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An Overview of the Proposed Cypriot Distributed Ledger Technology Law of 2021

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Abstract

The Cypriot Ministry of Finance published in September 2021 a bill on a proposed Distributed Ledger Technology Law which aims to incorporate blockchain technologies, including tokens and smart contracts into the Cypriot legal system. This piece provides the reader with a synopsis of the main provisions of the bill and what their effect could be once adopted. A brief analysis is also provided with regard to whether the proposed legislation achieves its goals of facilitating the proper use of such technologies whilst contributing to the prevention and suspension of money laundering and guaranteeing consumers' rights, all in a manner that is technologically neutral so that it does not obstruct the further development, and incorporation into the local legal system, of distributed ledger technologies.

Keywords

Blockchain; smart contracts; distributed ledger technology; proposed legislation

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1 Introduction

In September 2021, the Cypriot Ministry of Finance published the proposed bill for a law on Distributed Ledger Technology (DLT).¹ This bill is part of the National Strategy on Decentralised Technologies and Blockchain which was approved by the Cypriot Council of Ministers in June 2019.² The main objectives of this proposed Law are to facilitate the application of DLTs in a manner which promotes their proper use, enhances innovation, prevents money laundering, and safeguards the rights of the consumers. All these objectives will be achieved whilst also maintaining a technologically neutral stance so as to avoid hindering the development of new technologies.

This analysis provides a brief overview of some of the key concepts that will be introduced into the Cypriot legal system. The main features of the proposed bill to be discussed below are: (i) the new legal definitions introduced into the country's legal system; (ii) the assignment of property status to crypto assets; and (iii) the regulation of smart contracts. The final section of this article discusses their potential impact once the proposed legislation is adopted, whilst also taking into consideration similar legislative initiatives at an EU level.

2 Definitional aspects of Blockchain Technologies

A large volume of new legal concepts is introduced into Cypriot legislation by virtue of article 2 of the proposed Law.³ Some of the most important are the definitions of DLTs and blockchain as well as those of the different types of

¹ Bill on the Distributed Ledger Technology Law of 2021, available at <http://mof.gov.cy/en/press-office/announcements/949/?ctype=ar> accessed 04 April 2022.

² Ministry of Finance, 'Distributed Ledger Technologies (Blockchain) - A National Strategy for Cyprus' (Republic of Cyprus, June 2019), 12-17.

³ Bill on the Distributed Ledger Technology Law of 2021 (n 1), art.2

tokens, or crypto assets that may exist on those Blockchains.

The lawmakers were careful enough to distinguish between different types of DLTs, including specific categories such as 'permissioned DLT', 'public permissioned DLT', and 'public permissionless DLT'. 'Permissioned DLTs' are the information systems where only authorised participants may effect changes or add records into the distributed ledger.⁴ In turn, some of those DLT systems may be public or private in terms of readability. Another distinction is that between permissioned and permissionless DLTs; this subcategorization refers to the participants that can make changes to the information stored, with the users of the former requiring authorisation to do so, while the users of the latter can do it freely. The care and detail placed in defining these different facets of DLT are indicative of the Republic's intentions that this Law is meant to be used and relied upon, rather than merely complying with technological trends.

Most importantly though, the legislators made the distinction between DLT and 'Blockchain',⁵ recognising that Blockchain is only one application of the DLT, albeit the most popular one. 'Blockchain' is the technology of cryptographically recording data in blocks which are verified through the use of predefined mathematical algorithms, thus securing the originality of each transaction or asset. Another important characteristic of Blockchain is that it is consensus-based, meaning that all transactions which are added as blocks to the Blockchain must be verified by all other users, hence enhancing the security of each transaction. Currently, most, if not all, crypto assets rely on the use of some Blockchain. This separate definition of 'Blockchain' highlights the technologically neutral position this bill adopts, which allows for the possible emergence of different types of DLTs.

⁴ Ibid.

⁵ Ibid.

A further set of important definitions found in article 2 is that of 'tokens' or 'crypto assets'. This bill defines crypto assets as:

a digital representation of value or rights which may be transferred and stored electronically, using Distributed Ledger Technology or similar technology and is not: (i) issued or guaranteed by a central bank or a public authority; (ii) a digital representation of an official currency of a country or electronic money, and thus does not have the legal status of an official currency of a country or money; (iii) legal tender, whether or not denominated in legal tender.⁶

This definition has a number of positive aspects. With regard to money laundering, the proposed bill adopts a wider definition of crypto assets, compared to the Prevention and Suppression of Money Laundering and Terrorist Financing Law of 2007,⁷ by making clear reference to security and utility tokens. This is in line with the current standards set by the Financial Action Task Force (FATF).⁸ Though these standards are not binding, FATF has been well established as the organization responsible for setting global standards against money laundering. This definition also surpasses the current European anti-money laundering standards, as set through the 5th Anti-Money Laundering Directive.⁹ In fact, the term crypto assets as set in the proposed bill bears great

⁶ Ibid.

⁷ Prevention and Suppression of Money Laundering and Terrorist Financing Law of 2007 (188(I)/2007), available at http://www.cylaw.org/nomoi/enop/non-ind/2007_1_188/full.html [consolidated version only available in Greek].

⁸ Financial Action Task Force, 'Updated Guidance for a Risk-Based Approach to Virtual Assets and Virtual Asset Service Providers' (FATF, October 2021), available at <https://www.fatf-gafi.org/media/fatf/documents/recommendations/Updated-Guidance-VA-VASP.pdf> accessed 1 April 2022.

⁹ Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018 amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing, and amending Directives 2009/138/EC and 2013/36/EU [2018] OJ L156/43, art.1(2)(d).

similarity with the new definition the EU is planning to adopt through the Markets in Cryptoassets (MiCA) Regulation which is bound to be adopted in 2023.¹⁰ Aligning with international standards, and modernizing European ones, is another indication of the lawmakers' forward-looking stance when drafting this bill.

One last positive note on the definition of crypto assets is that, in contrast with corresponding definitions in other European jurisdictions, the Cypriot legal understanding of that term reflects the phenomenological classification of cryptoassets. What this means is that rather than defining cryptoassets in a cumbersome legalistic manner, which would make it hard for market players to formulate their policies around it, the Cypriot legislators simply embrace an effective interpretation of the way the market categorises cryptoassets as well as facilitate the wider use of DLTs. This investor-friendly move has the potential to give Cyprus a competitive investment advantage when compared to other states.

3 Property Status of Crypto Assets

Apart from providing a plethora of definitions, the proposed Law also provides context to the concept of crypto assets' property status. Article 4 of the Law gives tokens the status of personal, movable property of the person they belong to, whereas it may be owned jointly by more than one person.¹¹ The proposal then moves on to one of the bill's most important articles, in term of providing certainty to token owners. Article 5 sets out the ways in which ownership of a token may be evidenced.¹² Article 5(1) creates a rebuttable presumption in favour

¹⁰ Commission, 'Proposal for a Regulation of the European Parliament and of the Council on Markets in Crypto-assets, and amending Directive (EU) 2019/1937' COM/2020/593 final, 24 September 2020, art.3.

¹¹ Bill on the Distributed Ledger Technology Law of 2021 (n 1) art.4.

¹² *Ibid* art.5.

of a token's ownership for anyone that can demonstrate the registration in his name in a blockchain, or the possession of a private key connected with that specific token.¹³ The second subsection then provides for the way that presumption may be rebutted in the event of a private key being possessed or a block being made as a consequence of fraud, piracy, deceit, theft or error.¹⁴

Moving on to article 6, this provides for the manners in which valid transfers of a token's ownership may take place, both in a blockchain or other DLT, or alternatively off the blockchain.¹⁵ Additionally, article 7 governs the risk of double spending, preventing the previous owner after a transaction to transfer the same token again to any other person.¹⁶ Concludingly, this proposed Law provides for a robust framework under which a person may own and transfer a token, whilst also creating the necessary safeguards to protect consumers and investors against those who intent to carry out any malicious acts relating to those assets.

4 Smart Contracts

One last area that will be governed by this proposed legislation is that of smart contracts. This is another concept that is defined in article 2 of the proposed bill.¹⁷ These are basically conditions set by the contractual parties on the blockchain, in the form of code. As soon as the predetermined conditions are met and verified, a set of computers executes the actions provided for in the smart contract automatically. Regarding the introduction of this type of contracts into the Cypriot legal landscape, article 10 of the proposed bill achieves this to a great

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid art.6.

¹⁶ Ibid art.7.

¹⁷ Ibid art.2.

extent.¹⁸ More specifically, it provides that a smart contract may qualify as a valid and legally binding contract if it meets the conditions on the formation of contracts set by the Contracts Law (Cap. 149).¹⁹ Moreover, this article allows for the existence of hybrid smart contracts, in the sense of having a smart contract being a part of a broader contract, hence allowing the automatic execution of only certain terms of the said contract. In turn, article 10(2) guarantees the parties' freedom of contract by allowing for a smart contract's terms to be either formulated by the parties and then embedded into code, or alternatively, to be part of a pre-determined smart contract, that already exists in the blockchain, which is then chosen and acted upon by the parties.²⁰ Moreover, in order to facilitate the formation of smart contracts, article 12 allows for the use of electronic stamps and signatures.²¹ These provisions create the possibility for smart contracts to play a more active role in everyday deal-making, hence allowing for Cyprus-based companies to become more competitive, compared to their competitors in jurisdictions which do not allow for smart contracts.

With respect to the applicable law, article 11 provides that for all smart contracts meeting the conditions qualifying them as legally binding contracts, the governing law will be that which applies to all other contracts.²² Again, this is a provision that will harmoniously introduce smart contracts into the wider legal landscape, hence encouraging their adoption by market players.

¹⁸ Ibid art.10.

¹⁹ Contracts Law (Cap.149), available at http://www.cylaw.org/nomoi/enop/non-ind/0_149/full.html [consolidated version only available in Greek].

²⁰ Bill on the Distributed Ledger Technology Law of 2021 (n 1) art.10(2).

²¹ Ibid art.12.

²² Ibid art.11.

5 Concluding Remarks - Putting the proposal into perspective

Though this analysis has been fairly technical so far, this last section aims to demonstrate the potential impact this bill could have on the way business operate in Cyprus. Regarding the sought-after legal certainty, although this is something that will become visible over time, the *prima facie* impression is that this will be brought about with the adoption of this proposed bill. The rules it creates allow for the formation of a solid legal framework without hindering the application of future developments by being too rigid. By embracing emerging technologies like crypto assets and smart contracts, Cyprus aims to establish itself as an attractive investment destination for technologically friendly corporations as well as to encourage already established corporations to make the transition into the digital era.²³

The importance of the creation of this framework lies in the potential benefits it could create both for the state and for private sector players. Through this legislative piece, Cyprus opens its market for the use of what is arguably the most dynamically developing class of assets in the world. With more than 10.000 cryptocurrencies already in circulation,²⁴ a number which is expected to multiply exponentially in the coming years due to the increasing popularity of non-fungible tokens, the introduction of those assets into the legal system will create an unprecedentedly large market for investment opportunities.

Nonetheless, a point of concern regarding this proposed bill are the delays that can be observed in its adoption. In its annual report for 2021, the Ministry of

²³ Ministry of Finance (n 2) 11-12, 23.

²⁴ Raynor de Best, 'Quantity of cryptocurrencies as of February 3, 2022' (Statista, 03 February 2022), available at <https://www.statista.com/statistics/863917/number-crypto-coins-tokens/#statisticContainer> accessed 9 April 2022.

Finance maintained the position that the proposed bill would be submitted to the House of Representatives within 2022.²⁵ However, as of September 2022, the proposed bill seems to be undergoing legal vetting and other technical controls by the Ministry of Finance and the Law Office of the Republic. Even if the proposed bill does reach the House of Representatives, there will still be some distance to cover prior to its adoption as it will have to undergo readings in the House's relevant parliamentary committees prior to it reaching the plenary session of the Republic's legislative body. Such delays carry the risk of depriving the local legal system of all the competitive advantage that would have come with an early adoption of the bill.

Another issue that may pose questions in the near future is the adoption of the aforementioned MiCA Regulation. It would be interesting to examine how the two legislative pieces would interact when they both come into effect. What seems worrisome is that any overlap between the two will increase legal uncertainty until their respective scopes are made clear in practice. Yet it must be noted that the MiCA Regulation is a much more extensive legislative piece. Not only does it introduce concepts regarding crypto assets into the EU's *acquis*, but it also establishes a comprehensive regulatory framework which vests obligations and rights to crypto assets issuers, national competent authorities, the European Securities and Market Authority, the European Banking Authority, and the European Central Bank.

To the contrary, the proposed Cypriot bill has a much wider aim, which according to its preamble is:

²⁵ Ministry of Finance, 'Annual Report of the Ministry of Finance for 2021' (Republic of Cyprus, April 2022), 11.

- (a) Facilitating the application of distributed ledger technology (“DLT”), including blockchain technology, in a technologically neutral manner which achieves a balance between the need to promote and properly use new technologies and enhance innovation and the need to prevent money laundering and safeguard the rights of consumers.
- (b) Promoting innovation and growth, while at the same time affording protection to investors as well as consumers.
- (c) Applying the principle of technological neutrality while at the same time providing legal certainty, to promote the proper use of smart contracts in Cyprus.²⁶

Accordingly, one could argue that when both legislative pieces are finally adopted, their respective application would complement one another with regard to crypto assets.

Turning to smart contracts, the situation becomes somewhat more complex. This is due to a proposal published in February 2022 for a new European Data Act.²⁷ Though analysing this proposal in its entirety would go beyond the scope of this article, there are still some points to mention concerning smart contracts. The proposed Data Act does provide a definition for smart contracts in article 2 which defines them as ‘a computer program stored in an electronic ledger system wherein the outcome of the execution of the program is recorded on the electronic ledger’.²⁸ This definition does resemble the one discussed above in the proposed bill. However, a truly contentious aspect of the proposed Data Act is the fact that it sets some very specific requirements for

²⁶ Bill on the Distributed Ledger Technology Law of 2021 (n 1) preamble.

²⁷ Commission, ‘Proposal for a Regulation of the European Parliament and of the Council on harmonised rules on fair access to and use of data (Data Act)’ COM/2022/68 final, 23 February 2022.

²⁸ *Ibid* art.2.

smart contracts. More specifically, article 30 provides among others that 'the smart contract shall include internal functions which can reset or instruct the contract to stop or interrupt the operation to avoid future (accidental) executions'.²⁹ The effect of this provision is that it essentially requires smart contracts to be stoppable. This has caused academics like Schrepel to warn that this requirement will essentially outlaw Blockchain oracles that cannot be redesigned.³⁰ The current formulation of article 30 of the proposed Data Act arguably sacrifices technological neutrality by imposing a rather stringent requirement on smart contract formation. It is entirely possible that if the Data Act is adopted in its current form, it will cause uncertainty to those that make use of smart contracts, thus undermining their application.

This formulation comes into contrast with that of the proposed Cypriot bill where no such requirements have been imposed. Indeed, the wording of the proposed bill is in accordance with the original aim of the lawmaker that was to facilitate the use of new technologies in a technologically neutral manner. Though the stance of the proposed bill is more preferable as it avoids the risk of stifling the natural development of the technology surrounding smart contracts, its application may be hindered with the adoption of the EU Data Act. Nonetheless, the eventual formation of the legal landscape regarding smart contracts is something that remains to be seen in the coming years as more legislation is adopted and the use of the technology itself proliferates.

Conclusively, the addition of key concepts like smart contracts and crypto assets through this bill opens up Cyprus as an investment destination for

²⁹ Ibid art.30(1)(b).

³⁰ Sergio Goschenko, 'EU Data Act Proposes Shutdown Function for Smart Contracts' (Bitcoin.com, 2 March 2022), available at <https://web.archive.org/web/20220413011702/https://news.bitcoin.com/eu-data-act-proposes-shutdown-function-for-smart-contracts/> accessed 3 September 2022.

corporations using crypto assets. This is a rising market with more than 18.000 businesses already accepting cryptocurrency payments as well as over 300 million individual crypto users worldwide.³¹ Therefore, attracting any number of such service providers will create a series of benefits for both the state and the private sector alike.

The definitions included in the proposed bill will introduce an increased sense of certainty about the use of crypto assets which, combined with their unambiguous proprietary status, will likely aid towards their eventual adoption by more market players. The same positive outcome seems to flow from the provisions of the proposed bill regarding smart contracts. Their adoption will help towards their harmonious inclusion into the wider field of contract law in Cyprus. However, at present, this is only a proposal. It remains to be seen when this bill will be adopted, and what the reactions will be when that time comes. At present, the delays concerning its adoption, along with the simultaneous consultation for the adoption of corresponding legislation at an EU level, seem to increase – rather than decrease, legal uncertainty.

³¹ TripleA, 'Cryptocurrency across the world' (2021), available at <https://triple-a.io/cryptocurrency-ownership/> accessed 1 April 2022.