DOI: 10.15276/ETR.05.2023.8 DOI: 10.5281/zenodo.10092664

UDC: 657.1 JEL: E42, P24

# THE USE OF ELECTRONIC MONEY IN PAYMENT OPERATIONS OF UKRAINIAN ENTERPRISES: ISSUES OF REGULATORY REGULATION AND ACCOUNTING

# ВИКОРИСТАННЯ ЕЛЕКТРОННИХ ГРОШЕЙ У ПЛАТІЖНИХ ОПЕРАЦІЯХ ПІДПРИЄМСТВ УКРАЇНИ: ПИТАННЯ НОРМАТИВНОГО РЕГУЛЮВАННЯ ТА ОБЛІКУ

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Received 02.09.2023

Селіванова Н.М., Корня С.В., Сімова А.О. Використання електронних грошей у платіжних операціях підприємств України: питання нормативного регулювання та обліку. Оглядова стаття.

Стаття присвячена використанню електронних грошей у платіжних операціях підприємств України та аналізує питання, пов'язані з нормативним регулюванням та обліком таких операцій. Розглянуті основні законодавчі акти, які розкривають поняття електронних грошей, їх класифікацію, особливості та принципи функціонування. Булю висвітлено актуальні проблеми, які стосуються емісії, використання та обліку електронних грошей за умови новоприйнятих законодавчих актів та постійного їх вдосконалення. Розглянуто зміни, які відбулись у сфері обліку електронних грошей. Проаналізовано облікові стандарти щодо проведення платіжних операцій за допомогою електронних грошей, зосереджуючись на класифікації, оцінці та звітності. Запропоновано рекомендації щодо подальшого вдосконалення обліку та звітності в сфері електронних грошей.

*Ключові слова:* електронні гроші, платіжні операції, бухгалтерський облік, нормативне регулювання

Selivanova N.M., Kornia S.V., Simova A.O. The Use of Electronic Money in Payment Operations of Ukrainian Enterprises: Issues of Regulatory Regulation and Accounting. Review article.

The article is devoted to the use of electronic money in payment transactions of Ukrainian enterprises and analyzes issues related to regulatory regulation and accounting of such transactions. The main legislative acts that reveal the concept of electronic money, their classification, features and principles of functioning are considered. Actual problems related to the emission, use and accounting of electronic money under the conditions of newly adopted legislative acts and their constant improvement were highlighted. The changes that have taken place in the field of electronic money accounting have been considered. The accounting standards for electronic money payment transactions are analyzed, focusing on classification, measurement and reporting. Recommendations for further improvement of accounting and reporting in the field of electronic money are proposed.

Keywords: electronic money, payment transactions, accounting, regulatory regulation

he use of electronic money is quite widespread in the modern world, especially among the younger generation. It is a convenient and safe payment method that avoids the use of cash and minimizes the risk of money theft. In general, electronic money has become an integral part of the modern world and allows people to conveniently and safely make payments on the Internet. The topic of accounting for transactions using electronic funds is very relevant in today's world, as the use of electronic funds is becoming more and more common. This is due to the growing popularity of online shopping and e-commerce in general. In addition, with the development of technology and the convenience of using electronic funds, they are becoming the primary tool for making contactless payments in various industries, including tourism, hotel business, restaurant business and others. Proper accounting of payment transactions using electronic funds is important for enterprises and businesses, as it allows you to store information about transactions, track income and expenses, maintain reports and other financial documentation. In addition, electronic money circulation provides a high level of security and reliability regarding the storage of funds and execution of transactions, which allows you to avoid possible financial risks and fraud.

#### Analysis of recent researches and publications

In recent years, many scientists have considered issues related to the use and accounting of electronic

money, the study of the legal framework on these issues. In particular, these issues were dealt with by such scientists as T.V. Mokienko, O.V. Fartushnyak, A.S. Stoupova and others.

#### Unsolved aspects of the problem

Modern scientists have considered many topical issues related to the topic of electronic money. Despite this, there are still many unsolved problems, such as: the problem of accounting and use of electronic money, and the procedure for conducting payment transactions using electronic money.

The aim of the article is study the regulatory and legislative framework related to the concept of welectronic money», to reveal the peculiarities of accounting of payment transactions using electronic money.

### The main part

Over the past ten years, most commercial transactions, especially in retail, have moved to the virtual space, which has led to the formation of a new branch of public relations — e-commerce. Electronic stores and a new form of payment — electronic money — appeared in this virtual space.

The term «electronic money» has many meanings related to the use of computer networks and storage of value systems to transfer and store money. Electronic money can be both traditional currencies and non-state private currencies, and can be circulated both according to the rules agreed with state central banks and according to the rules of non-state payment systems. They are a form of digital payments that allow people to make transactions without using cash or bank cards. They allow people to quickly and conveniently pay for goods and services, send money to each other and store money in an electronic

account. Electronic money is used for a variety of payments, including paying bills, purchasing goods and services, online gaming, and transferring money between users in different countries around the world. Most electronic funds offer additional functions, such as storing cryptocurrencies, issuing their own payment cards, and others.

The main legal act regulating the use of payment services, including electronic money, was the Law of Ukraine "On Payment Systems and Fund Transfers in Ukraine" dated 04.05.2001 №2346 and the Regulation on Electronic Money in Ukraine, approved by a resolution of the Board of the National Bank of Ukraine dated November 4, 2010 №481. The norms of these legislative acts are mostly outdated and do not meet modern requirements, technical innovations and international business practice. Therefore, in 2022, the Verkhovna Rada of Ukraine adopted a new Law of Ukraine "On Payment Services" dated 01.04.2023 № 1591. This law contains norms that regulate the main provisions regarding the regulation of the scope of payment services in Ukraine. (Fig. 1). It is worth noting that this law ensures a more efficient and secure transfer of funds in accordance with modern technologies and international standards. Proposals for the proposed Law were developed by the National Bank of Ukraine with legal expertise and technical support from the European Bank for Reconstruction and Development. This ensures compliance of the specified Law with the current requirements of European legislation. According to these proposals, it was proposed to expand the range of entities that have the right to issue electronic money and electronic means of payment, including non-bank financial institutions and other non-credit institutions.

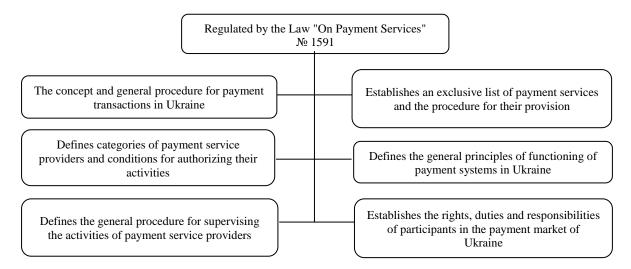


Figure 1. Norms of Law of Ukraine №1591 on regulation of payment services Source: compiled by authors on materials [1]

Article 1 of Law № 1591 defines electronic money as units of value stored in electronic form, issued by an electronic money issuer for payment transactions (including using prepaid multipurpose payment cards), which are accepted as a means of payment by persons other than their issuer and are a monetary

obligation of such an electronic money issuer. It should be noted that electronic money is referred to as payment instruments by this Law [1].

The National Bank of Ukraine is the main regulator of electronic money, just like regular money. On November 1, 2022, the Board of the

National Bank of Ukraine adopted Regulation № 210 "On the Issue of Electronic Money and Payment Transactions with It". This regulation sets out the rules and procedures governing the provision of financial payment services for the issuance of electronic money and payment transactions with it. It defines the requirements that must be met by companies issuing electronic money and their commercial agents. The Regulation also contains restrictions on the use of electronic money and sets

out the specifics of payment transactions with electronic money. In addition, it establishes requirements for accounting for electronic money received by the issuer from consumers [2]. The aspects regulated by this Regulation are considered in Fig. 2.

Many scientists considered the classification of electronic money and each of them had their own opinion. The generalized classification of funds is presented in Table 1.

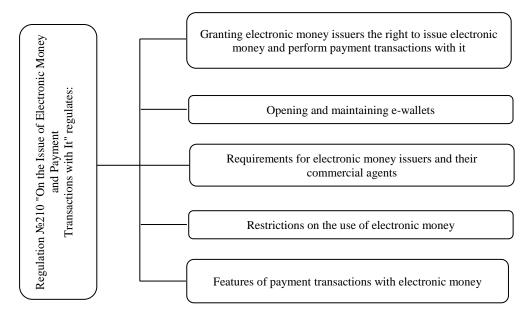


Figure 2. The main aspects regulated by the Regulation
"On the Issue of Electronic Money and Payment Transactions with It" №210

Source: compiled by authors on materials [2]

Table 1. Classification of electronic money

Criterion	Kind	Characteristic		
Form	Network	Consist only of information in computer networks		
	Card-based	They have an additional link to payment and identification smart cards		
Anonymity	Personalized	Mandatory user identification is required		
	Anonymous	They do not require mandatory personalization of the user		
Issuer	Fiduciary	Included in the state financial system as a separate payment subsystem, denominated		
		in the national currency		
	Private	Consist of a separate private currency recognized by the state, need to be exchanged		
		for state currency		

Source: compiled by authors on materials [3, 4]

Classifying electronic money is important for several reasons. First, it helps to establish clear rules and regulations governing different types of electronic money. This allows regulators and supervisors to set requirements and standards for different types of payment systems, which contributes to stability and confidence in the financial system as a whole.

The second reason for the importance of classification is consumer protection. Distinguishing between different types of e-money allows for the establishment of security, data protection, and transparency requirements for users. Regulators can set mandatory minimum standards that e-money issuers must meet to ensure security and consumer protection.

The classification also helps issuing banks define their role and functions in the electronic money market. It defines rules and requirements related to the issuance, servicing, and management of electronic money. It provides banks with a defined structure for developing their payment system and ensuring a high level of quality and security of electronic money for customers.

If only a bank has the right to issue ordinary money, then with electronic money the circle of issuers is expanded. The Law of Ukraine "On Payment Services" defines institutions that have the status of issuers of electronic money. They are presented in Fig. 3.

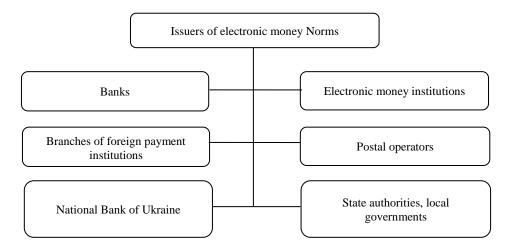


Figure 3. List of e-money issuers in accordance with the Law "On Payment Services" Source: compiled by authors on materials [1]

The list of electronic money issuers provides an overview of the diversity of participants in the electronic payments market. The list includes banks, financial institutions, and other companies that provide payment services using electronic money. Each issuer has its own unique specialization,

services, and offers to customers. This creates a competitive environment and enriches consumer choice.

According to the NBU, six banks issue e-money within different payment systems, the list of which is shown in Fig. 4.

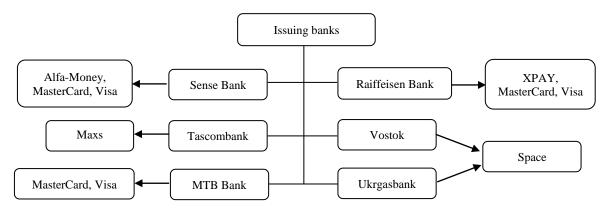


Figure 4. Issuing banks and payment systems they use *Source: compiled by authors on materials [5]* 

According to the National Bank's statistics, in 2021, the volume of electronic money transactions in Ukraine amounted to UAH 10,163 million, the amount of issued electronic money was UAH 37.3 million, and the number of e-wallets exceeded 23 million.

The electronic payment system involves many participants. The most important among them is the payment system, which coordinates the work of all other participants. A payment system is not a card issuer, does not provide loans, and does not set acquiring fees. The main function of a payment system is to provide efficient and reliable financial services.

Payment systems are divided into first and second generation, as well as national and international. Some of the first-generation international payment systems, including Mastercard, Visa, American Express, Diners Club International, UnionPay from China, and JCB from Japan, have become the world's largest due to their expansion from one country to the rest of the world. These international payment

systems cooperate with banks and payment providers in many countries, their cards can be linked to different accounts, transfer money between different countries and operating currencies.

National PS cards operate exclusively within one country. The National Payment System of Ukraine was established by the National Bank of Ukraine and is called the Ukrainian Payment Space (abbreviated as "SPACE"). Today, the National Payment System includes 53 participants, with a total of 625 thousand cards issued [6].

Examples of second-generation non-bank payment systems include PayPal, belong. They use the Internet as a transportation infrastructure and work with electronic money, which can be traditional currencies transferred from a current or card account to an account in such a system, or non-state monetary units, such as cryptocurrencies. Money transfers can only be made online and between user accounts in the system. Both the buyer and the seller must have their own accounts in this electronic payment system. The money received by the seller goes to the electronic

wallet and can then be used for purchases within the system or withdrawn to a current account.

There are also official payment systems for interbank payment transactions, to which ordinary users do not have direct access. For example, in 1973, the SWIFT international payment system was created for international payments. Thanks to this system, the exchange of financial information takes place around the clock under a high level of security.

Closed payment systems also include domestic networks used to exchange information between the central bank and other banks in the country. Ukraine has its own domestic network, the Electronic Payment System (EPS) of the National Bank of Ukraine, which is mandatory for all commercial banks in the country.

The procedure for opening an e-wallet is not as complicated as it seems at first glance. Let's take the Payeer payment system as an example. This system is actively developing in the Ukrainian market and the number of Payeer wallets is growing every day. You can register a wallet in this system without documents through the official website (Fig. 5).

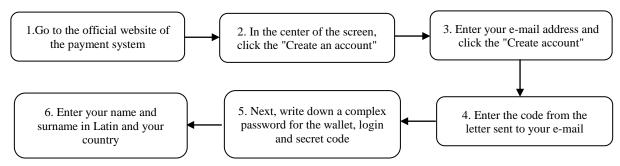


Figure 5. Sequence of opening an electronic wallet *Source: compiled by authors on materials* [7]

As for accounting, you should consider Law of Ukraine №2888 "On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding payment services", which fully entered into force on April 1, 2023. After all, it was he who made changes in the accounting of payment transactions with electronic funds. The main innovation of this law is that in all legislative acts there will be a mention of electronic money at the same time as a mention of a bank account. Now tax officials will be provided with information about the presence or absence of an electronic money account of any enterprise. By the way, according to the court's decision, tax officials

will be able to obtain information on the movement of funds in such a bank account as in an electronic money account.

Any economic entities can make payments using electronic money, and will also be able to receive payments in electronic money, and all this will need to be reflected in tax and accounting reports. Also, a pleasant bonus is that, according to the innovations, the Tax Service and the Treasury have been given permission to open an account in electronic money, which means that taxes and other payments (for example, utility bills) can be paid using electronic money.

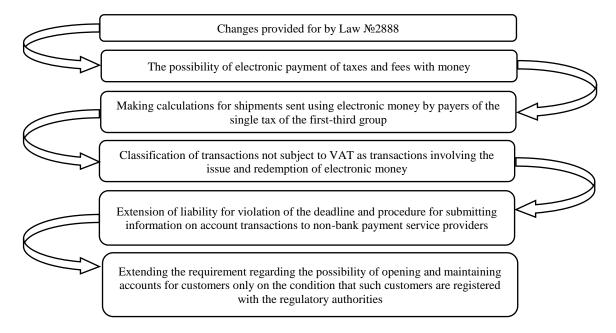


Figure 6. Changes provided for by the Law of Ukraine «On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding payment services»

Source: compiled by authors on materials [8, 9]

This law provides for many innovations, which are shown in Figure 6.

In accounting, e-money is classified as other money, as it is different from regular money, but can be easily converted into it. In accordance with Instruction №291, we recommend using account 335 "Electronic money denominated in national currency" [10].

Information on cash flows in the Balance Sheet (Statement of Financial Position) is provided in Section II of the asset (line 1165). In addition, information on available cash is also provided in the Notes to the annual financial statements (section 6, lines 640-690).

Here is an example of accounting for a transaction using electronic money in Table 2.

Table 2. Accounting for transactions involving the use of cash and their reflection in the accounting records

Content of a business transaction		Credit	Amount, UAH
1. Transferred money from the current account to open an electronic wallet		311	10000,00
2. Electronic money has been credited to the electronic wallet		333	9800,00
3. The amount of the bank's commission for opening an electronic wallet (2%) is displayed		333	200,00
4. Prepayment to the supplier was made by electronic money		335	4500,00
5. VAT tax credit is recognized		644	750,00
6. Receipt of goods from a supplier		631	3750
7. Tax credit from VAT was written off		631	750
8. Offsetting of debts between the buyer and the supplier		371	4500

Source: the authors' own elaboration

As you can see from this table, accounting for electronic money is not very different from accounting for regular money. The only nuance is the bank's commission for opening an electronic wallet, which is reflected as administrative expenses and reduces the financial result of the company.

### **Conclusions**

The article discusses the procedure for accounting for payment transactions using electronic funds and highlights its importance and advantages in the modern world. The growing popularity of electronic funds, such as credit and debit cards, mobile payments and other electronic systems, indicates the gradual replacement of cash with technologies that simplify payment and storage processes. First of all, the use of electronic funds provides convenience and speed of payments. In addition, electronic money allows payments to be made anywhere in the world, which makes it particularly convenient for travelers and people engaged in international trade.

Electronic money is an area that is constantly evolving and undergoing changes in the current financial environment. This area is not thoroughly researched and further research can be conducted in the following areas:

 technological developments: a review of the impact of new technologies, such as blockchain,

- encryption, distributed ledgers, on electronic money. Research can focus on improving the security, speed, and efficiency of electronic money, as well as exploring the possibilities of integrating it with other innovative technologies.
- impact on the financial system: analyzing the impact of electronic money on the traditional financial system and banking services. Research can focus on changes in consumer habits, bankcustomer relationships, and the impact of e-money on macroeconomic stability and financial inclusion.
- regulatory and regulatory aspects: examining the regulatory challenges posed by the growing use of electronic money. Research can focus on developing effective legal frameworks, including consumer protection, anti-abuse, and financial fraud prevention.
- socio-economic impact: studying the impact of electronic money on the socio-economic development of society. Research may include analyzing changes in consumer financial behavior, increasing the availability of financial services for low-income groups, reducing poverty, and promoting the development of micro and small businesses.

### Abstract

The article examines the use of electronic money in payment operations of Ukrainian enterprises and analyzes issues of regulatory regulation and accounting of such operations. It is aimed at understanding the current state of the use of electronic money in the business environment of the country and identifying key problems affecting the effective functioning of payment systems.

Modern scientists have considered many topical issues related to the topic of electronic money. Despite this, there are still many unsolved problems, such as: the problem of accounting and use of electronic money, and the procedure for conducting payment transactions using electronic money. The main emphasis in the work is on the legal regulation of electronic money in Ukraine, the current legal acts and their compliance with the requirements of international standards are analyzed. Newly adopted legal acts made their own corrections

regarding the emission, use and accounting of electronic money. The most important law, which specifies the norms that regulate the main provisions regarding the regulation of the scope of payment services, is the new Law of Ukraine "On Payment Services". It is this law that defines institutions that are issuers of electronic money. The largest part of these institutions consists of banks that work on various payment systems.

The main regulator of electronic money, like ordinary money, is the National Bank of Ukraine. By resolution of the Board of the National Bank of Ukraine, the Regulation "On issuing electronic money and carrying out payment transactions with it" was adopted, which establishes rules and procedures that regulate the provision of financial payment services for issuing electronic money and carrying out payment transactions with it.

The tax legislation has undergone changes and according to the law "On Amendments to the Tax Code of Ukraine and other legislative acts of Ukraine regarding payment services", in all legislative acts there will be a mention of electronic money at the same time as a mention of a bank account. Now tax officials will be provided with information about the presence or absence of an electronic money account of any enterprise.

Despite the fact that electronic money is a new means of payment, accounting is no different from cash accounting. Based on the analysis of modern sources and scientific publications, the article offers recommendations for improving the regulatory regulation and accounting of electronic money in order to increase efficiency, payment processes at Ukrainian enterprises and ensure a high level of security and trust in digital payments.

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#### Посилання на статтю:

Selivanova N.M. The Use of Electronic Money in Payment Operations of Ukrainian Enterprises: Issues of Regulatory Regulation and Accounting / N.M. Selivanova, S.V. Kornia, A.O. Simova // Економіка: реалії часу. Науковий журнал. — 2023. —  $N_2$  5 (69). — С. 90-97. — Режим доступу до журн.: https://economics.net.ua/files/archive/2023/No5/90.pdf.

DOI: 10.15276/ETR.05.2023.8. DOI: 10.5281/zenodo.10092664.

## Reference a Journal Article:

Selivanova N.M. The Use of Electronic Money in Payment Operations of Ukrainian Enterprises: Issues of Regulatory Regulation and Accounting / N.M. Selivanova, S.V. Kornia, A.O. Simova // Economics: time realities. Scientific journal. – 2023. – № 5 (69). – P. 90-97. – Retrieved from https://economics.net.ua/files/archive/2023/No5/90.pdf.

DOI: 10.15276/ETR.05.2023.8. DOI: 10.5281/zenodo.10092664.

