# Legal Status of Electronic Money in Ukraine

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Abstract: The lack of a unified theoretical position on the definition of electronic money, insufficient understanding of their technical, economic, and legal nature, the discrepancy in the legal regulation of the circulation of such money in different countries is conditioned by the novelty of the institution of electronic money. In turn, due to the rapid progress, the issue of electronic money is becoming increasingly relevant, attracting the attention of lawyers, economists, and society as a whole. The purpose of this study is to analyse the legal status of electronic money, its advantages and disadvantages, considering the practice of the European Union in this matter. The study used a complex of philosophical and worldview general scientific and special scientific methods. The formal-logical method was used to define the basic concepts and legal categories related to the analysis of the legal status of electronic money in Ukraine. The historical method was used to highlight the process of development and establishment of legal regulation of electronic money in Ukraine. The method of systems analysis allowed to identify and formulate the main conclusions and recommendations for increasing the efficiency of cooperation between Ukraine and the European Union in the field of legal regulation of electronic money. Furthermore, when determining the legal status of electronic money, it is important to consider the legislation of the European Union. The study also analyses the differences in the legal status of electronic money from non-cash, virtual, and digital money.

Keywords: Payment system, issuer, monetary obligations, National Bank of Ukraine, payment agent.

## INTRODUCTION

The modern development of the world in the 21st century has led to a massive spread of the use of electronic money in various countries of the world, which has not bypassed Ukraine. Therewith, the development of computer and Internet technologies will only stimulate the development of innovations in the field of electronic money in the future. Technological innovation has changed the way concepts such as "money" are defined, which were recently issued in the form of coins or banknotes and were the accepted medium of exchange. As A. Korolova and T. Kotenko note (2014): "when electronic money appears on the market, it will not give up its positions and, overcoming obstacles, will establish itself on it for good. The result will be the liberalisation of the existing banking system and the development of state and legal conditions for the operation of electronic money systems".

The statistics of the National Bank of Ukraine also indicate a stable positive trend in the use of electronic money. For example, in the first half of 2019, compared to the same period last year, there was a significant increase: the volume of e-money issued – up to 85.4 million UAH (more than twice); the volume of transactions with electronic money – up to UAH 4.9 billion (more by 60%); the number of electronic wallets – up to 67.9 million pcs. (more by 20%) (Electronic money is gaining... 2019). In this context, it became necessary to clarify the legal status of electronic money, as well as to develop their legal regulation. At the same time, the practice of using electronic money has proven the need for a more efficient settlement of financial relations implemented with the use of modern technologies.

It is also important to develop a common understanding and vision of the main directions for the development of legal regulation of electronic money in Ukraine, understanding modern trends, as well as promoting the further development of legal regulation of electronic money in Ukraine. Therewith, the introduction of electronic money in the processes of electronic commerce from an economic standpoint has several advantages, in particular, the bank: receives real non-cash or cash money for the depositor, ensuring the emission of electronic money; receives interest for service; gets the opportunity to perform certain operations with "balances". Furthermore, the advantages of electronic money include: convenience, as well as security, since as a result of the loss or theft of electronic devices, their owner can save money by blocking transactions with the use of the appropriate media (Lebedev 2019). Moreover, electronic money can also accelerate economic growth as well as promote the development of new sectors of the economy. Notably, the development of electronic money systems at the present stage of the evolution of society is described by a gradual narrowing of the sphere of using cash and paper payment documents, the transition to payment instruments and modern payment technologies. Electronic money is widely used in circulation and is becoming an important instrument

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of the financial infrastructure of economically developed countries (Cohen 2001; Batrakova 2016).

Undoubtedly, the legislation of the European Union is valuable for the analysis of foreign experience. The regulatory framework for regulating electronic money circulation in the EU countries is the Directive 2009/110/EC, which governs electronic money, as well as the EU Directive 2015/2366 on payment services in the internal market (Directive 2009/110/EC... 2009; Directive (EU) 2015/2366... 2015). Thus, considering the European integration course of Ukraine, it is also important to analyse the acquis of the European Union in this area.

#### LITERATURE REVIEW

The scientific community started to study the problem of the legal status of electronic money from the middle of the 20th century. As G. Gurkaynak and I. Yilmaz note (2015): "The need to regulate electronic money emerged when technologies significantly expanded to such an extent that electronic money was not limited exclusively to payment cards. Currently, technology continues to evolve and create many different payment systems. Nowadays, people can pay by simply using to their electronic devices, mobile wallets, online money transfers, wire transfers, etc." This opinion is shared by E. Goryukov (2004), who believe that electronic money is a new form of money that appeared due to technological innovations.

At the same time, certain aspects of electronic money were regulated by domestic and foreign scientists. For example, at the dissertation level, Sh. Yeghiazaryan (1999) analysed electronic money in the modern system of monetary circulation. A. Kosarev (2010) studied the problems of legal regulation of transactions in the field of e-commerce, where he also analysed the legal status of electronic money. E. Goryukov (2004) worked on the problem of electronic money: analysis of the use practice and development forecast. Earlier studies have described electronic money as a vehicle for transactions that are anonymous, bilateral, and autonomous (Okamoto 1991).

In his scientific articles, I. Veres (2017) points out that electronic money is described by common features of money, in particular, they are a means of payment and an independent object of civil rights. The features of electronic money are: electronic money is stored on an electronic device; e-money can be issued exclusively by a bank; electronic money circulation is limited to a certain payment system; electronic money is a monetary obligation of the person who issues it. S. Yesimov (2014) believes that electronic money has the potential to increase the efficiency of the existing payment system. First of all, this is expressed in the reduction of material and time costs incurred by banks, trade enterprises, and the population. Due to rapid technological development, electronic money and electronic devices (such as "digital money" or "smart card") currently make it easy and convenient to manage and transfer funds without having to carry large amounts of cash (Tuba 2014).

Just like ordinary money, electronic money can be donated, borrowed to other users of the system, converted, and used to buy goods and services on sites connected to the system. With the help of electronic payments, millions of people replenish their accounts on their mobile phones, pay for utilities, satellite and cable television, pay for the services of Internet providers (Pisotska 2004). There is also an interesting analysis by A. Dorokhina (2016), who studied electronic money as a subject of crimes against property. In particular, she believes that electronic money can be attributed to a special type of non-cash money, and therefore, they can be the subject of crimes against property.

Thus, in most publications of domestic researchers, only individual problems of electronic money are considered; there are practically no fundamental studies that would reveal the conceptual foundations of the legal status of electronic money, considering the practice of the European Union in this matter. That is why the problem of the legal status of electronic money in Ukrainian realities is still relevant and requires further study in this area. In connection with the spread of the use of settlements with the help of electronic money, there was a need to consolidate such a form of money as electronic money at the level of current legislation, along with cash and non-cash forms of money.

### MATERIALS AND METHODS

Recently, considering the modern development of technologies, domestic and foreign researchers have been actively studying the problem of electronic money. At the same time, unfortunately, much is still unknown about this phenomenon. In particular, for example, the legal status of electronic money in Ukraine has not yet been sufficiently studied at the doctrinal level; there is no comprehensive analysis of the adaptation of Ukrainian law to the law of the European Union in this subject area. Furthermore, in many countries the definition and legal status of electronic money differ, and there is also no single international legal treaty that would unify this issue. This study gives an idea of the legal status of electronic money in Ukraine, considering the practice of the European Union in this matter.

Notably, the research methods were chosen with consideration of the purposes and goals set in the study. To establish the objectivity and validity of scientific provisions. conclusions and recommendations, the study used a complex of philosophical and worldview general scientific and scientific methods. For special example. the Aristotelian method was used to define the basic concepts and legal categories related to the analysis of the content and legal regulation of electronic money in Ukraine. Furthermore, the work uses the historical method in the analysis process, as well as in highlighting the main stages of the development and establishment of legal regulation of electronic money in Ukraine. The method of systems analysis allowed to identify and formulate the main conclusions and recommendations for increasing the efficiency of cooperation between Ukraine and the European Union in the field of legal regulation of electronic money.

In turn, the comparative method is used when comparing the content and scope of legal regulation of electronic money in Ukraine and the European Union, as well as in the analysis of the compliance of Ukrainian legislation with EU law. Also, the logical-legal method is used to clarify the legal status of electronic money in Ukraine. Furthermore, forecasting and modelling methods are used to identify modern problems and threats in the field of legal regulation of the status of electronic money and develop proposals and recommendations. With the use of the dialectical method in the study of the legal status of electronic money, new results were derived, and based on the investigation carried out in this area, new ones were presented. Furthermore, the study used the method of induction and deduction. In particular, based on knowledge of the legal status of electronic money in the European Union, assumptions were made to adapt EU law to Ukrainian law in this area. The deductive method allowed to draw conclusions based on other domestic and foreign studies.

Furthermore, the information and empirical basis of the study included the regulations of Ukraine and the

European Union, scientific research of domestic and foreign scientists, materials of scientific and practical conferences, seminars, etc. in the field of the legal status of electronic money. The reports of the European Central Bank and the National Bank of Ukraine on the situation in the field of legal regulation of electronic money were also important sources of the research. For example, among the national regulations, the study analyses the Law of Ukraine "On Payment Systems and Transfer of Funds in Ukraine" (2001), as well as the Regulation on Electronic Money in Ukraine, approved by the Resolution of the Board of the National Bank of Ukraine of 2010. Also, in the study, in order to investigate the legal status of electronic money in the European Union and the need for Ukraine to implement these provisions into its national legislation, Directive 2009/110/EC governing electronic money, as well as EU Directive 2015/2366 on payment services in the internal market were used. The scientific novelty of the study lies in a comprehensive analysis of the legal status of electronic money in Ukraine, considering European experience in this area, as well as consideration of current trends in reforming this area.

#### **RESULTS AND DISCUSSION**

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Notably, "electronic payments or payment services have a long history. With the introduction of the first universal payment card, the Diners Club Card, in 1950, electronic payments quickly gained popularity and contributed to the widespread adoption of electronic money" (Gurkaynak and Yilmaz 2015). For the first time, the phenomenon of electronic money was officially investigated by the European Central Bank in 1993 and published in its report in 1994.

In particular, the report notes that it is necessary to introduce certain requirements for electronic money, which include:

- issuers of electronic money should be subject to prudential supervision;
- provision of strong and transparent legal mechanisms;
- electronic money schemes should support adequate technical, organisational and procedural security measures to prevent, contain and detect threats to the security of the scheme, especially the threat of counterfeiting;
- when developing and selling electronic money, it is necessary to consider protection against criminal abuse, such as money laundering;

- electronic money schemes should supply the central bank of each respective country with any information that may be required for monetary policy purposes;
- e-money issuers should be legally obliged to redeem e-money in exchange for central bank money at par at the request of the e-money holder;
- it should be possible for central banks to impose reserve requirements on all e-money issuers (European Central Bank 2012).

A 1994 European Central Bank report focuses on the so-called "e-wallet", which is a "plastic card that contains real purchasing power for which the customer paid in advance" (Report to the Council... 1994). Since that time, European countries have tried to regulate electronic payments. At present, electronic money does not have a generally accepted universal definition. This is mainly because this is a relatively new concept and most of the legal regulations governing it are still in the development stage. Electronic money has been defined broadly to refer to the various retail payment mechanisms that use electronic devices. In other words, electronic money is any electronic means of payment, any device or system that conducts payments with the use of electromagnetic sources (European Central Bank 2012). The legal status of the issuance and use of electronic money in Ukraine is regulated by the Law of Ukraine "On Payment Systems and Transfer of Funds in Ukraine" (2001), as well as the Regulation on Electronic Money in Ukraine, approved by the Resolution of the Board of the National Bank of Ukraine of 2010 (Regulation of the NBU... 2010). In particular, Article 15 of the Law of Ukraine "On Payment Systems and Transfer of Funds in Ukraine" of 2001 regulates the specific features of issuing electronic money and carrying out transactions with them, and also contains the concept of electronic money, which means units of value that are stored on an electronic device, are accepted as a means of payment by other persons than the person, they are issued, and are a monetary obligation of this person, which is performed in cash or non-cash form.

Notably, according to the aforementioned law, only a bank can issue electronic money. In turn, the bank that issues electronic money assumes obligations to repay it. The user of electronic money can be a business entity or an individual. Therewith, a user that is a business entity has the right to use electronic money to pay for goods, works and services, and a user that is an individual has the right to use electronic money to pay for goods, works, and services, and transfer electronic money to other users-individuals. A significant drawback of the Law of Ukraine "On Payment Systems and Transfer of Funds in Ukraine" of 2001 is that it is outdated and does not meet the requirements of the present time. Since its adoption, the situation in the financial and payment markets has changed significantly, new types of services are developing, new systems and instruments are being formed. Thus, it became necessary to amend the above-mentioned law. That is why the National Bank of Ukraine, with the technical support of the European Bank for Reconstruction and Development, has developed the Law of Ukraine "On Payment Services" (2020).

The innovations presented in the bill expand the circle of market participants. For example, previously only banks and payment systems were participants in the payment market, now the bill defines 9 participants in the payment market. Important in changing the legal status of electronic money in Ukraine is that the bill allows to work with electronic money, while not only banks, but also non-bank financial organisations will be able to issue electronic money. The concept of "payment service provider" is also introduced, which allows transactions in the market not only by payment systems, but this will also provide an opportunity to develop new services, etc.

In turn, the Regulation on Electronic Money in Ukraine from 2010 regulates activities related to the issue of electronic money in Ukraine and introduces monitoring of such activities. The Regulation also establishes a serious limitation: the amount of electronic money on an electronic device that cannot be replenished should not exceed 4,000 UAH, and on one that can be replenished should not exceed 14,000 UAH. The replenished amount received annually through the user's electronic device must not exceed 62,000 hryvnia. Users-individuals have the right to transfer electronic money to other users-individuals with the help of prepaid cards in the amount of up to 500 hryvnia per day and no more than 4,000 hryvnia within one month. At the same time, the National Bank of Ukraine began work on adapting the procedure for using electronic money to European standards. Thus, to harmonise national legislation with the legislation of the European Union, the NBU proposes to update the procedure for carrying out transactions with electronic money. In Article 133 of the Association Agreement

between Ukraine and the European Union, which entered into force in full in 2017, the parties acknowledge the importance of bringing the current Ukrainian legislation in the field of payment services closer to the legislation of the European Union (Association Agreement between... 2014). In turn, Ukraine should ensure the gradual alignment of legislation with the EU acquis. Thus, considering Ukraine's European integration aspirations, it is also necessary to analyse the experience of the European Union in the context of the legal status of electronic money.

Notably, the following directives have been developed in the European Union to regulate electronic money:

- 1. Directive 2009/110/EC of the European Parliament and of the Council of 16 September 2009 on the establishment, operation, and prudential supervision of institutions dealing with electronic money, amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC (hereinafter referred to as Directive 2009/110/EC governing electronic money) (Directives 2005/60/EC 2005; Directive 2009/110/EC of the European... 2009).
- EU Directive 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EC and EU Regulation 1093/2010, repealing Directive 2007/64/EC (hereinafter referred to as EU Directive 2015/2366 on payment services in the internal market) (Directive (EU) 2015/2366... 2015; Directives 2002/65/EC 2002; Directive 2007/64/EC 2007; Directives 2009/110/EC 2009; Regulation (EU) No 1093/2010 2010; Directives 2013/36/EU 2013).

Directive 2009/110/EC contains the concept of "electronic money". Therewith, the requirements for the definition of electronic money are mentioned in the preamble of Directive 2009/110/EC, which states that the definition should cover all types of electronic money, from those that are stored on a payment device in the possession of the electronic money holder, to those that are stored remotely on a server and managed by the e-money holder through a specific e-money account. Also, according to the preamble, the definition should be aimed at avoiding obstacles to

technological innovation. Thus, the concept of "electronic money", according Directive to 2009/110/EC, means electronically. including magnetically, accumulated monetary value, which is represented by a claim against the issuer, and which, after receiving the funds, is issued for the purpose of making payment transactions and is accepted for physical or legal entities, is not an electronic money issuer. On January 13, 2016, the second EU Payments Directive 2015/2366 came into force. To implement this directive, the NBU is working to expand the scope of entities entitled to issue electronic money and electronic means of payment, including these non-bank financial institutions, as well as other non-credit institutions. In general, the above directives are aimed at improving the rights of users of payment services. They provide guarantees of free access to the European market for various payment systems, including non-bank payment services that can carry out money transfers with the use of various payment agents, through the telecommunications network and operators of information technology systems.

The use of electronic money is rapidly developing in the modern world. However, its technical, legal, economic, and cultural components have not yet been fully developed. In recent years, there has been the introduction of a large number of uses of payment for goods and services, using software, and modern payment systems are high-tech, which involve the use of electronic money. However, the development of the e-money market is highly dependent on legal regulation. Accordingly, innovation in electronic payments may not be possible if the relevant regulations are not flexible enough. Notably, in this aspect, the legislator is facing a difficult task, since technologies are developing faster than the law, and it is not entirely possible to predict all possible changes associated with electronic money. Admittedly, an important advantage of electronic money is that it accelerates payment transactions. As such, they will soon become a practical alternative to cash payments. Therewith, when using electronic money, there are possible risks that personal and financial data will be intercepted by unauthorized third parties. Hence, there is a need for safer, more practical, convenient, and simple electronic payment systems. In science, there is a debatable issue of the correlation between the legal status of electronic, non-cash, virtual, digital, and other money. It is mistaken to completely identify electronic money with non-cash money. There is a fundamental difference between e-money and conventional noncash money. It lies in the fact that non-cash money is associated with a specific bank account and, in most cases, with a bank plastic card of an individual, while electronic money are associated with a specific electronic wallet, which can be used to receive or send payments almost instantly via a computer or mobile phone with an access to the Internet (Pozhydaieva 2014). This means that to use non-cash funds, access to a bank account is required, while electronic money can be used online and takes less time.

There are two main features inherent in electronic money, the presence of which allows to assert that an electronic payment instrument can be attributed specifically to electronic money: they must perform the function of money, at least, the function of a measure value equivalent and means and а of circulation/payment, as well as the function of a store of value; they must exist in electronic form and differ from traditional bank accounts and securities (Kravchuk 2012). At the same time, according to the NBU Letter dated 2014 No 29-208/72889, until 2018. cryptocurrency, in particular, digital money Bitcoin, which the NBU did not recommend to use, could not be classified as electronic money (List of the National Bank... 2014). Furthermore, the European Banking Authority also called on European Community banks to refrain from transactions with cryptocurrencies, including Bitcoin, until a system of rules is in place that can prevent abuse.

To date, the NBU Letter No 29-208/72889 of 2014 has ceased to be valid in 2018 by the adopted NBU letter No 40-0006/16290. Thus, the legal status of cryptocurrency is not legally defined. The Draft Law "On the Circulation of Cryptocurrency in Ukraine" (2017) defines a cryptocurrency as a software code (a set of symbols, numbers, and letters), which is an object of ownership, which can act as a medium of exchange, information about which is entered and stored in the blockchain system as accounting units of the current blockchain system in the form of data. Thus, cryptocurrency also cannot be classified as electronic money. Summing up, it should be noted that according to the NBU letter No 25-112/6750 of 07.06.2013, electronic money cannot be equated with the status of the monetary unit of Ukraine, since they are issued by banks and have restrictions on the distribution and implementation of transactions with them among a limited circle of persons. At the same time, the letter of the NBU No 25-109/5294 of 07.02.2014 noted that electronic money does not constitute currency values and monetary funds (Letter

of the National Bank of Ukraine... 2013; Letter of the National Bank of Ukraine... 2014).

The above analysis allows to single out individual problems that relate to the legal status of electronic money. Firstly, at present there is a monopoly of banks on the emission of electronic money. In turn, such a monopoly does not contribute to the mass distribution of electronic money. Secondly, to date, there is no legislative mechanism to compensate for funds that were lost as a result of technical problems in the payment system or the bankruptcy of a partner bank of the system. Thirdly, the presence of severe restrictions on the volume of electronic funds and payment transactions hinders the development of their use by Ukrainian enterprises and individuals.

# CONCLUSIONS

Thus, electronic money is one of the means of electronic payments. In turn, electronic money differs from cash and non-cash means by its twofold legal nature and use exclusively within certain payment systems, as well as by the fact that their value is ensured by users' contributions. To date, the legal status of the issue and use of electronic money in Ukraine is regulated by the Law of Ukraine "On Payment Systems and Transfer of Funds in Ukraine" of 2001, as well as the Regulation on Electronic Money in Ukraine, approved by the Resolution of the Board of the National Bank of Ukraine of 2010. Furthermore, considering Ukraine's European integration aspirations, when determining the legal status of electronic money, it is important to consider the legislation of the European Union.

Thus, the important directives that regulate the status of electronic money in the EU and which Ukraine must implement into its national legislation are Directive 2009/110/EC regulating electronic money, as well as EU Directive 2015/2366 on payment services in the internal market. Among other things, the study highlights the problematic aspects of the legal status of electronic money in Ukraine, which include: monopoly of banks on the emission of electronic money, which does not contribute to their distribution; the lack of a legislative mechanism to compensate for funds that were lost as a result of technical problems in the payment system or the bankruptcy of a partner bank of the system; the presence of strict restrictions on the volume of electronic funds and payment transactions hinders the development of their use by Ukrainian enterprises and individuals. Thus, the current legal

status of electronic money impedes their development and requires revision in the near future.

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