

*V. Smaha, Bachelor student*  
*Yu. Bondarenko, PhD in Tech. Sci., As. Prof., research advisor*  
*N. Osadchuk, PhD in Educ., language advisor*  
*S. P. Korolov Zhytomyr Military Institute*

## **BLOCKCHAIN TECHNOLOGY APPLICATION IN MILITARY LOGISTICS**

The aim of this study is to investigate the effect of application of Blockchain technology in military logistics. On the basis of this research the data from different material have been received.

For solving many logistics problems, related to the information component of the logistics system, world companies are probably using one of the most discussed modern technologies, namely Blockchain. First of all, it should be noted that Blockchain is a publicly available and unchangable digital book, in which information is stored in interconnected blocks. Thus, when creating a new block of information the previous ones are also being involved. This fact determines the high reliability of this technology.

The technology is rapidly gaining popularity due to its significant advantages over conventional paper documents and other electronic registry systems. These advantages precisely include high reliability and the ability to monitor deliveries in real time throughout the logistics chain. The researchers have the results: significant reduction of the time for filling up the documentation, and increasing the efficiency. It is possible to create both open and closed systems.

The experience of using blockchain in civilian logistics prompts implementing this technology in military logistics. In the prospect it can solve a number of problems concerning the information component of science.

Today, the US Army is actively exploring the application of blockchain in the area of logistics. US Air Force Command is introducing the technology in the systems of providing elements for airplanes. It should reduce the cost of their maintenance, but for the present the blockchain is being used for small supplies.

In our opinion, the creation of a single electronic system, consisting of several private information chains, will give each officer of the Armed Forces the opportunity to monitor the performance of their orders and, at the same time, control them in real time that provides assurance in the immediate planning of the operations of the military unit. In military affairs, everything must be precise without uncertainty. He can also control the distribution of various types of supply within a large military unit. It will increase the response to the needs of troops that positively affects the army. This technology can complement existing control systems in the troops.

The Ukrainian Military Scientific Center in Kyiv is already considering certain decisions for establishing a new control system of supply based on the information chain. But they are not perfect. Several technical problems should be solved. A great performance of computer systems is required to create an electronic registry book. Another problem is the lack of well-trained specialists in this field.

In conclusion, we can say that military logistics, as a science, is developing simultaneously with technological progress in the world. Although there are currently problematic issues in this area, there are suggestions for their solutions. In the near future we expect to see a completely new logistics system, based on electronic registry books.

#### **REFERENCES**

1. Просто и доступно о Blockchain. Что это и как работает. [Электронный ресурс]. – Режим доступа: <https://golos.io/ru--golos/@aleco/prosto-i-dostupno-o-blockchain-cto-eto-i-kak-rabotaet>.

2. Оленькова А. Всё о технологии blockchain, покорившей мир / А. Оленькова [Электронный ресурс]. – Режим доступа: <https://www.lobanov-logist.ru/library/362/63236/>.

3. Сергеев В.И., Кокурин Д. И. Применение инновационной технологии «Блокчейн» в логистике и управлении цепями поставок // Креативная экономика. – 2018. – Том 12. – № 2. – С. 125-140.