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## Digital monetary system and social relations: legal realities and prospects of the implementation mechanism

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### ABSTRACT

This text offers a reflection on the legal aspects of the implementation of the digital money system in Ukraine and abroad. The authors also analyzed and modeled the directions of development of social relations arising from the use of digital money in various spheres of people's lives. In particular, the authors of the study identify the details of the impact of the digital monetary system in ensuring stability and the implementation of monetary policy in the financial sphere. Likewise, the potential impact of the use of digital money in the banking system is analyzed. The authors investigated the possibility of ensuring the transparency of transactions and control over the circulation of digital money, and proposed the appropriate legal mechanisms that must be implemented for the effective functioning of the digital money system.

KEY WORDS: Legal regulation, economic policy, monetary policy, digital money, digital monetary system.

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## Sistema monetario digital y relaciones sociales: realidades jurídicas y perspectivas del mecanismo de implementación

### RESUMEN

Este texto ofrece una reflexión sobre los aspectos legales de la implementación del sistema de dinero digital en Ucrania y en el extranjero. Los autores también analizaron y modelaron las direcciones de desarrollo de las relaciones sociales que surgen del uso del dinero digital en varias esferas de la vida de las personas. En particular, los autores del estudio identifican los detalles del impacto del sistema monetario digital para garantizar la estabilidad y la implementación de la política monetaria en la esfera financiera. Asimismo, se analiza el impacto potencial del uso del dinero digital en el sistema bancario. Los autores investigaron la posibilidad de garantizar la transparencia de las transacciones y el control sobre la circulación del dinero digital, y propusieron los mecanismos legales apropiados que deben implementarse para el funcionamiento efectivo del sistema de dinero digital.

**PALABRAS CLAVE:** Regulación legal, política económica, política monetaria, dinero digital, sistema monetario digital.

Digitalization plays an important role at the current stage of economic development in Ukraine and abroad. In the conditions of digitalization of the economy, transformations are taking place in all areas of human activity. One of these areas is financial one. In particular, there are significant changes associated with increasing the level of automation, openness and consumer orientation. With the development of digital currency, the issues of forming a digital monetary system and a single international digital currency are becoming increasingly relevant. Currently, the world of payments is changing at an accelerated pace. Users expect faster and easier payments anywhere, anytime (Barontini, & Holden, 2019). As for the technologization of the banking system, it is irreversible and is manifested in the use of digital technologies, channels, products, services, as well as in the creation of digital and online banks, resulting in new sources of information, data processing algorithms, evaluation and decision-making criteria.

As defined by the International Monetary Fund, Central Bank Digital Currency (CBDC) is a digital form of existing fiat money that is issued by a central bank and can function as legal tender (European Central Bank, 2020). The main difference of the CBDC from other types of electronic currency is that the issuer of the latter can be a bank and other

electronic money institutions (a company that has received from the regulator the right to issue and execute payment transactions with electronic money), which undertake obligations with their repayment.

The main features of digital currency are as follows: existence in electronic form; stored in an electronic wallet installed on the user's device, which can be replenished in advance in order to be able to pay with digital currency where there is no Internet; the technological basis of digital currency can be: database, distributed ledger technology; digital currency is an electronic equivalent of existing currency; a unit of digital currency will be equal to a unit of the same currency in other forms (for example, one e-hryvnia will correspond to one cash hryvnia or hryvnia in non-cash form); only the central bank can issue digital currency; digital currency will be mandatory for accepting goods, services or works as payment (Triukur, 2021)

The main difference between digital currency and non-cash means is the payment infrastructure. In particular, in the case of non-cash settlement, an interbank transfer takes place. At the same time, the situation is different with digital currency. So, when payment is made with its help, the funds from the buyer's digital wallet are immediately directed to the same digital wallet of the seller, without the burden of going through a financial institution (Wright, 2019).

As for the advantages of digital currencies, they are as follows:

- 1) Increased reliability. It is manifested in the fact that the Central Bank, as the issuer and custodian of the digital currency, will always be solvent and will not go bankrupt;
- 2) Cheapness of calculations. Eliminating intermediaries from payment transactions should have the effect of making them cheaper.

Also, central banks have considerable advantages from the introduction of digital currency. In particular, thanks to digitalization, the emission of digital currency can be carried out faster than by influencing the money supply with the help of the discount rate or the purchase of government debt obligations. Also, digital currency is easier to account for, since there is no "anonymity", and therefore it can facilitate the fight against corruption and money laundering. A positive for banks is the possibility of programming digital currency (for use in certain areas).

So, as can be seen from the above analysis of the properties of digital currency, such a

currency is promising and can greatly facilitate both government regulation and control in the financial sphere, as well as people's lives and transaction security.

A number of positive changes are expected from the implementation of the digital monetary system. Among them: the immediacy of calculations; lower tariffs compared to available means of payment; greater financial involvement.

One of the tasks of the Central Bank of Ukraine is to improve the management and increase the transparency of finances, as well as to eliminate opportunities for money laundering and counterfeiting. Also, the digital currency will make it possible to index cash in logistically difficult conditions (island states, mountainous terrain).

At the same time, the mechanism of the digital money system cannot function without a properly ensured mechanism of anonymity and cyber security. Yes, it is important to control digital transactions (in particular, through a centralized model) for complete security, transparency and guarantee of payments, and on the other hand, total digital tracking and stored history of every penny spent is not entirely appropriate. At the same time, cash almost guarantees anonymity, but at the same time, it is difficult to confirm the transaction in the event of a disputed situation.

From the point of view of the end user, the main disadvantage of digital currency is the lack of anonymity, which can have negative consequences for individuals. Also, the spread of digital currencies may have the effect of entrusting central banks with uncharacteristic functions of working with citizens and problems in the work of commercial banks (SMART – infrastructure in the sustainable development of cities: world experience and prospects for Ukraine, 2021).

So, it can be stated that the advantages of the digital money system are threatened by risks. Currently, most countries are only studying the possibility of introducing digital currencies and are thinking about legislative regulation, in particular, issues related to the identification of the user of digital currency, setting limits for calculations, financial monitoring, compliance with bank secrecy; defining the role of commercial banks, payment systems and other financial service providers in the digital currency ecosystem.

As a result of the conducted research, the following conclusions were drawn:

1. The rapid development of technologies provides an opportunity to transform the payment system and make it more convenient for both the user and the state.

2. Central Bank Digital Currency (CBD) is a digital form of existing fiat money that is issued by a central bank and can function as legal tender.
3. The main difference between digital currency and non-cash funds is the payment infrastructure. In particular, with a cashless settlement, an interbank transfer takes place, while in the digital money system, the payment is made from the buyer's digital wallet and is immediately directed to the same digital wallet of the seller.
4. The advantages of digital currencies have a number of risks related to anonymity and cyber security, so currently most countries are only studying the possibility of introducing digital currencies and thinking about legislative regulation, in particular issues related to the identification of the user of digital currency, setting limits for settlements, financial monitoring, compliance with banking secrets; defining the role of commercial banks, payment systems and other financial service providers in the digital currency ecosystem.

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