Landmark Legal Statement on Cryptoassets and Smart Contract

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Landmark Legal Statement on Cryptoassets and Smart Contracts

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On November 18, 2019, the U.K. Jurisdiction Taskforce (UKJT), one of six taskforces established by the LawTech Delivery Panel (set up by the U.K. government, the judiciary and the Law Society to promote the use of technology in the legal sector) issued a legal statement to the effect that cryptoassets constituted property and smart contracts could constitute legally binding contracts (the "Statement"). This is the first authoritative step, in any jurisdiction, towards a formal recognition of the legal status of cryptoassets and smart contracts. The rationale behind the Statement was perceived uncertainty among market participants about the status and enforceability of these instruments under English law. The Statement to a large extent alleviates these concerns. It showcases the flexibility of the English judge-made common law system, which is capable of adapting to technological change without necessarily requiring legislative intervention. Although the Statement is not binding, it has persuasive force, and will likely impact other common law jurisdictions. For market participants globally, the Statement provides welcome clarity of the legal and practical risks when using cryptoassets and smart contracts. Still, some complex legal questions remain open and further developments in this area are on the horizon.

Background to the Statement

The Statement is the result of a public consultation process which was commenced against the backdrop of perceived legal uncertainty among market participants about the legal status and enforceability of cryptoassets, distributed ledger technology (DLT) and smart contracts under English law. That uncertainty reportedly risked creating a lack of confidence by market participants and investors as well as potentially inhibiting the further development of those instruments.

On May 9, 2019, the UKJT published a consultation paper identifying a number of questions on which input was sought by June 21, 2019 (the "Paper"). The aim of the Paper was to gather information about the possible scope and substance of a subsequent legal statement by the UKJT. It was stated that the legal statement would either demonstrate that English law already provided sufficiently certain formulations in relation to the relevant issues, or would highlight areas which would need to be clarified, by legislative steps or with the assistance of the English courts.

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1

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The Paper intentionally excluded other areas of law such as any regulatory issues, data protection, matters of taxation or consumer protection. The UKJT stated that other bodies or organizations would be better placed to address these issues. More than 140 written responses to the Paper were received, including from academics, technologists, businesses and lawyers. On June 4, 2019, a public consultation meeting was held, at which market participants and other stakeholders shared their views on the questions raised in the Paper.

The Statement was published on November 18, 2019 and the reaction from market participants and legal circles has been generally positive. We set out below what the Statement concluded.

What cryptoassets mean

In general, cryptoassets are assets which are represented digitally within the electronic payment systems where they exist/are used and which involve cryptographic techniques. Bitcoins are probably the best-known example of cryptoassets, but many others exist and new applications and techniques are continuously being developed and explored.

In terms of a precise definition of cryptoassets, the Statement (rightly) steers clear of offering that, noting that such an exercise would be of limited use in light of the technology's rapid development and the great variety of systems in operation. Instead, the Statement identifies five principal features of cryptoassets, which we explain below.

Intangibility: Cryptoassets are purely virtual; they cannot be seen or touched and are not capable of being subject to physical control.

Cryptographic authentication: This is in connection with how cryptoassets function. Typically, such an asset is represented by information on (i) a "public key," which is disclosed at large or to all participants in the electronic payment system and which contains encoded information about the asset, including ownership, value and transaction history; and (ii) a "private key," which permits dealings in the asset to be cryptographically authenticated by digital signature (practical control over the asset therefore stays with whoever has knowledge of the private key).

Use of DLT: Dealings in a cryptoasset are broadcast to a network of participants and, once confirmed as valid, added to a digital ledger whose main function is to keep a reliable history of transactions and prevent double spending. The ledger may be distributed and decentralized, i.e., shared over the network with no one person having a responsibility, or right, to maintain it. A common type of distributed ledger uses a blockchain, which comprises blocks of transactions linked together sequentially (and containing information such as value, participants and the date and time when the transaction was made), but other models are also in use.

Decentralization: This goes to the use of DLT, since in the case of cryptoassets there is currently no financial institution serving as a trusted third party in relation to any dealings.

Rule by consensus: In some systems, the rules governing dealings in cryptoassets are established by the informal consensus of participants, rather than by contract or in

some other legally binding way. Consensus rules may also determine which version of the distributed ledger is definitive.

Cryptoassets recognized as property; what are the implications?

The public and private keys mentioned above, and the distributed ledger data, are pure information. Information in itself (as opposed to the medium in which it is recorded), like knowledge, is not generally treated as property under English law. Cryptoassets are also not physical things (i.e., choses/things in possession) and not legal rights (i.e., choses/things in action), which are the two traditional types of personal property recognized under English law.

So there has been a concern, and related uncertainty, as to what legal creature cryptoassets are. The Statement concludes that they are property: the asset is not the data itself, but the relationship between the data and the rules of the electronic payment system which allows an owner to deal with the asset. The Statement explains that the fact that a cryptoasset might not be a chose/thing in action on the narrower definition of that term does not in itself mean that it cannot be treated as property. It states that if cryptoassets need to be classified at all, they are best treated as being another, third kind of property (similar for example to EU carbon emission allowances).

This confirmation means that a trust may be declared over an ownership interest in a cryptoasset (which has reportedly been indicated as a possibility in a recent case in Singapore, *B2C2 Ltd v. Quoine Pte Ltd* (n 19) (Simon Thorley IJ)). Security may also be taken over a cryptoasset, by way of charge or mortgage (rather than pledge or lien which require physical possession). The clarification would give the English courts additional comfort in support of an earlier first instance decision to grant an asset preservation order of over 80 bitcoins worth approximately £1.2 million (\$1.6 million). Cryptoassets are also to be regarded as property for the purposes of the U.K. Insolvency Act, which would in principle be advantageous to the creditors of a person/company with ownership (or other rights) over cryptoassets that becomes insolvent.

What is a smart contract?

The key feature of smart contracts is that they do not require human intervention in order to be performed, at least in part. They are automatic, as they are embedded in a network system which executes performance using the same techniques as discussed above: cryptographic authentication, distributed ledgers, decentralization and rule by consensus. The terms of the contract are recorded in computer-readable form, i.e., code. The idea is that the code will do what it has been programmed to do, which means that there is strictly no need for a party to promise performance or resort to the law to enforce a promise by the counter-party.

Smart contracts recognized as legally enforceable

The concern and uncertainty in relation to smart contracts stems from the fact that there could be an external event to the code, such as system failure, or the code might operate in unexpected or unintended way, and the legal status of a smart contract might become an issue between the parties.

The Statement concludes that the ordinary rules of English contract law apply to smart contracts. It also confirms that a smart contract between anonymous or pseudonymous parties is capable of giving rise to binding legal obligations.

It follows that the three requirements in relation to whether a contract has been formed (agreement, intention to be legally bound and consideration) apply to smart contracts. In that context, a key question might be, in the usual way, what the parties actually intended: specifically, whether they intended to be bound by the behavior of the code.

In relation to contractual interpretation, interesting legal issues arise in circumstances where the smart contract is wholly written in code and the program has used an ill-defined construction in the programming language. Contractual interpretation is in general about prescribing meaning to natural language, which seems at first glance odd if there is no natural language at all, but mere code. Yet, ordinary principles of English law are sufficiently flexible and can (and should) be applied to such novel situations. In particular, a contract written wholly in code can be seen as an extreme example of a contract whose language is clear. If an ill-defined construction is used by the program such that the result does not have a single "meaning," ambiguities might be resolved by reference to other parts of the code that make the intended behavior clear. Where that is not sufficient, just like with natural language contracts, a judge will need to look beyond the boundaries of the code in order to determine what the parties objectively intended their obligations to be.

Conclusion

The Statement provides ground-breaking clarifications in relation to key uncertainties surrounding cryptoassets and smart contracts. As cryptoassets have been recognized as property, the legal analysis in circumstances of fraud, theft and unlawful spending following a hacking incident becomes clearer, but it is not straightforward. For example, the question of whether a bona fide purchaser and holder of a private key has ownership of a cryptoasset which has been unlawfully obtained by the seller seems to be resolved in favor of the bona fide purchaser, following the finding that cryptoassets are (possibly a third kind of) personal property. However, a number of questions that would require clarification in due course remain, such as (i) how assets, services or other things that are linked to cryptoassets are to be treated, including whether such linkage creates separate legal rights and if bailment is possible in such circumstances, (ii) the treatment of cryptoassets in insolvency situations, and (iii) how the conflict of laws analysis would apply. Further regulation and legislation might come in the future, in particular in matters of data protection, taxation, regulatory capital and antimoney laundering. Some of the remaining uncertainties as to cryptoassets and smart contracts are likely to be further ventilated in the courts. The future looks exciting and we will be tracking these developments.

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