Administrative and legal regulation of the transfer of confidential information within the system of the Ministry of Internal Affairs of Ukraine

Адміністративно-правове регулювання передачі відомостей конфіденційного характеру в системі МВС України

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Ключові слова:
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The issue of the information exchange within bodies and units of the Ministry of Internal Affairs is one of the problems of the organization and the implementation of their activities during the whole period of the existence of the system of the Ministry of Internal Affairs of Ukraine. The historical retrospective review of providing the Ministry of Internal Affairs with communication channels shows the presence of a steady support of units of the Ministry of Internal Affairs for communication services provided by the central body of the executive power in the sphere of telecommunications together with other users, where the bodies of the Ministry of Internal Affairs and other state authorities have been subscribers.

The information was passed through commutation network of the departmental system – regional network of public data transmission and commutation channels of intertown telegraph communication directly to the Ministry of Internal Affairs of Ukraine. Under such conditions, it is possible to accumulate the necessary amount of information, but it is technologically difficult and inefficient to provide a computer-aided access.

The issue of the administrative and legal regulation of the internal system transfer of confidential information within the system of the Ministry of Internal Affairs of Ukraine was considered by such scientists as O. Andriiko, N. Bortnyk, I. Holosnichenko, S. Honcharuk, Ye. Dodin, R. Kaliuzhnyi, L. Koval, M. Kovaliv, V. Kolpakov, N. Moroz, V. Ortynskyi, O. Ostapenko, I. Pakhomov, S. Pietkov and others. However, it should be noted that a comprehensive legal research concerning the problems of legal regulation of circulation and protection of confidential information in the context of the development of information and communication technologies in the Ministry of Internal Affairs is not carried out. The availability of communication channels, even with appropriate technical characteristics, is not a complete solution to all problems. It is necessary to solve the problem of protection of the information from interception during its passage through the communication channel, the problem of identification and authentication of the remote user who has to access the database. There are technical components in solving the above problems; however, the administrative and legal components are of great importance. Many technical efforts of information protection will not be effective without the formation of clear governing structures and rules of ensuring the security of confidential information. To leave the database of the bodies of the Ministry of Internal Affairs (including a military formation of the National Guard and the State Border Guard Service of Ukraine, which have a separate system for telecommunications) and the whole system of confidential information without proper protection – it means to endanger the life of millions of people. In some cases, the leakage of such information may create a real threat to the life and health of citizens, significantly reduce the efficiency of operative and official measures and lead to other numerous negative consequences.

The system of information protection is a central element of the general system of the circulation of confidential information. The second central element is providing the possibility of real access to information by authorized persons. Despite the constant growth and complication of the tasks standing before the Ministry of Internal Affairs of Ukraine, with a decrease of the manning level of the Ministry of Internal Affairs of Ukraine, provided by the Law of Ukraine "On amendments to certain legislative acts of Ukraine regarding the reform of internal affairs institutions" (№ 193-VIII from 12.02.2015) in 2014 – 240000; in 2017 – 210000, a number of objective problems related to insufficient logistics and personnel, solving the above tasks are greatly complicated.

Therefore, the Ministry of Internal Affairs of Ukraine takes measures for weakening the negative impact of existing problems on the implementation of the tasks standing before the bodies of the Ministry of Internal Affairs by means of enhancing the management and efficiency of existing capabilities. One of the main directions of the implementation of these measures is improving the information support of the bodies of the Ministry of Internal Affairs based on equipping them with modern hardware and software complexes and systems, implementation of new and advanced information technology in the practical activities. The Ministry of Internal Affairs of Ukraine constantly carries out such activities within the financial resources allotted by the state regional and local budgets.

Every day we receive about 100000 requests to get the required information from the AIS. The unified digital departmental telecommunication network of the Ministry of Internal Affairs of Ukraine, designed for ensuring the possibilities of operative exchange of computer information technology is developed and implemented. In all regions and the Autonomous Republic of Crimea, in the cities of Kiev and Sevastopol the regional information and computing units of the Interior Ministry are functioning.

The formation of a unified information environment providing the computer-aided access to databases and computer-aided exchange of information is not an end in itself – it is primarily a measure of increasing the level of management organization. According to M. Kovaliv, effective information exchange significantly increases the procedure of detection and investigation of crimes, ascertainment of necessary facts, and it has many other positive effects.

Among the main tasks, there is a necessity to ensure the proper level of information security in information and telecommunication support of bodies of the Ministry of Internal Affairs. It is also necessary to represent a set of measures that provide a guaranteed level of information security in information and telecommunication support of bodies, the Ministry of Internal Affairs. Ensuring information security is achieved by performing information security functions which include: identification and authentication of users; differentiation of access to information and technical resources; internetwork screening; cryptographic protection of information exchange; antivirus protection; prevention of information leakage due to accessory radiations and guidance; ensuring the possibility of electronic digital signature to ensure the legally significant electronic circulation.

Only three functions have a legal component, and only two of them are directed to ensure the protection of information from the illegal distribution. The question is about identification and authentication of users; differentiation of access to information and technical resources. Electronic digital signature is one of the methods of user identification; in paperwork document control, it performs the most important function of the confirmation of the authenticity of the information contained in the report. V. Hrytsiuk, I. Zotova and O. Kulchytskyi believe that "identification is the process of the recognition of the system element, as a rule, is the process of the confirmation of the authenticity of the information contained in the report. V. Hrytsiuk, I. Zotova and O. Kulchytskyi believe that "identification is the process of the recognition of the system element, as a rule, is the process of the confirmation of the authenticity of the information contained in the report.

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used in normative legal acts of different levels, but in most cases, its definition is not available, as lawmakers refer it to generally used terms.

The category of “authentication” is more complicated. In particular, under the rules ensuring the information protection in information, telecommunication and information-telecommunication systems: identification – the procedure of user recognition in the system usually by means of predetermined name (identifier) or other a priori information about user, which is recognized by the system; authentication – the procedure of ascertainment of belonging the information to user in the system (hereinafter – user) after presented identifier.

The above facts confirm that authentication is a function of identification and identification has technical and legal components. The latter, a legal component, is not taken into consideration by the program of creating a unified telecommunication system of bodies the Ministry of Internal Affairs. But for the operation of the databases that exist in bodies of the Ministry of Internal Affairs, the problem of determining the powers of the police, civil servants, state commission of experts and other persons is more important than using internetwork screens of the last modification. The automation of the processes of information exchange in the Ministry of Internal Affairs concerns confidential information that is provided by the Regulations on the integrated information search system of bodies of Internal Affairs of Ukraine.

The analysis of the scientific and technical literature on information security allows distinguishing the common methods of differentiation of access to information resources in databases: access lists; the use of a matrix of authority establishing for work with information resources; access by levels of privacy; password differentiation of access. Herewith, it is important to avoid purely technical approaches in providing the important element of ensuring the information protection in databases – it is differentiation of access. For example, there is a purely technical approach to solving this problem in the system of VIP Net information protection, which is actively implemented within bodies of the Ministry of Internal Affairs. Security Templates (a technical term) are security settings containing network filters and rules of transmission of IP addresses. The purpose of a security template is to apply a security policy settings, restricted group settings, user rights assignment, registry keys, file system, and services.

The development of models is the task of the exploitative organization. In this regard normative and legal acts of the Ministry of Internal Affairs have significant differences that are revealed in increasing the use of technical and legal standards in the presentation of normative provisions (e.g., replacing the order of the Ministry of Internal Affairs № 169 from 17.02.2015 by № 596 from 04.07.2016 with the same title)11. The model of the circulation of confidential information in general is a simplified model of the circulation of information that constitutes the state secret, where the principle of differentiation of access by levels based on the degree of the information secrecy is applied. However, the only access to this information is not enough – you need an administrative permission of an authorized official to review the specific information within a secrecy degree and documents with signs of “letters “I”, “K” and “CI”12.

There are two approaches to the implementation of the method of differentiation of access by lists – the list of informational resources is determined for each user, or the list of users is determined for each informational resource. Bodies of the Ministry of Internal Affairs should apply both varieties of this method for numerous databases. A necessary task is establishing a database for each method of differentiation of access to information. Moreover, you will have to do this based on the characteristics of the users.

The general chiefs (the head of the department of the Ministry of Internal Affairs and his deputies, beginning with territorial departments) should have access to all information resources of the Interior Ministry, which collect confidential information, including the databases listed in the Law of Ukraine "On the National Police".

Genome registration belongs to the category of biometric personal data, and it requires specific protection and access methods. In prospect, according to V. Bilous, it is advisable to include genome registration to closed databases, which must supplement the Law of Ukraine “On Unified State Register of Subjects to Military Service” (№ 1951-VIII from 16.03.2017). Genome registration belongs to the category of biometric personal data, and it requires specific terms of access.

The following method is primarily associated with integrity and authenticity of the information – matrix method of establishing authority. According to this method, a formalized list defines a set of powers, which a specific user can have in relation to certain information resources. For example, he has the right to: just get acquainted; get acquainted and supplement; get acquainted, supplement and amend, copy, delete, etc. This formal set of powers is very important and should be well thought out and recorded in the normative and legal act that regulates social and technical relations. For example, the chief of the unit, who makes a decision about modification and removal of information from the database, should not possess the ability to the actual implementation of such powers, and implement his desire through a specific procedure of giving documented issued orders. Technological capabilities of submitting changes must have database administrator or specially authorized user, whose activities are checked according to the Instructions on organization of control over the execution of documents within the system of the Ministry of Internal Affairs of Ukraine (Order of the Ministry of Internal Affairs of Ukraine from 23.04.2012 № 350), and Instructions on organization of control over the execution of documents within the National Police of Ukraine (Order of the Ministry of Internal Affairs of Ukraine from 13.06.2016 № 503).

There are methods of differentiation of access by levels of privacy (categories). This method works well under the formal division of information by degrees of secrecy in the system of classification of information that constitutes the state secret. At the same time, the method is schematic, as information attributed to the degree of “secret”, “top secret” (with the exception of information of “particular importance”), with signs of “letters “M”, “K” and “CI” is quite large and mixed.

Effective password method of differentiation of access to departmental databases, that is integrative in relation to all the above, gives the opportunity to lay the general, matrix and categorical powers to access. Password system is universal, but it has the fault – the content of the password can become known to unauthorized subject that can have access to the information contained in the database.

This administrative procedure should be subject to normative and legal acts regulating the protection of information within the Ministry of Internal Affairs. However, normative and legal acts, contained in open sources, do not have these issues. In the context of information exchange, remote access is the most dangerous one, and it is carried into effect from the locations that are outside of the zone of technical control (for example, outside the administrative building, which has a computer equipment containing database). In terms of the fundamentals of information technology and systems, there are two principles of remote access to automated databases through the selected telecommunication channels and telecommunication channels of general based on the Law of Ukraine “On telecommunications” (№ 1280-IV from 18.11.2003). In the case of organizing the access to selected or protected telecommunication channels, the problem of unauthorized access will be come to the usual technical error, as a circle of persons who have access is restricted.

The transition of mobile communication to 5G standard (telecommunication standard for mobile networks after 4G / IMT-Advanced) increases the efficiency of information exchange. The selected protected channels are effective only between stationary objects, such as between administrative buildings, where units of the one body of the Ministry of Internal Affairs are situated. Remote mobile access gives a police officer opportunity...
of access to databases directly from the place of conducting operative and investigative actions, fulfilling official tasks. The implementation of this approach leads to the prospects of achieving the proper official result, reducing the maintenance of the administrative system, improving the quality and efficiency of work. The problem of regulating the circulation of confidential information within bodies of the Ministry of Internal Affairs is one of the parts of their activities, in which the automation of processes of operative and search activities becomes more important, and it is reflected in changing the technological approaches to formation of unified digital departmental telecommunication network of the Ministry of Internal Affairs (abolition of the order of the Ministry of Internal Affairs of Ukraine from 17.02.2015 № 169 by the order of the Ministry of Internal Affairs of Ukraine from 04.07.2016 № 596 with the same title)\(^\text{17}\).

Among the normative and legal acts that have a long-term and system nature for the prospects of the activities of the Ministry of Internal Affairs of Ukraine there is the Strategy of the development of bodies of the Ministry of Internal Affairs of Ukraine and the Concept of priority measures for reforming the system of the Ministry of Internal Affairs\(^\text{18}\). The access of law enforcement agencies to electronic information resources will be carried out with the use of advanced information and telecommunication technologies through communication channels of the unified digital departmental telecommunication network of the Ministry of Internal Affairs. This will ensure the efficiency of the use of the databases of Integrated information search system\(^\text{19}\), checking of persons suspected of committing crimes and offences, crimes detection, suppression of crimes at the stage of preparation for attempt.

In terms of visa-free regime of crossing the state border with the countries of the European Union, the issue of information exchange between law enforcement agencies that is reflected in the national security strategy of Ukraine becomes a question of urgent importance. At the same time at the legislative and departmental levels (for example, the Ministry of Internal Affairs), there are a number of problems of legal regulation in the sphere of circulation and protection of confidential information. Ineffective legal regulation of relations concerning protection of confidential information within the bodies of the Ministry of Internal Affairs has negative consequences. It is necessary to highlight the distrust of citizens and organizations that private transmitted information will be safely protected and used only for purposes determined by law. This creates an imbalance of the information interaction between the authorities and society. The research of these issues will improve the level of the legal regulation of relations in the sphere of circulation and protection of confidential information within bodies of the Ministry of Internal Affairs provided by the Strategy of the development of bodies of the Ministry of Internal Affairs of Ukraine.

**Summary**

The article deals with the issues of improving the administrative and legal regulation of the transfer of confidential information within the system of bodies and units of the Ministry of Internal Affairs of Ukraine in the context of the adaptation of the national legislation to the requirements of the European Union. The authors analyze the coordination of normative and legal regulation of the transfer of confidential information from the point of view of administrative and information legislation and technological methods, which are applied for the efficient protection and access to information within the information and communication systems.

**Анотація**

У статті розглядаються проблеми вдосконалення адміністративно-правового регулювання передачі відомостей конфіденційного характеру в системі органів і підрозділів МВС України в контексті адаптації


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національного законодавства до вимог Європейського Союзу. Аналізується співвідношення нормативно-правового регулювання передачі інформації конфіденційного характеру з позиції адміністративного й інформаційного законодавства, а також методів технологічного характеру, які застосовуються для ефективного захисту і доступу до інформації в інформаційно-комунікаційних системах.

**Literature:**


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