УДК 347.2
DOI: 10.31359/1993-0909-2018-25-2-114

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ВІРТУАЛЬНА ВАЛЮТА В ЦИВІЛЬНОМУ ПРАВІ УКРАЇНИ: СТАН, ТЕНДЕНЦІЇ, ПЕРСПЕКТИВИ

Анотація. *У статті розглянуто особливості віртуальної валюти в цивільному праві України, зокрема сучасний стан, проблеми, тенденції та перспективи. Досліджено технічні аспекти роботи технології блокчейну та їх вплив на правове регулювання випуску та обігу криптовалюти. Окреслено підходи до регулювання криптовалюти в інших країнах в контексті їх порівняння з українським досвідом. Проаналізовано віртуальну валюту як об'єкт цивільного права, особливості й основні проблеми у використанні блокчейну, що склалися на сучасному етапі. Описано проект Закону, покликаний врегулювати відносини з обігу криптовалюти в Україні, наведено його характеристику, основні переваги і вади. Зроблено висновки про тенденції та перспективи законодавчого врегулювання випуску й обігу криптовалюти в Україні.*

Ключові слова: «приватні» гроші, віртуальна валюта, криптовалютні транзакції, цивільне право України, криптовалюта як об'єкт цивільного права, правовий режим криптовалюти.

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ВИРТУАЛЬНАЯ ВАЛЮТА В ГРАЖДАНСКОМ ПРАВЕ УКРАИНЫ: СОСТОЯНИЕ, ТЕНДЕНЦИИ, ПЕРСПЕКТИВЫ

Аннотация. *В статье рассмотрены особенности виртуальной валюты в гражданском праве Украины, в частности современное состояние, проблемы, тенденции и перспективы. Исследованы технические аспекты работы технологии блокчейн и их влияние на правовое регулирование выпуска и оборота криптовалюты. Определены подходы к регулированию криптовалюты в других странах в контексте их сравнения с украинским опытом. Проанализированы виртуальная валюта как объект гражданского права, особенности и основные проблемы в использовании блокчейна, сложившиеся на современном этапе. Описан проект Закона, призванный урегулировать оборот криптовалюты в Украине, представлена его характеристика, основные преимущества и недостатки. Сделаны выводы о тенденциях и перспективах законодательного урегулирования выпуска и оборота криптовалюты в Украине.*

Ключевые слова: «частные» деньги, виртуальная валюта, криптовалютные транзакции, гражданское право Украины, криптовалюта как объект гражданского права, правовой режим криптовалюты.

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VIRTUAL CURRENCY IN THE CIVIL LAW OF UKRAINE: STATE, TRENDS, PERSPECTIVES

Abstract. *The article deals with the peculiarities of the virtual currency in the civil law of Ukraine, namely a current state, problems, trends and prospects. The technical aspects of the work of the blockchain technology and their influence on the legal support of the emission and turnover of cryptocurrency are explored. The approaches to the regulation of cryptocurrency in other countries in the context of their comparison with Ukrainian experience are considered. The cryptocurrency as an object of the Ukrainian civil law is analyzed, as well as the peculiarities and main problems using of blockchain at the present stage. A draft of law designed to regulate turnover of cryptocurrency in Ukraine, its characteristics, main advantages and disadvantages are described. Conclusions on the trends and prospects of legislative regulation of the emissioni and turnover of cryptocurrency in Ukraine are made.*

Keywords: 'private' money, virtual currency, cryptocurrency transactions, cryptocurrency as an object of the Ukrainian civil law, legal regime of cryptocurrency.

INTRODUCTION

One of the non-titled and not directly foreseen by the law objects of civil law are so-called virtual currencies – a kind of "private" money issued not by the public authority by emission of restricted funds (bitcoin, etc.) that are subject to conversion in certain circumstances to a real money [1; 2; 3]. The negative attitude and limitations by the states emission of private money is largely due to the lack of state oversight of the entities that issue them. The availability of private money offers an opportunity to use alternative payment units, which negatively affect the course of state money and, in theory, can reduce demeand for them.

The status of entities carrying out the issue, exchange, storage and operations with private money ("platforms of private money"), is not clearly defined for most virtual currencies [4; 5]. The absence of status of financial organizations on such platforms makes impossible the traditional currency control and bank supervision of private money. They are not subject to the consumer identification requirements (KYC); they can also deliberately weaken the control, thereby indirectly supporting criminal operations, money laundering and terrorist financing (ML/TF).

In the absence of the control over volume of emission of private money and the availability of security, the probability of a default of the issuer of private money is significantly greater than the probability of default of the state. This causes increased volatility (unsteadiness) of the course of private money and additional risks for their holders, which further increases volatility. Non-cash money is subject to failures and other technical risks. A failure can lead to theft, disappearance of money, a sudden in-

crease in money supply and, consequently, depreciation of money. At the same time, platforms of private money do not want and can not be responsible for this.

In the regulatory sphere all possible measures were taken to reduce the mentioned risks. Platforms of private money equated to payment systems and banks with the corresponding requirements of customer identification, which meant:

− complete ban on anonymous payments or limitation of their maximum sum, storage of transaction history;

− establishment of restrictions for platforms for the management of user accounts and emission of unsecured money in order to avoid uncontrolled animation (formal increase);

− restriction of access of legal entities to the use of platforms to avoid the «leakage» of private money to the settlement system.

Thus, the private money platforms were reduced to payment systems, in which the use of virtual currency served only for technical purposes – transactions were simplified between clients who have invested public money into the system [1]. This status offsets most of the benefits of private money. Theoretically, a payment system operating over the Internet can act extraterritorially while being offshore, but all attempts to create such an independent system have invariably encountered active opposition from financial regulators and law enforcement agencies.

1. MATERIAL AND METHODS

At the present stage in Ukraine there is a situation in which the active development and use of cryptocurrency occurs in the absence of a regulatory framework for its regulation. This gives rise to a number of problematic legal situations and more acutely raises the problem for the need in legislative regulation of virtual money. The Verkhovna Rada of Ukraine is considering the Draft Law of Ukraine "On the Circulation of Cryptocurrency in Ukraine" [6]. Its provisions that have not yet entered into force may regulate in future:

− the concept of cryptocurrency;

− blockchain system and entities of crypt-currency operations;

− mining of cryptocurrency;

− use of cryptocurrency and cryptocurrency transactions;

− activity of cryptocurrency market.

Trends and prospects of legal regulation of cryptocurrency in Ukraine are due to the peculiarities of this legal phenomenon. Cryptocurrency – is not the first in the history example of creating private money, but first of all they differ technologically:

− decentralized (the central issuer is absent);

− not tied to material objects, including account holders, which complicates control and regulation of cryptocurrency;

− in the technology of blockchain and its individual implementations (in particular, in cryptocurrency), states see the threat as it involves the effective replacement of state

functions by software algorithms. In the long run, this will lead to a loss by the state part of functions in the settlement sphere, which, of course, does not correspond to theinterests of the ruling groups.

Before analyzing the current state of legislative regulation of cryptocurrency in Ukraine, comparing it with the experience of individual countries and outlining the prospects of further development, it is necessary to consider technical aspects of work of blockchain technology, since it is they who most influence the resolution of legal issues concerning the issue and circulation of cryptocurrency. A clear answer, exactly what is the cryptocurrency, how exactly the mechanisms of its extraction and realization are provided, will help to establish its place in the legal field.

2. RESULTS AND DISCUSSION

2.1. The mechanism of work of blockchain

By the end of XX century anonymous payment systems and private money exchanges, even though they were technological possibile, from political point of view they were completely unacceptable for the major financial market state players. Thus, at the beginning of 2000 the architecture of the Internet, the computing powers of its nodes and the increase of its connection speede enabled in some cases to switch from multilevel architectures of networks ("client-server") to decentralized peer-to-peer architectures in which individual network members interact without centralized server (peer-to-peer, p2p). The use of decentralized architecture in financial sphere has become a matter of time.

Though in vast majority of cases, multilevel architectures are most efficient, one-level provide greater reliability, as in case of failure of one member, others remain active. For such networks, it has been used in situations of constant pressure from the outside, including the exchange of controversial content. The example are decentralized file-exchange networks (and partially decentralized, like BitTorrent), and also anonymous proxies.

The architecture of one-level network and technology of electronic digital signature needed to identify participants of network were well developed and tested already in the middle of 2000s. The only problem remained was the forging of information about committed transactions by unfair participants of the system (the problem of multiple spending). In other words, the availability in decentralized system different information about the fate of the payment unit forms the problem at determining the "right" transaction. Without centralized intermediary, there is no standard network, participant who can be trusted. It is this problem that solved the technology of blockchain ("chain of blocks"), on which the implementation of cryptocurrency (including bitcoin), as well as non-payment implementations of distributed ciphered registers, was established. Decentralized payment system, although carries certain risks, in some situations may be more efficient than centralized, since remittances made with the help of such system

do not require the participation of intermediaries, and, correspondingly, can not be cancelled or changed by these intermediaries [1].

Blockchain, except the technology itself, is called the direct database – "distributed registry". "Distributed" means that each participant keeps (and synchronizes) full version of base or, at a minimum, records of large number of recent transactions. Thus, it is impossible to liquidate blockchain by disconnection some participants from network: base is saved for those who stayed. Base storage means the participation in the system and, accordingly, the presence of unique key necessary for addressing transactions (participant address, or "wallet"). The presence or absence of any other information about the user in base odes not influence the work of the system, and therefore blockchain can be anonymous, that is contain only address of participants (their "wallets") [1].

The most widespread implementation of blockchain technology is a cryptocurrency bitcoin, blocks of which are sealed since 2009. The first operations of exchange of bitcoins to property and money took place in 2010; at the same time there were exchanges, which provided an opportunity to follow the courses of cryptocurrency. As of October 2017, its base was about 136 GB and has been steadily increasing [1]. The bitcoin base is open: any participant can check transactions that were carried out by other participants. The amount of available information can be different in different blockchains, but the more open the network, the more it is protected from breakage. In any case and in any implementation of the blockchain, in the course of a transaction its possibility is checked – for example, whether there is enough cryptocurrency in participant for the transfer. In this way, the emergence of funds from nowhere is warned.

The only problem in this case is the "multiple spending", that is determining the correct transaction in case of sending the same funds to different addresses.

The blockchain proposes a technological solution to this issue. The base consists of a chain of successive blocks (hence the name of the technology, the block chain). Each next block contains indentifier of the previous one, and also information about the "difference" of the performed transactions. Thus, it is impossible to falsify transactions already existing in the base, as this will lead to the changing of all new ones. The introduction of new transactions into base is much more complicated, in what is the whole essence of blockchain.

The authors of the system deliberately complicated the creation of new blocks: for bitcoin they can be created no more than once every ten minutes. This is achieved by complex mathematical calculations. To enter a new block into the system participants should fulfill a task that is solved only thorugh an overrun. The one who first finds the correct number receives a reward from the system: the right to "seal" the next block of transactions and supplement it with a common base. If the participants increase their capacity and solve tasks too quickly, the system automatically complicates the requirements so that to the emergence of new blocks will be spent an average of at least no more than ten minutes.

This process is called mining, by analogy with the extraction of the ore. Mining – is a technology for extraction of virtual money by solving in Internet complicated mathematical tasks on special equipment called "farm" [3]. With the help of mining the emission of new money units (in a form of commissions) is realized. The emission can be decreased or even stop with time, for example, in bitcoin, where thus it is guaranteed the stability of money stock [1].

Therefor, the algorithm of work of blockchain can be imagined in such a way. If the participant of the system wants to fulfil transactions, he should inform about it other participants. Those who are ready to take part in mining, check the possibility of transaction and start calculations. The participant who received the correct result the first "seals" the block and sends updates to all other participants of the network. If he send at once several mutually controversial transactions (multiple spending), only one happens – the one that first came to the miner who found the solution. The blockchain technologically solves the risk of multiple spending as a result of unscrupulous actions by realization of the technology of the distributed (decentralized) database guided by the actions of participants. It is practically impossible to influence the network from the outside while there are enough participants or their total capacity. By default, the blockchain is open and anonymous; this ensures maximum decentralization and protection of the network. It is quite possible to make network based on the blockchain on-anonymous and closed, but so far all popular networks are anonymous [1].

While most members of the network remain independent, it is impossible to falsify the information in the earlier blocks in the blockchain, as it is impossible to carry out transaction for any of the participants. The network based on the blockchain is always consistent – for example, it is possible to track the path of each bitcoin from time of its appearance in network. The active participants (miners) are interested in the correct work and development of the network, since they benefit in the form of commission, in fact, for maintaining its network performance.

Since "impossible" transactions are excluded and all participants have equal rights, the volume of cryptocurrency and the change of this volume (emission) are determined in advance. The cryptocurrency can be distributed between the participants from the beginning, as well as emitted and distributed depending on various factors (the existence of the base, the status of the participant of the system or its local computing power). Thus, the distribution of bitcoins in the corresponding system is based on the computing power.

The blockchain technology was deliberately not patented, and therefore, soon enough, there were alternative implementations of cryptocurrency (alcoins). The most popular cryptocurrency based on identical with Bitcoin-protocol is Lightcoin – the cryptocurrency that uses a little other encryption algorithm providing faster execution of assignments. Most alcoins are used as speculative instrument and quickly lose popularity as means of exchange and accumulation. New decentralized platforms were created based on the blockchain: an alternative DNS system of internet-addressing

Namecoin, Ripple, which is positioned as infrastructure technology for interbank payments, and Etherium – the ecosystem of decentralized applications, implemented as the only decentralized virtual machine. Technology went beyond the scope of creating virtual money: the distributed platforms with the function of smart-contacts, the precursor of which was the classic blockchain, are already considered as mechanism for realization of alternative system of transactions which are not associated with the state involvement and legal regulation [4].

2.2. Cryptocurrency as an object of civil law

World practice has formed various approaches to cryptocurrency as object of law. At various times and in different countries the cryptocurrency was considered as:

- payment means (Italy, Japan);
- financial instrument;
- money surrogate (Ukraine, Russian Federation, Belarus, this position was also expressed in in the European Commission);
- goods (for the first time – in the USA);
- digital equivalent of value;
- the form of digital property;
- intangible asset.

Today, in most countries of the worl, the cryptocurrency is not considered to be money, currency or payment means, but qualified as intangible asset or goods [7]. The subject of the discussion is the question of the nature of the right to cryptocurrency, particularly, whether it is a subject of property right, exclusive rights, etc. [8]. The purpose and technological properties of blockchain technology are determined by the prevailing general legal understanding of cryptocurrency in native literature and public legal consciousness as intangible digital asset, which defines units of value, the subjective rights of which are fixed in accordance with records in distributed registry (blockchain).

One of the most acute problems of civil circulation of virtual currency in Ukraine is the search for suitable objects of law to which it could be equated. The records in the blockchain are absolute rights and by nature are similar to things: their number is known; they move from owner to owner in a strictly defined order and do not contain any claims rights (like securities). The native doctrine of law for a long time avoids the possibility of recognizing intangible things. For example, non-cash and non-documentary securities are recognized as objects of claim rights; due to the lack of central depositary (registrar) of cryptocurrency do not foresee the emergence of a claim right from their owner.

In view of this, the legislator does not even have the theoretical possibility to consider cryptocurrency to be object of claim rights. In such a situation, there are significant chances to regulate cryptocurrency as the object sui generis (as at one time exclusive rights were regulated in Russia, despite objections of supporters of proprietary concepts). No less probable is the use of substantive law by analogy (as was the case, for example,

in determining the legal nature of electroenergy), which would give rise to another fiction in legal regulation. In some respect this can be a better option than analogy with the right to the intellectual property (the blockchain = database) or with «information» (for example, according to the law of RF "On Information, Information Technologies and Information Protection" [9]).

The native settlement system is more or less closed: at receipt all funds are subject to currency control, which eliminates most of the suspicious and criminal transactions. It is clear that separate loopholes for dirty money are kept – offshore, criminal banks in third world countries, etc. However, a complete path to the settlement system for them is closed. The legalization of cryptocurrency in one way or another opens this way; this is why even partial legalization of them is hindered in order not to give cryptocurrency systems access to financial systems. And even haven decided on this step can face a powerful counteraction from the side of FATF and SWIFT [1].

Given to inconsistency of cryptocurrency with none of the actual objects of civil law, their full legal settlement requires either the creation of new object of civil rights in the actual system of objects, or the formation of the new system of objects of civil rights. However, from the ppoint of view of legislator it is easier to equate cryptocurrencies to one of the actual objects of civil rights, despite the probability of partial inadequacy of such regulation of the essence of cryptocurrency and the resulting confusion.

It should be taken into account that in most countries of the world the cryptocurrency is not considered money or currency, it is mainly qualified as intangible asset or goods and, more often, does not act as a legal payment means. At the same time, operations with cryptocurrency are equated with barter operations. This position is criticized, since under such conditions the financial components of cryptocurrency, which is transferred to the production sphere and into the sphere of goods turnover, are lost; thus losing is what it was created for, which does not contribute to the development of interbank cooperation and financial technologies [5].

2.3. Bitcoin in the practice of the Court of Justice of the European Union

The main features and legal regime of virtual currency of bitcoins (as one the most common types of non-traditional currencies) is determined by European Court of Justice's jurisprudence. Particularly, this decision on the taxation of value added tax on cryptocurrency transactions in the "Tax Authority of Sweden (Skatteverket) against David Hedqvist" of October 22, 2015 [10].

The court considered the question of the taxation of value-added tax on transactions with cryptocurrencies in connection with the provision by the company of the respondent of the services for the exchange of traditional currencies into bitcoin virtual currency. A court decision is an important document for understanding the European approach to the definition and regulation of cryptocurrency. It is possible to allocate from it the following basic points:

1. A virtual currency can be defined as type of unregulated digital money emitted and controlled by its developers and accepted by members of a particular virtual community. Bitcoin virtual currency is one of the virtual "two-way flow" currency schemes that users can buy and sell on an exchange basis. Given their use in the real world, such virtual currencies are similar to other convertible currencies. They provide the possibility to buy both real and virtual goods and services.

2. Virtual currencies are different from electronic money, since they are not expressed in traditional accounting units, such as the euro, but are expressed in virtual units such as "bitcoin".

3. Operations for the provision of services for the exchange of traditional currency to bitcoin virtual currency and vica versa must be carried out electronically through the website of the company. The company operator will buy units of bitcoin virtual currency directly from private individuals and companies or on international exchange sites. In the future the company will resell the units through an exchange site or store.

4. Bitcoin virtual money sold by the company-operator is such that the operator purchased directly on the exchange site after the client placed the order, or such that the company already had in stock. The price offered by the company-operator for clients will be based on current price on a specific exchange site, to which a certain percentage will be added. Te difference between the purchase price and the sale price is the profit of the company-operator. The company will not charge any other fees.

5. Transactions for the provision of services for the exchange of traditional currency into the bitcoin virtual currency and vica versa are limited to the purchase and sale of bitcoin virtual units in exchange for traditional currencies. From the foregoing, it does not seem that these operations include payments made with the help of a bitcoin. Such operations are the provision of exchange services for remuneration.

6. The bitcoin virtual currency with two-way flow that will be exchanged for traditional currencies in the context of exchange operations can not be describes as "tangible property", given that the virtual currency has no other purpose other than being a payment instrument. The same applies to traditional currencies – money that serves as a legal means of payment.

7. Transactions for the exchange of traditional currency to the bitcoin virtual currency and vice versa, which consist in the exchange of different means of payment, do not fall under the concept "supply of goods". In these circumstances, these operations are the supply of services for remuneration.

8. Provision of services for the exchange of traditional currency into the bitcoin virtual currency and vica versa provides the existence of a bilateral legal relations between the operator company and other party of the agreement in which the parties mutually agree on the transfer of the amount of currency and the receipt of the corresponding value in virtual currency with a two-way flow or vice versa.

9. It is also clear that the operator company for services will receive a remuneration equal to the margin that it will include in the calculation of the echange rate at which it is ready to sell and buy the relevant currencies.

10. In order to determine whether the supply of services is paid, it does not matter whether the remuneration is expressed in the form of commission payment oe certain fees.

11. Operations for the exchange of traditional currencies into the bitcoin virtual currency and other non-traditional currencies and vica versa, as long as such currencies are accepted by the parties as an alternative to the legal payment means and do not have any purpose other than to serve as a means of payment, are financial transactions.

12. The "bitcoin" virtual currency, being a contractual payment means, can not be considered as a current account, a deposit account, a payment or a transfer. In addition, unlike deposit and current accounts, payments, transfers, debts, checks and other negotiable instruments, the "bitcoin" virtual currency – is a direct payment means between the operators who accept it.

13. Unless otherwise provided by the law of the respective country, operations involving the "bitcoin" virtual currency, other non-traditional currencies, are not used as legal payment means.

14. The "bitcoin" virtual currency is neither a security guaranteeing ownership, shares in companies or associations, nor debt nor other securities giving right to the property of legal entities and other securities that can be equated with their character with the other securities equate with the right of ownership.

2.4. Status and prospects of legal regulation of blockchain and cryptocurrency

The need to regulate the blockchain and cryptocurrency puts a number of new challenges to the state. The blockchain is an entirely new technology aimed at the technological solution of a number of tasks previously provided by state regulation. The problem of double spending, the identification of the owner, the execution of smart-contracts – they are all solved in technological rather than legal way: the action becomes impossible due to asymmetric encryption and chain of blocks, but not because of the legal prohibition and state supervision [1].

This approach entails fewer costs, but does not take into account the boundary situations and does not have the flexibility inherent in legal regulation. The blockchain admits a cross border, global data exchange, and therefore the same problems are relevant for its regulation as for the regulation of global networks in general. First of all, this is a problem of exterritoriality in cross border relations. Each state has its own traditions of legal regulation of information technologies; the international regulation of this sphere is minimal. The only adjacent sphere in which a strong international cooperation (bsed on the FATF) operates is the fight against money laundering, but on its basis it will be difficult to reach any international agreements on cryptocurrency.

The regulation of cryptocurrency and blockchain is partially related to currency and financial legislation, and also to the security market, which was traditionally regulated within national jurisdiction. So far, there is no recognized practice for legal regulation in sphere of cryptocurrency (and the practice of regulation of blockchain). The use of the blockchain technology for solving various problems (cryptocurrency, distributed storage and exchange of information, public offer, and performance of contracts) requires the application of legal norms from various fields. As a result, the legislator has a choice: the gradual extension of traditional norms to various realizations of blockchain or acceptance of centralized regulation, which takes into account the principles of building of any decentralized system. It is supposed that the regulation of cryptocurrency will give a possibility to use them often as an exchange means, which will reduce the speculative component in their use and, accordingly, the volatility of cryptocurrency market. The regulation will attract big business to operations with the use of cryptocurrency, which will reduce the shadow market and improve the reputation of cryptocurrency, which in turn will also attract medium and small businesses to such operations. An increase in the number of participants in the respective blockchains will increase their decentralization, and, accordingly, reliability [1].

In many countries of the world and international organizations the possibilities of the blockchain technology in different spheres of life are actively explored. Great prospects for the development of this technology are seen in the filed of finance, that is as a promising tool for payments and settlement and clearing operations. Therefore, the most active steps for its comprehension, legal protection and regulation are made by financial and monetary regulators, in particular Japan, Singapore, Hong Kong, Great Britain, and China [11]. The introduction of the blockchain is a priority of the largest banks of the world and the most innovative countries – Sweden, Estonia, Denmark, etc. Such developed countries as Switzerland, Canada, and the USA do not hinder the development of cryptocurrency, even actively develop and implement the blockchain technologies. In the USA, for example, its use is completely legal under control of its conversion into dollars and vica versa [12].

Today the legal regime of cryptocurrency in Ukraine is not determined. The calculations are conducted mainly by concluding agreements of a mine, in which the cryptocurrency acts as a commodity that is exchanged for real goods, services or work. Operation on the acquisition or alienation of cryptocurrency can be recognized as a one way transaction, giving of goods or, in general, a transaction that is contrary to the law [5].

The absence of legal regulation of cryptocurrency in Ukraine is much more acute problem than the lack of regulation of the blockchain in general. In this case, without normative regulation the cryptocurrency can not use honest entrepreneurs: it is impossible to justify the profits received from the sale of cryptocurrency, to pay taxes from them, pass currency control, and carry out mining legally.

In Ukraine there is no a single clear position concerning the legal regime of cryptocurrency. In 2014 the National Bank of Ukraine provided an explanation in which

noted that the bitcoin cryptocurrency is a monetary surrogate that does not have a real value. Although formally mining (manufacturing of cryptocurrency) is not a violation, the NBU advised to refrain from using cryptocurrencies, since its status is not legally determined, and therefore the regulators are not liable for possible risks and losses associated with the use of virtual currencies in settlement operations [13].

However, in recent years, the position of considering of cryptocurrency as a new financial instrument with elements of private money has become increasingly widespread, which has incouraged the implementation of relevant state policy. Thus, the Draft Law "On the Circulation of Cryptocurrency in Ukraine" was developed on 06.10.2017 No. 7183, which is currently under consideration by the Verkhovna Rada of Ukraine and is intended to regulate the main provisions concerning the use of cryptocurrency in Ukraine.

2.5. The concept of the Draft Law "On Circulation of Cryptocurrency" on 06.10.2017 No.7183

This bill is based on the idea that the NBU should control the cryptocurrency, all its types (bitcoin, etherium and even about eight hundred denominations of virtual money) are proposed to be legalized, and for manipulating with cryptocurrency at the exchange, to collect the tax to the state treasury.

It defines the cryptocurrency as program code (a set of characters, numbers and letters) that is the object of ownership, which can act as a mine, the information about which is entered and stored in the blockchain system as the accounting units of the current blockchain system in the form of data (program code) [6].

The state is not liable, and also does not reimburse the value of cryptocurrency in case of its depreciation or loss for any other reasons. The state does not guarantee and does not take any measures to ensure the activity of online-services for the exchange of cryptocurrency.

Consequently, the developers of the mentioned Draft Law proposed to adhere to the already established in the world practice approach and recognize the cryptocurrency not money, but the product, and apply to cryptocurrency operations general provisions of the contract of mines [5].

Legal principles of the blockchain system and the status of subjects of cryptocurrency operations [6]:

The subjects of cryptocurrency operations carry cryptocurrency transactions, that is operations for the transfer of cryptocurrency, the information about which is stored in the blockchain system.

The blockchain system is a decentralized public registry of all implemented cryptocurrency transactions carried out by the subject of cryptocurrency operations.

The subjects of cryptocurrency operations are cryptocurrency exchange, the user of the blockchain system, the cryptocurrency owner, and miner.

The cryptocurrency owner is any individual, individual entrepreneur or legal entity that legally holds and owns a cryptocurrency.

Miner – any individual, individual entrepreneur or legal entity that, through its own and/or leased specialized equipment, ensures the efficiency and safety of the blockchain system, cryptocurrency transactions, and, depending on the rules of the blockchain system, receives remuneration of the blockchain system and/or acquires ownership rights to cryptocurrency.

Mining is defined as the computational operations performed by the miner with the help of own and/or leased specialized equipment in order to ensure the efficiency and security of the blockchain system and, depending on the conditions of the blockchain system receives the remuneration of the blockchain system. The cryptocurrency is obtained as remuneration of the blockchain system, as a result of its generation in the blockchain system by the miner, who fulfilled necessary conditions for its obtaining. It is owned by miner and is subject to taxation [6]. The mining activity is planned to introduce to the Classifier for the support of functioning of the distributed database in class 63.11 "data processing, information placement on web-sites and related activities", since mining includes support services and the operation of the distributed data registries including using the blockchain technology, data processing and smart-contracts in distributed blockchain-registries [14].

This definition of mining carries purely technical character and does not provide any criteria for the legal qualification of this type of activity. The consolidation of such a legal definition of mining does not solve the problem of its qualification and in general does not make any practical sense. Obviously, the law should stipulate that mining is a type of entrepreneurial activity that is more consistent with the world practice and facilitates an approach to solving the question of taxation of this activity [5].

The order of using cryptocurrency and implementation of cryptocurrency transactions [6]:

The subject of cryptocurrency operations has the right to freely dispose cryptocurrency, in particular, to carry operations for mine (exchange) of cryptocurrency of any kind to another cryptocurrency, to exchange it into electronic money, currency values, securities, services, goods, etc.

To the cryptocurrency the general norms are applied that can be spread to the right of private property.

In accordance with the legislation of Ukraine, the general provisions about the mine contract are applied to cryptocurrency transactions.

Data on cryptocurrency transactions coincide in the blockchain system and are open and public for all subjects of cryptocurrency operations.

The cryptocurrency transactions contain information about the cryptocurrency basket from which the transfer was, the recipient, the amount of transfer, the timestamps that determine the moment of transfer. The cryptocurrency basket is a specialized software or platform that allows the user of the blockchain system to store the cryptocurrency and carry cryptocurrency transactions.

The subject of cryptocurrency operations independently guarantees the conduct of transactions of cryptocurrency. The subject of cryptocurrency operations undertakes to keep data on carried out transactions within 5 years.

The activity of cryptocurrency exchange [6]:

The cryptocurrency exchange is an organization that provides the interconnection between the subjects of cryptocurrency operstions and exchange of the cryptocurrency into electronic money, currency value, securities.

The creation and activity of cryptocurrency exchange is carried out solely in accordance with the procedure established by the National Bank of Ukraine.

The cryptocurrency exchange is obliged to carry out monitoring of all transactions, identification and personification of the subject of cryptocurrency operations in the order established by the National Bank of Ukraine.

The exchange of cryptocurrency to electronic money, financial values, and securities is carried out exclusively by the cryptocurrency stock exchange.

The income received by cryptocurrency exchange on the implementation of cryptocurrency operations is subject to taxation in accordance with the reuirements of the current legislation of Ukraine.

The exchange (moving) of cryptocurrency can be carried out with the help of online-services on cryptocurrency exchange on the Internet.

The subject of cryptocurrency operations carries the mine (exchange) of cryptocurrency with the help of online-services on cryptocurrency exchange at their own risk.

The above mentioned provisions on cryptocurrency exchange mainly have framework character and directly contain clauses of regulatory character. A number of important issues in this market are generally left unregulated. In this regard, the world practice of the legislative regulation of the issue and placement of token by analogy with securities deserves attention [7].

CONCLUSIONS

For the worlds leading countries the virtual currency is a fully fledged and legally regulated part of the economy. It is not considered as money, currency or payment means, but is qualified as an intangible asset or commodity. The possibility of using the blockchain technology in different spheres, especially financial ones, are actively explored and implemented. For example, the introduction of the blockchain is a priority for the banks of such countries as Sweden, Estonia and Denmark.

Today there is a situation in Ukraine in which the active use of cryptocurrency s combined with the lack of legal support of this process. Most settlements occur through the conclusion of mine agreements, in which the cryptocurrency acts as a commodity that is exchanged for another product or services. The absence of a sinle position and interpretation leads to the fact that such operation can be recognized as one-way transaction or giving of the goods, and a transaction that is contrary to the law. Such contradictions lead to problematic legal situations and put the more acue questions about the

legislative regulation of virtual currency. The difficulty here is in the absence of the relevant object of civil law, to which it could be equated. Therefore, for a full legal settlement it is necessary to either equalize the cryptocurrency to one of the existing objects (which is the easiest way for the legislators), or to create a new system of objects of civil rights.

The conducted research gives grounds for the conclusion about the positive dynamics in legal regulation of virtual currency. Despite explanations of the National Bank of Ukraine in which the cryptocurrency was named as money surrogate and its use was used to be illegal, the development and spread of the blockchain technology in a few years led to a revision of such position and the implementation of the first real steps for its legalization. This is, in particular, the Draft Law "On the Circulation of Cryptocurrency in Ukraine", which is under the consideration of the Verkhovna Rada, the adoption of which will regulate the main issues of the circulation and use of virtual currency in Ukraine.

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Рекомендоване цитування: Майданик Р. А. Віртуальна валюта в цивільному праві України: стан, тенденції, перспективи / Р. А. Майданик // Вісн. Нац. акад. прав. наук України. – 2018. – Т. 25, №2. – С. 114–129.

Suggested Citation: Maydanyk, R. A. (2018). Virtual Currency In The Civil Law Of Ukraine: State, Trends, Perspectives. *Journal of the National Academy of Legal Sciences of Ukraine,* 25(2), 114–129.

Стаття надійшла / Submitted: 28.04.2017
Доопрацьовано / Revised: 02.06.2018
Схвалено до друку / Accepted: 25.06.2018