens native to the network (if the intention is to create digital bearer instruments).

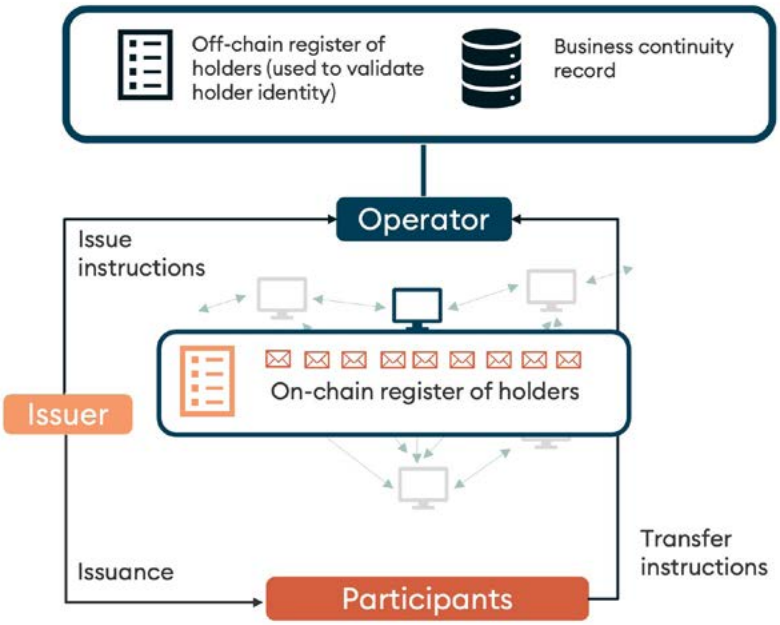
This model allows for digital securities to be issued directly onto a distributed ledger and for transactions to be validated on a decentralised basis, with no third party intermediation. In practice it currently poses a number of regulatory and practical challenges that limit its scalability.



Direct issuance; operator maintains a register or record of claims on a blockchain

Under this model, an operator (either a registrar acting on behalf of the issuer or a third party operator) creates a smart contract that records an identifier, such as a unique public address, associated with each security holder. Each security holder's balance is then recorded to the associated identifier upon issuance, and balances updated with each transfer. Transfer instructions are verified by the operator rather than on a decentralised basis.

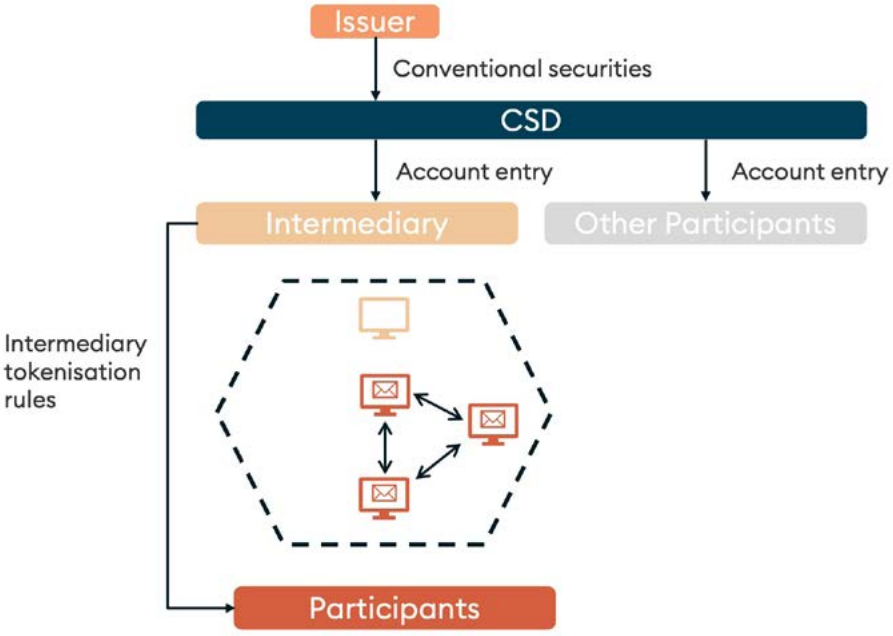
The balances and transactions can be fully transparent (on a public blockchain), while the identities of security holders are recorded only in a parallel off-chain ledger maintained by the operator. The operator also maintains a business continuity record off-chain, to mitigate risks of technological disruption. This model may present certain challenges under existing regulation that limit its scalability.



Direct contractual claim/ entitlement derived from securities being recorded to address

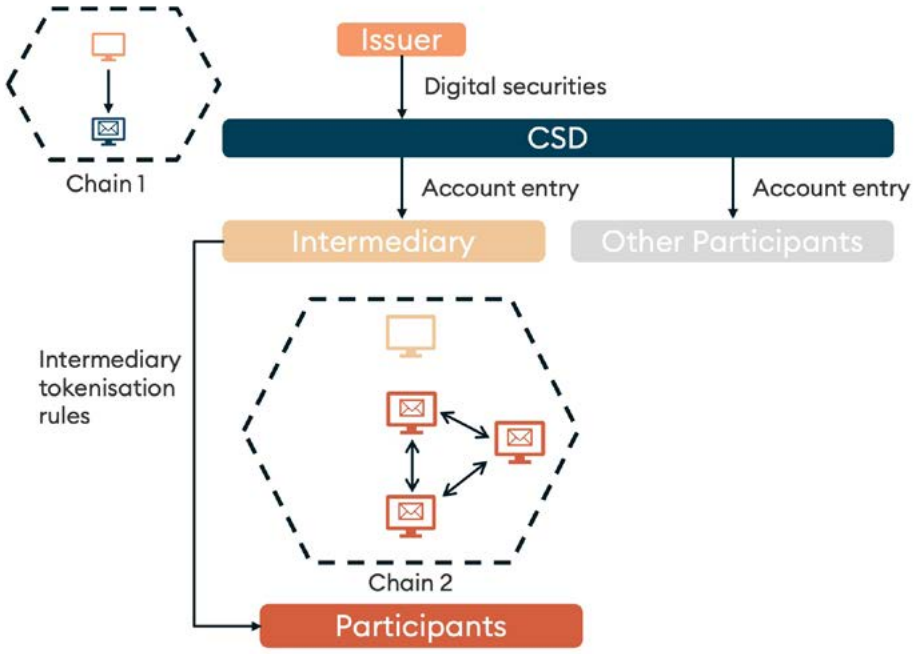
Indirect digital issuance by intermediary in respect of conventional securities in a CSD

Under this model, conventional securities are immobilised with, or issued in dematerialised form into, a top-level intermediary (e.g. a CSD). The securities are credited to the account of a participant in the CSD's system. That participant (the "**Intermediary**") issues tokens to which interests in the conventional securities are legally stapled. Transactions in the tokens are validated on a decentralised basis (in accordance with an agreed protocol) and recorded on a distributed ledger. The Intermediary oversees the system and may have certain override functionality in this regard. Participants are subject to a common rulebook with the Intermediary.



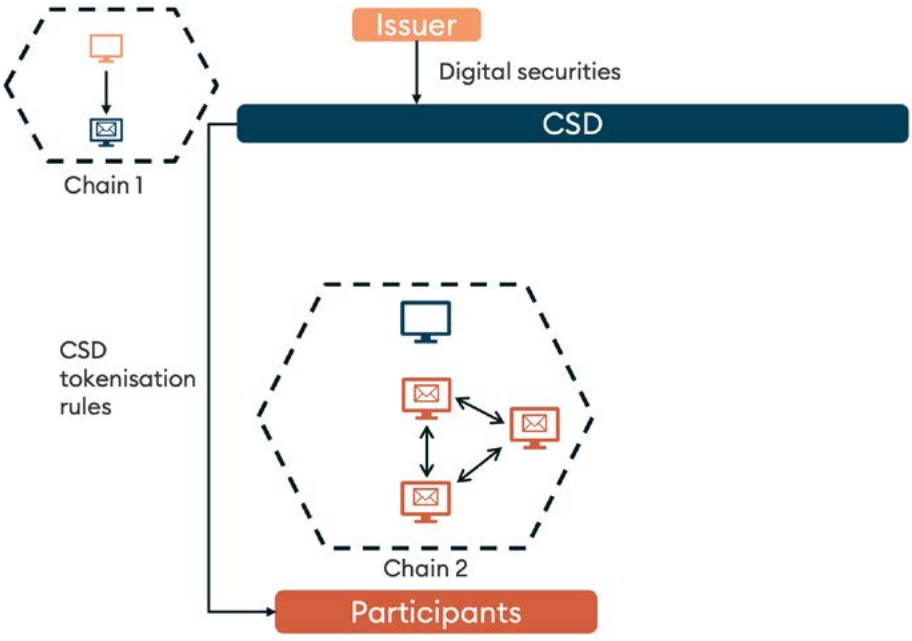
Indirect digital issuance by intermediary in respect of digital securities in a CSD

This model is the same as the previous one, save that the securities issued into the top-level intermediary (e.g. a CSD) are also in digital form.



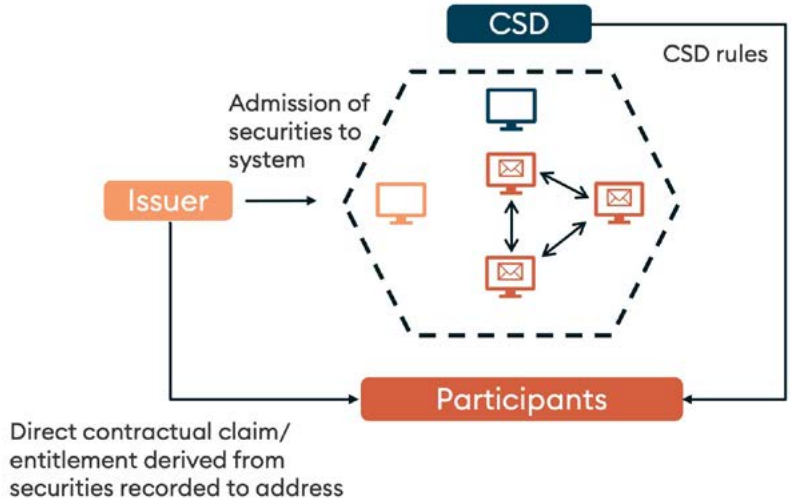
Indirect digital issuance by CSD in respect of digital securities in the CSD

This model is the same as the previous one, save that the tokenisation is carried out by the top-level intermediary (e.g. CSD) itself rather than a lower-level intermediary.



Direct issuance; decentralised validation; CSD oversight

Under this model, the issuer, top-level record-keeper (e.g. CSD) and participants are connected directly on the network. The CSD treats the distributed ledger as its books and records in respect of the initial recording of securities and maintenance of securities accounts. Transactions are validated on a decentralised basis (in accordance with an agreed protocol) and recorded on a distributed ledger. The CSD oversees the system and has certain override functionality in this regard. Participants are subject to a common rulebook with the CSD.



APPENDIX 2 - CONSULTEES AND CONTRIBUTORS

LawtechUK and its UK Jurisdiction Taskforce are grateful to the academic experts and industry leaders who have contributed to the Legal Statement on Digital Securities through the public consultation and as expert consultees.

With our thanks to and appreciation of the many contributors who prefer to remain anonymous as well as:

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Notes

1 <https://technation.io/lawtech-uk-resources/#cryptoassets>

2 It was first cited by *Bryan J in AA v Persons Unknown* [2019] 3556 (Comm), who held the analysis therein to be 'compelling' [57] and relied on the analysis in holding that a proprietary injunction could be granted over a cryptoasset.

3 Notably in *Ruscoe v Cryptopia Ltd* [2020] 2 NZLR 809, where Gendall J in the High Court of New Zealand held that cryptoassets could be held on trust.

4 References to 'English law' are to be read as references to 'English and Welsh law'.

5 Examples are Germany's Law on Electronic Securities, Lichtenstein's Blockchain Act, Switzerland's Federal Intermediated Securities Act, France's Blockchain DLT Ordinance, 2017-1674 and Luxembourg's Blockchain II Act.

6 In the First Legal Statement, we said "*The great advantage of the English common law system is its inherent flexibility. Rather than depending on the often cumbersome, time-consuming and inflexible process of legislative intervention, judges are able to apply and adapt by analogy existing principles to new situations as they arise. In commerce, the law is there to support and fulfil reasonable expectations. ('Of great significance is the Common Law's attitude to the expectations of those it serves. Common law does not defeat the reasonable expectations of honest men.' Johan Steyn, 'Contract Law: fulfilling the reasonable expectations of honest men' (1997) 113 LQR 433.) It is 'endlessly creative … a living law, built on what has gone before, but open to constant renewal'. (Sir John Laws, The Common Law Constitution, Hamlyn Lectures (Cambridge University Press 2014) 9–10). Time and again over the years the common law has accommodated technological and business innovations, including many which, although now commonplace, were at the time no less novel and disruptive than those with which we are now concerned*.

7 <https://www.lawcom.gov.uk/project/digital-assets/>

8 <https://lawtechuk.io/ukjt-digital-securities>

9 <https://twentyessex.com/people/lawrence-akka/>

10 <https://www.3vb.com/our-people/qc/david-quest-qc>

11 <https://www.linklaters.com/en/find-a-lawyer/richard-hay>. Michael Voisin and Sophia Le Vesconte, both of Linklaters LLP, also reviewed and commented on successive drafts of this Legal Statement. The Taskforce is grateful for their contributions.

12 <https://www.4pumpcourt.com/barrister/matthew-lavy/>

13 <https://twentyessex.com/people/sam-goodman/>

14 J. Benjamin, "Securities Collateral" in *Reform of UK Personal Property Security Law: Comparative Perspective*, ed., John de Lacy (1st ed., Routledge-Cavendish 2009). See: *Re Beavan* (1885) 53 L. T. 245.

15 In *re Rayner* [1904] 1 Ch 176 per Vaughan Williams LJ (*obiter*), at 187, 'The word is not a term of art, but only a word of description. It is a commercial word which will vary with the history of commerce', referred to in Re Gent and Eason's Contract [1905] 1 Ch 386, per Farewell J at 388. *Singer v Williams* [1921] AC 41, per Lord Shaw of Dunfermline at 57, 'The word "securities" has no legal signification which necessarily attaches to it on all occasion of the use of the term. It is an ordinary English word used in a variety of collocations; and it is to be interpreted without the embarrassment of a legal definition and simply according to the best conclusion one can make as to the real meanings of the term as it is employed in, say,

a testament, an agreement, of a taxing or other statute as the case may be. The attempt to transfer legal definitions derived from one collocation to another leads to confusion and sometimes to a defeat of true intention.'

16 They are not necessarily mutually exclusive. Some products may have features of more than one category.

17 also including certificates and warrants.

18 In the context of this Legal Statement, by 'securitisation' we mean to refer to the process of representation by a Digital Security of a proprietary entitlement to an underlying asset, and not to the technical process of securitisation or repackaging known to securities lawyers.

19 SI 2001/3755. The Regulations were made under s 207 Companies Act 1989 (now s 785 Companies Act 2006).

20 In particular, reg 2(1) says that the purpose of the USRs is to "*enable title to units of a security to be evidenced otherwise than by a certificate and transferred otherwise than by a written instrument*". They do not concern title which is evidenced by a certificate, or the transfer of securities by written instrument. There is no reason, in our view, why the relevant certificate, or written instrument, cannot be in electronic form.

21 USRs, reg 38.

22 A debt obligation may or may not include an obligation to pay interest. Below, we consider bonds which provide for a debt obligation, but the analysis for other types of bond is the same.

23 Some syndicated loans may also be unitised and transferable, though the interests in them are not freely tradable in the financial markets.

24 which themselves are the object of property rights in the hands of the holder of the bond.

25 or permissioned systems operating on a public blockchain.

26 This, and the other models presented below, are necessarily oversimplified, and are for illustrative purposes.

27 except with regard to the application of Companies Act formalities (as discussed in paragraphs 155 – 192) if the digital bond is structured as a registered security, since those formalities will be inapplicable to a foreign company).

28 *Simmons v London Joint Stock Bank* [1892] 2 AC 201.

29 See para 137 of the First Legal Statement.

30 Para 81.

31 For some of the legal history behind the name, which relates to the manner in which the edge of the document was traditionally cut straight (or 'polled'), see John Cartwright, *Formation and Variation of Contracts* (3rd Edn, Thomson Reuters 2021) para 7–02.

32 E.g. *Accordent Pty Ltd v Bresimark Nominees Pty Ltd* (2008) 101 SASR 286, [2008] SASC 196 [66]-[69]; *Moody v Condor Insurance Ltd* [2006] 1 WLR 1847 [15].

33 Note on the Execution of a Document Using an Electronic Signature prepared by the joint working party of The Law Society Company Law Committee and The City of London Law Society Company Law and Financial Law Committees, approved by Mark Hapgood KC. See also Law Commission reports on Electronic Execution of Documents (2019) and Smart Legal Contracts (2021).

34 CA, s 44.

35 In technical terms, a deed poll does not require consideration, and is therefore binding on the maker from the moment it is made. If it is expressed to be irrevocable, then they could not go back on that without breaching the deed's terms, and anyone who was intended to benefit from the deed could sue.

36 Under Law of Property Act, s 136, a legal assignment must made "by writing under the hand of the assignor" and express notice in writing must be given to the debtor.

37 At least in the circumstances described in the First Legal Statement.

38 para 47.

39 Although an original owner can, it appears, trace legal title to money through a straight substitution, not involving a mixture, against a transferee that is not a bona fide purchaser for value without notice (see *Trustee of the Property of F C Jones & Sons (A Firm) v Jones* [1997] Ch 159 (CA))

40 The establishment of this principle which was important in facilitating the initial development of the Eurobond markets.

41 *Edelstein v Schuler & Co* [1902] 2 KB 144.

42 cf Michael Bridge, Louise Gullifer and ors, *The Law of Personal Property* (3rd Edn Sweet & Maxwell 2021) para 31-043.

43 The retained EU law version of Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories.

44 reg 3(2).

45 Other methods of holding interests might be more appropriate where foreign laws are relevant.

46 Similarly, if the securities are required to be recorded in a CSD for regulatory reasons, the CSD will be required to maintain a degree of control in order to comply with its regulatory obligations.

47 other than where that asset is a contractual right created by design to be unitised, as discussed above in the context of digital bonds.

48 para 138.

49 Tokens used in the manner contemplated in this section and in relation to

50 CA, s 540(1).

51 depending on the nature of the share.

52 *Bratton Seymour Service Co Ltd v Oxborough* [1992] BCC 471, 475 (Steyn LJ).

53 CA, s779. Blockchain or DLT-based systems structured to meet the corporate requirements as discussed in paragraphs 155 – 192, in our view would not, without more, give rise to warrants to bearer.

54 CA, ss 769, 776.

55 But only *prima facie* evidence: CA, s 768.

56 CA, ss 769 and 776 say that there is no requirement for share certificates "if the conditions of issue of the shares, debentures or debenture stock provide otherwise".

57 See Appendix 4 for examples of models currently contemplated in the market.

58 The English common law concepts of 'transfer' and 'negotiability' we discuss should not be confused with those of 'transferable security' and 'negotiable on the capital markets' which appear in EU-derived legislation and associated guidance, e.g. FCA PERG 13.4: ' ... Transferable securities refer to classes of securities negotiable on the capital markets but excluding instruments of payment. We consider that instruments are negotiable on the capital markets when they are capable of being traded on the capital markets. ...'; Financial Services and Markets Act 2000, s 102A(3): '"Transferable securities" means anything which is a transferable security for the purposes of the markets in financial instruments regulation, other than money-market instruments for the purposes of that regulation which have a maturity of less than 12 months.'; Regulation (EU) No 600/2014 of the European Parliament

and of the Council of 15 May 2014 and amending Regulation (EU) No 648/2012, Reg 2(1)(24). Nothing we say is intended to suggest that Digital Securities cannot be 'transferable securities', which are 'negotiable on the capital markets' in that sense.

59 para 35.

60 For example, certain contracts, including negotiable instruments, are expressly excluded from the Third Party Rights Act. However, this should not be a material issue, firstly as a contract can be rendered non-negotiable through express terms and the effects of negotiability can largely be replicated through the stapling mechanism, and notably the inclusion in the primary contract of an identification mechanism whereby those entitled to enforce the primary contract are identified as a class whose membership changes from time to time and secondly as if the security has achieved negotiable status, the effect (as we note in paragraph 89) is to staple the claim to the relevant token without the need for the Third Party Rights Act.

61 Third Party Rights Act, s 1(3).

62 As set out in Third Party Rights Act, s 2(1), namely if (i) the third party has communicated their assent to the issuer; (ii) the issuer is aware that the third party has relied on the term; or (iii) the issuer can reasonably be expected to have foreseen that the third party would rely on the term and the third party has in fact relied on the term.

63 [1983] 1 QB 256.

64 *Habibsons Bank Ltd v Standard Chartered Bank (Hong Kong) Ltd* [2010] EWCA Civ 1335.

65 [1987] AC 59.

66 See, generally, The Law Commission "Digital Assets: Consultation Paper" (n 35) Chapter 17. Although s 136(1) of the Law of Property Act, which requires a legal assignment of a legal thing in action to be "by writing under the hand of the assignor" is referred to in the Public Consultation document, it does not raise any additional issues, and we do not discuss it here.

67 There is no single definition of a trust in English law. It encompasses (but is not restricted to) the legal relationship created when assets are placed under the control of a trustee for the benefit of a beneficiary or for a special purpose (Hague Convention on the Law Applicable to Trusts and on their Recognition 1985 art 2). Most custodian relationships documented under English law operate as trusts even if the custodian documentation does not refer to the establishment of a trust relationship.

68 [1967] 2 AC 291.

69 See, e.g. the summary of responses to the Law Commission at para 6.15ff of The Law Commission 'Intermediated securities: Summary of responses to call for evidence' (2021) <https://www.lawcom.gov.uk/project/intermediated-securities/>.

70 *Grey v Inland Revenue Commissioners* [1960] AC 1.

71 *Akers and others v Samba Financial Group* [2017] UKSC 6, [2017] AC 424 [55] (Lord Mance JSC), and [66]–[69] (Lord Neuberger PSC).

72 Akers (n 57) [69] (Lord Neuberger PSC).

73 s 205(1)(ii).

74 Had it meant to refer to destruction, given the wider context of the Law of Property Act, we think that it would have mentioned extinction or destruction in terms.

75 *Grey* (n 56).

76 *Vandervell* (n 57) 311.

77 *The Law of Personal Property* (n 38) para 22-035.

78 See the non-binding comment by Hildyard J in *SL Claimants v Tesco plc* [2019] EWHC 2858 (Ch), [2020] Bus LR 250 [116].

79 *The Law of Personal Property* (n 64) paras 27-009, 27-050; Law Commission 17.15; Joanna Benjamin, *Interests in Securities: A Proprietary Law Analysis of the International Securities Markets* (Oxford University Press, 2001) para 3.39 notes the argument that a novation extinguishes the original asset, and is therefore not a disposal.

80 strictly, an unincorporated association.

81 Trusts Law Committee Working Party: Equitable Problems in the Securities Markets (1998).

82 For example, the Financial Collateral Arrangements (No 2) Regulations 2003 reg 4 (2), the Uncertificated Securities Regulations 2001 reg 38(5). We do not conclude from that, that it would otherwise apply.

83 *Westdeutsche Landesbank Girozentrale v Islington London Borough Council* [1996] AC 669, 714.

84 *Re Holt's Settlement* [1969] 1 Ch 100, 116. *Chinn v Collins (Inspector of Taxes)* [1981] AC 533, 548F (Lord Wilberforce): "The legal title to the shares was at all times vested in a nominee for N.M.R.(C.L), and dealings related to the equitable interest in these required no formality. As soon as there was an agreement for their sale accompanied or followed by payment of the price, the equitable title passed at once to the purchaser, …"; *Neville v Wilson* [1997] Ch 144; Trust Law Committee Working Party 'Equitable Problems in the Securities Markets' (1998) p 7; Law Commission Project on Intermediated Securities Third Seminar: Issues affecting Transferees of Intermediated Securities' (2006). Some doubt about this has been expressed in *UBK v Sahib* [1997] Ch. 107, 129 (Chadwick J); *JSC VTB Bank v Skurikhin* [2019] EWHC 1407 (Comm) at [240]–[241] (Patricia Robertson QC), but to us those doubts seem, with respect, misplaced, and had been addressed in the earlier cases.

85 See Law Commission 'Intermediated securities: who owns your shares? A Scoping Paper' (November 2020) para 7.41ff <https://www.lawcom.gov.uk/project/intermediated-securities/>.

86 First Legal Statement [158].

87 First Legal Statement [164]. The Law Commission has subsequently agreed: The Law Commission of England and Wales, "Smart Legal Contracts – Advice to Government" (2022), para 3.76.

88 The Intermediated Securities Scoping Paper (n 74) para 7.52; Electronic Execution (2019) Law Com No 386 pp 2–3.

89 Noted, for example, in H Liu, "Transfers of equitable interests in the digital asset world" (2022) 5 Journal of International Banking and Financial Law 325; Law Commission 17.39.

90 First Legal Statement [166]–[167].

91 Law Commission, *Electronic Commerce: Formal Requirements in Commercial Transactions: Advice* (2001), albeit repeated in Law Commission, "Electronic execution of documents" (Law Com No 386, 2019).

92 Instead of referring to writing, the Consumer Contracts (Information, Cancellation and Additional Charges) Regulations 2013 refer to recording on a durable medium, which "enables the recipient to store the information in a way accessible for future reference for a period that is long enough for the purposes of the information", and "allows the unchanged reproduction of the information stored" (reg 5).

93 *Your Response Ltd v Datateam Business Media Ltd* [2014] EWCA Civ 281, [2015] QB 41 [19].

94 Digital Assets Consultation Paper (n 55) paras 17.46, 17.56.

95 For example, a transfer of a digital bond (discussed above in paragraphs 26 - 70) would not necessarily require registration by the relevant company in order to effect a transfer of legal title.

96 [1949] Ch. 333, 339.

97 [1968] 1 WLR 1125, 1141A.

98 p 1140C. The reference to "*proper*" did not even require that the instrument comply with all the formalities in the relevant company's articles.

99 [1994] 1 BCC 91, 94–95. This meant that a document could constitute a "*proper instrument of transfer*" even if it did not comply with all the formalities proscribed in the Stamp Act 1891.

100 See the notice in the London Gazette dated 18 June 2021: <https://www.thegazette.co.uk/notice/3824442>.

101 <https://www.gov.uk/hmrc-internal-manuals/stamp-taxes-shares-manual/stsm011015>. The precursor to the 2021 change was The Stamp Duty (Method of Denoting Die) Regulations 2019 (SI 2019/ 719), which made amendments to existing Stamp Duty legislation (for example Stamp Duty Management Act 1891, s 27) which allowed HMRC to denote Stamp Duty by methods other than using impressed stamps.

102 <https://www.gov.uk/hmrc-internal-manuals/stamp-taxes-shares-manual/stsm021030>.

103 <https://www.gov.uk/guidance/stamp-duty-reliefs-and-exemptions-on- paper-shares>.

104 Bennion, Bailey and Norbury, *Statutory Interpretation* (8th Edn, Lexis Nexis 2022) para 11.9. The meaning of the term "proper" in relation to stamping falls away as part of the interpretative exercise if by definition the "instrument of transfer" cannot be stamped. In such cases, we take the term "proper" to have its ordinary meaning, i.e. something that is appropriate or suitable for its purpose.

105 CA, s 771.

106 CA, s 771. The company may refuse registration but must give reasons for doing so. This may occur, for example, where a proposed transfer of shares is in breach of the company's Articles of Association. The directors' decision may be challenged in Court.

107 CA, s 121.

108 CA, s 125.

109 CA, s 1138.

110 CA, s 114 in respect of the register of members and CA, s 743 in respect of any register of debenture holder.

111 SI 3006/2008.

112 See for example Companies Act 1985, 353.

113 Explanatory Memorandum, paragraphs 7.4 and 7.5.