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PUBLIC REQUEST FOR INFORMATION SECURITY

Abstract. The article states that the introduction of the modern information technologies in the sphere of life (cultural, social, economic, political) has significantly increased the dependence of the society and each individual on the reliability of the functioning of the information infrastructure, the reliability of the information used, its protection from the unauthorized modification, as well as illegal access to it.

The following definition of the concept of information security is formulated – it is a state of the information environment that provides satisfaction of the information needs of the subjects of the information relations, security of information and protection of the subjects from negative information influence. In this definition, the subjects of the information relations can be: the state, the so-

ciety, organizations, people. The following types of information security are characterized: information security of the state, information security of the society and information security of the individual.

It is stated that the information security, based on the twofold essence of information, should be aimed at protecting both its objective and subjective component. In the first case it acts in the form of security of the information, in the second — in the form of information and mental security.

Thus, the protection of information involves a system of measures aimed at preventing the unauthorized access to information, unauthorized modification, loss, destruction, violation of integrity, etc. However, the problem of protecting the citizens from negative information is much more complicated than the problem of protecting information in general, because information risks are extremely diverse and their impact is not always obvious.

In the conditions of turbulence the solution of the problem of protection of the society in the information sphere must be complex-systemic in nature and implemented at different levels: normative, institutional, personal.

Keywords: information, informatization, information security, information society, threats and risks.

СУСПІЛЬНИЙ ЗАПИТ НА ІНФОРМАЦІЙНУ БЕЗПЕКУ

Анотація. Зазначено, що впровадження сучасних інформаційних технологій у сфери життєдіяльності (культурну, соціальну, економічну, політичну) істотно підвищило залежність суспільства і кожної конкретної людини від надійності функціонування інформаційної інфраструктури, достовірності використовуваної інформації, її захищеності від несанкціонованої модифікації, а також протиправного доступу до неї.

Сформульоване наступне визначення поняття інформаційна безпека — це стан інформаційного середовища, що забезпечує задоволення інформаційних потреб суб'єктів інформаційних відносин, безпеку інформації та захист суб'єктів від негативного інформаційного впливу. В даному визначенні суб'єктами інформаційних відносин можуть бути: держава, суспільство, організації, людина. Охарактеризовані наступні види інформаційної безпеки: інформаційна безпека держави, інформаційна безпека суспільства та інформаційна безпека особистості.

Зазначено, що інформаційна безпека, виходячи з двоєдиної сутності інформації повинна бути спрямована як на захист об'єктивної, так і суб'єктивної її складової. У першому випадку вона виступає у вигляді безпеки інформації, у другому — у вигляді інформаційно-психічної безпеки.

Таким чином, захист інформації передбачає систему заходів, спрямованих на недопущення несанкціонованого доступу до інформації, несанкціонованої її модифікації, втрати, знищення, порушення цілісності тощо. Однак, проблема захисту громадян від негативної інформації значно складніша, ніж проблема захисту інформації загалом через те, що інформаційні ризики надзвичайно різноманітні, а їх вплив не завжди очевидний.

В умовах турбулентності вирішення проблеми захисту суспільства в інформаційній сфері повинно носити комплексний системний характер та здійснюватися на різних рівнях: нормативному, інституційному, та особистісному.

Ключові слова: інформація, інформатизація, інформаційна безпека, інформаційне суспільство, загрози та ризики.

ОБЩЕСТВЕННЫЙ ЗАПРОС НА ИНФОРМАЦИОННУЮ БЕЗОПАСНОСТЬ

Аннотация. Указано, что внедрение современных информационных технологий в сферы жизнедеятельности (культурную, социальную, экономическую, политическую) существенно повысило зависимость общества и каждого конкретного человека от надежности функционирования информационной инфраструктуры, достоверности используемой информации, ее защищенности от несанкционированной модификации, а также противоправного доступа к ней.

Сформулировано следующее определение понятия информационная безопасность — это состояние информационной среды, обеспечивающей удовлетворение информационных потребностей субъектов информационных отношений, безопасность информации и защиту субъектов от негативного информационного воздействия. В данном определении субъектами информационных отношений могут быть: государство, общество, организации, человек. Охарактеризованы следующие виды информационной безопасности: информационная безопасность государства, информационная безопасность общества и информационная безопасность личности.

Отмечено, что информационная безопасность, исходя из двуединой сущности информации должна быть направлена как на защиту объективной, так и субъективной ее составляющей. В первом случае она выступает в виде безопасности информации, во втором — в виде информационно-психологической безопасности.

Таким образом, защита информации предусматривает систему мероприятий, направленных на недопущение несанкционированного доступа к информации, несанкционированной ее модификации, потери, уничтожения, нарушения целостности и тому подобное. Однако, проблема защиты граждан от негативной информации значительно сложнее, чем проблема защиты информации в целом из-за того, что информационные риски чрезвычайно разнообразны, а их влияние не всегда очевидно.

В условиях турбулентности решение проблемы защиты общества в информационной сфере должно носить комплексный системный характер и осуществляться на разных уровнях: нормативном, институциональном и личностном.

Ключевые слова: информация, информатизация, информационная безопасность, информационное общество, угрозы и риски.

Formulation of the problem. The most important role in the development of the modern society belongs to informatization, the peculiarity of which is that one of the main activities of the members of the society is the processes associated with information. The information society to which humanity is eagerly seeking is radically changing the status of information, expanding its potential as a positive resource and revealing its sharply negative potential. Information has always surrounded people, so any society can be considered informative.

However, the introduction of the modern information technologies in the sphere of life (cultural, social, economic, political) has significantly increased the dependence of the society and each individual on the reliability of the functioning of the information infrastructure, the reliability of the information used, its protection from the unauthorized modification, as well as illegal access to it.

The modern man, his daily life has proven to be addicted to mass communication. The proliferation of the networked computer technologies, mobile communications and the Internet, information resources of the modern society can carry not only good but also be exposed to increasing number of threats, which can harm the interests of the individual, the society, the state, lead to economic losses and threaten the security of the national information security. In this connection, the issue of the public request for information security becomes extremely important.

The chosen topic of the research is intended to help solve the problem of information security of the society and

the individual in the conditions of turbulence.

Analysis of the recent publications on the subject. The information security, problems of protection of the national information space have been researched by many scientists. In particular, the problem is reflected in the works of U. Ilnytska, V. Pocheptsov, Yu. Lisovska, O. Oleynik, T. Perun, V. Hurkovsky, K. Zakharenko, V. Zhogov, H. Foros, V. Trinyak, Yu. Muravska, A. Marushchak and other specialists. However, the problem of protecting the citizens from negative information is much more complicated than the problem of protecting the information in general, because information risks are extremely diverse and their impact is not always obvious. Therefore, the prevention of negative information influences and their neutralization require additional research of the problems of information security of the society and the individual in the conditions of turbulence, development of theoretical and methodological bases of the public administration in the field of the national information security. Thus, the study of the negative information impacts, the search for mechanisms to protect the citizens from them is a pressing issue for the science and practice of the public administration, namely information security as an integral component of the Ukraine's national security

Formulation of the purposes (goal) of the article. Expand the concept of information security, characterize the types of information security, investigate the public request for information security in a turbulent environment.

Outline of the main research material. In the general sense security is a state of protection against anything and can be applied both to the individual in particular and to the society and the state as a whole. At the same time, security as a concept differs depending on its scope: political science, sociology, economics, etc. In the theory of national security the following formulations are widely used: “national security”, “personal security”, “state security”, “international security”, “information security”, “political security”, “social security”, “military security”, etc. [1–3].

Today, with the concept of “information security”, in particular, with its terminological definition, a paradoxical situation has arisen. On the one hand, the term “information security” is widely used in the scientific publications, educational literature and legislative documents of different levels, on the other hand, this concept is still ambiguous, and its content in different sources has fundamental differences [4–6].

In our opinion, security is a state task, not only in the absence of threats that are subjectively perceived by the individuals and groups, but also in the assessment and preparation of the individuals and government structures for information threats. From the point of view of social relations, security can be called a state in which a person has a sense of confidence and security, a sense of trust in another person or the legal system. The opposite of security is risk [7].

Information security is: 1) a state of protection of the vital interests of the individual, the society and the state, which minimizes the damage caused by incompleteness, untimely and unreli-

able information; its destructive influence; misuse and dissemination of the personal data; 2) the state of protection of the national information space, which ensures the formation, use and development of the latter in the interests of the citizens, organizations, the state [4; 8].

The concept of “information security” is defined by the following components [9]:

First — meeting the information needs of the subjects in the information environment. It is obvious that without the subject’s necessary information, information security cannot be ensured. The information needs of different entities are not the same, but in any case the lack of necessary information can have negative consequences.

Second — the security of information. The requirements of completeness, authenticity and timeliness of information must be respected throughout the circulation of information, as violations of them may lead to incorrect decisions or, in general, to inability to make decisions, as well as breaches of confidentiality status may devalue the information. Therefore, information should be protected from influences that violate its status.

Third — protection of the subjects of the information relations from negative information influence. Making the wrong decisions can be caused not only by the lack of necessary information, but also by the presence of harmful, dangerous information for the subject, which is often purposefully imposed.

With this approach, the following definition can be formulated: *Information security is a state of the information environment that provides satisfaction*

of the information needs of the subjects of the information relations, security of information and protection of the subjects from negative information influence. In this definition, the subjects of the information relations can be: the state, society, organizations, people.

In the context of national security the more complete definition of information security is the following: *“information security is a state of protection of the vital interests of the individual, the society and the state, which minimizes the damage caused by incomplete, untimely and unreliable information, negative information impact, negative consequences of the functioning of the information technologies, as well as through the unauthorized dissemination of information”* [10; 11].

According to the analysis of the scientific literature on the issue of information security, most scholars agree that information security is an integral part of the national security. Information security is an integral part of overall security, whether national, regional or international.

There are the following types of information security (Figure).

Information security of the state — the state of preservation of the information resources of the state and protec-

tion of the legal rights of the individual and society in the information sphere. In other words, the information security of the state is a state of the state where its information environment cannot be harmed through the use of information resources and systems.

Information security of the state is an integral part of the national security of the country, which is ensured through the comprehensive organization of all resources and systems.

Information security of the society is a state of the society in which it cannot be harmed significantly by influencing its information sphere. Information security of the society can be achieved both as a result of measures aimed at maintaining the most informative environment in a secure state of the object, protecting the object from destructive influence, and by strengthening the immunity and developing the ability of the society and its members to evade the destructive information exposure.

Security is one of the basic human needs, that is, very important to the society. A sense of security must be linked to a state of peace, a lack of fear. Information security in its research focuses on identifying the state of threats to devices, systems, traffic segments

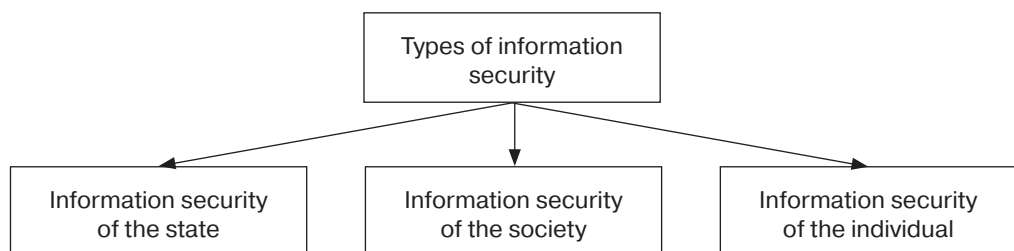


Fig. 1. Types of information security

and information security measures, as well as the likelihood of risks for them. For every society the issue of security is one of the main dimensions of its way of thinking about the social reality [7].

Information security of the individual — a state of protection of the individual, various social groups and associations of people from influences, capable against their will and desire to change the mental states and psychological characteristics of the individual, to modify his behavior and limit the freedom of his choice.

The risks to the information security of the individual may include interference with privacy, use of the intellectual property objects, restriction of access to information, unlawful use of the social media that act on the subconscious, misinformation, misrepresentation [12].

Information protection is a guarantee of security, a task of the state. The protection of information provides a system of measures aimed at preventing the unauthorized access to the information, unauthorized modification, loss, destruction, breach of integrity, etc.

The solution to the problem of ensuring the information security of the society and the individual should be complex-systemic in nature and implemented at different levels.

The first level is normative. A consistent regulatory framework must be created that takes into account all aspects of the information security problem.

The second level is institutional, which implies the concerted activities of different social institutions related to education and socialization.

The third level is individual, that is connected, above all, with self-teaching, self-education, formation of a high level of information culture of the personality as part of the general culture of the person. At this level the formation of the necessary personal qualities take place for ensuring the information self-protection of the individual.

Conclusions and prospects for further research. Information systems in today's economic space, given the widespread use of the digital tools, are, on the one hand, an invaluable source of knowledge about the state of the business entities and, on the other, a target for the unauthorized collection and receipt of such information and competition. Information security, based on the twofold essence of information, should be aimed at protecting both its objective and subjective component. In the first case it acts in the form of security of the information, in the second — in the form of information and mental security.

In the conditions of turbulence the solution to the problem of ensuring information security must be of a complex-systemic nature and be implemented at different levels (normative, institutional, personal).

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