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Information Security Strategy: New Challenges and Prospects for Ukraine

Introduction

Trends in digitalization in the global dimension open up many opportunities and perspectives for society related to greater flexibility and efficiency in the use of information space. This applies to the development of communication tools, access to the global information environment, the provision of digital information services, increasing media literacy in society and increasing the role of the state in shaping national consciousness. Meanwhile, the intensive development of the digital society implies the need to form adequate tools for regulating the information space at the national, European and global levels. Within the general direction and taking into account the intensive development of tools and methods of information warfare, first of all, it concerns information security. This is especially relevant for Ukraine, given the permanent hybrid aggression of the Russian Federation, which is accompanied by intensive information support.

The aim of the work is to study the tools of information security at the national level in accordance with the Information Security Strategy of Ukraine, the validity of its provisions and structure, as well as analysis of strengths, highlighting opportunities and debatable aspects. Achieving the goal of the study is based on the use of certain general scientific methods i.e. analysis, induction, modeling, concretization.

Main part

Regulation of information space and providing information security at the state level involves the formation of a strategic document that will define the main direc-

tions of action in this area and outline the legal field as a result of interdependence and subordination to relevant national and international legal acts of the proper types. Particular attention in such a document is given to special attention to information threats from the Russian Federation as the main aggressor. The first document in force of this type in the period 2017-2021 was the Doctrine of Information Security of Ukraine (hereinafter – the Doctrine), approved by Presidential Decree №47 / 2017 of 25.02.2017. The main prerequisite for the adoption of the Doctrine was increased information pressure from, so in fact the document was developed as a tool to counter the specific actions of one enemy in the information space. This document defined the main priorities of information policy: "information security; on ensuring the protection and development of the information; on the openness and transparency of the state to citizens; on the formation of a positive international image of Ukraine".

The next stage of state policy in this direction is the adoption of a comprehensive document that will determine the further formation of the legal field in the field of information security of Ukraine. Such a document is a draft of the Information Security Strategy (hereinafter – the Strategy). This document passed most of the stages of approval, i.e. on September 15, 2021 it was approved by the Cabinet of Ministers of Ukraine, on October 15, 2021 the document was approved at a meeting of the National Security and Defense Council of Ukraine. The currently developed Strategy is being considered by the President of Ukraine.

In the course of our analysis, it was found that this document is qualitatively and structurally different from the previous Doctrine, which will be terminated upon implementation of the Strategy. First of all, the Strategy covers a much wider range of areas of the information environment. Also, in our opinion, the Strategy is better systematized and structured.

The purpose of the Strategy is "to ensure information security of Ukraine aimed at protecting the vital interests of citizens, society and the state in combating internal and external threats, protecting the state sovereignty and territorial integrity of Ukraine, maintaining social and political stability, ensuring the rights and freedoms of every citizen".

The legal basis of the Strategy is the Constitution of Ukraine, laws of Ukraine, in particular "On National Security of Ukraine", the National Security Strategy of Ukraine, approved by the Decree of the President of Ukraine of September 14, 2020 \mathbb{N}^2 392/2020 "On the National Security Strategy of Ukraine", as well as international agreements, the binding nature of which was approved by the Verkhovna Rada of Ukraine. The implementation of the Strategy is designed for the period up to 2026. Therefore, we believe that an important prerequisite for ensuring the implementation of the Strategy is its legal basis and compliance with the above legal acts.

Structurally, the draft Strategy consists of five parts: general provisions (purpose, legal basis, implementation period, terminology base); analysis of threats and challenges to information security at the global and national levels; strategic directions and goals of the Strategy; mechanisms for achieving the defined goals and objectives; expected results.

An important element of the Strategy is the statement of belonging to the global security space, as a result of which the document identifies global challenges and threats to information security:

- 1. There are more and more global disinformation campaigns and not only state participants are joining them.
- 2. The policy of the Russian Federation remains a long-term threat not only to Ukraine but also to most democracies.
- 3. Acquisition of social networks' subjectivity, change of balance of information relations and protection of personal / private human rights.
- 4. The growing importance of digital technologies against the background of low levels of media literacy and digital awareness.

Taking into account global challenges and threats and supplementing them with problems at the internal level allowed the developers of the Strategy to formulate national challenges and threats:

- 1. Information and psychological influence on the population by foreign countries.
- 2. Information dominance of the aggressor state in the temporarily occupied territories.
- 3. Limited ability to respond to disinformation campaigns.
- 4. Weak coordination of counteraction to external and internal information threats.
- 5. The problem of normalization of media relations.
- 6. Manipulation of citizens' awareness of Ukraine's accession to the EU and NATO.
- 7. Providing information needs at the local level.
- 8. Insufficient level of information culture, media literacy of the population.

Understanding the specifics of global and national threats to information security allowed justifying strategic goals and identifying tasks, the implementation of which will ensure the achievement of these goals. The document identifies eight strategic goals:

- 1. Countering disinformation, manipulative information, as well as information operations and attacks by foreign countries.
- 2. Ensuring the comprehensive development of Ukrainian culture and the formation of a national identity.
- 3. Improving the level of media culture and media literacy of society.

- 4. Ensuring respect for the constitutional rights of the individual to freedom of expression and protection of privacy, protection of the rights of journalists and combating the dissemination of illegal content.
- 5. Information reintegration of the inhabitants of the temporarily occupied territories into the all-Ukrainian information space.
- 6. Creation and further development of the crisis communication system.
- 7. Development and establishment of a positive image of Ukraine and Ukrainians, information assistance in promoting the interests of the state in the world.
- 8. Development of the information society and raising the level of dialogue culture.

Analyzing the content of the Information Security Strategy, we moved away from traditional methods of analysis, including SWOT-analysis (which, in our opinion, in this case is not entirely appropriate due to the lack of threats as such as a result of the Strategy), and proposed our own approach – SOD-analysis highlighting Strengths, Opportunities and Discussion Strategies.



Fig. 1. SOD analysis model*

* Authors' idea.

The strengths of the Strategy identify the additional benefits that allow you to optimize the tools and ways to achieve certain strategic goals. In particular, we believe that they should include:

 Development of security provisions based on a systematic approach to the development of regulations using a clear hierarchy. This thesis is confirmed by the fact that the Information Security Strategy¹ is developed in accor-

 $^{^1}$ National Security Strategy of Ukraine "Human Security - Country Security", approved by the Decree of the President of Ukraine dated 14.09.2020 $\mbox{$\mathbb{N}$}$ 392/2020. URL: https://www.president.gov.ua/documents/3922020-35037 (date of access 06.12.2021).

- dance with the National Security Strategy of Ukraine, the Law of Ukraine "On National Security of Ukraine"² and meets the requirements of the Constitution of Ukraine (in particular, Article 17)³.
- Application of an integrated approach, which provides for multi-vector in ensuring the information security of the state. In our opinion, the adoption of this document is an important step in the implementation of the stated intentions of the international partnership, including countering global challenges and threats in the information sphere.
- Placing clear accents in the implementation of the policy of counteracting the information and psychological impact on the population of the temporarily occupied territories by the Russian Federation and other foreign countries. Coverage of aspects in counteracting the negative informational and psychological impact on the population of the temporarily occupied territories by the occupiers is one of the key notes of this Strategy, as such impact generates a significant number of risks and threats to Ukraine's national security.
- Giving vision to foreign partners' priorities in ensuring information security. In this way, Ukraine demonstrates to the world community its own position on combating global disinformation campaigns, upholding democratic values, ensuring a balance of information relations and protection of personal / private human rights, the feasibility of educational media literacy and digital awareness programs.
- Recognition of low level of media literacy, and, accordingly, uncritical perception of information. Thus, the Strategy takes into account various vectors of the information space and provides appropriate tools for its regulation and protection.
- Recognition of the problem of normalization of media relations. We believe
 that the need to modernize the regulation of media relations in Ukraine is
 long overdue. Therefore, the adoption of the Strategy will help improve the
 system of legal support of relations, taking into account current trends in
 the media sphere.
- The adoption of the Strategy will provide a number of additional opportunities to work in the information space in terms of organizational and legal support. Thus, we believe that the implementation of this strategy will provide the next opportunities:

 $^{^2}$ Law of Ukraine "On National Security of Ukraine" of June 21, 2018 № 2469-VIII. URL: https://zakon.rada.gov.ua/laws/show/2469-19#Text (date of access 06.12.2021).

³ Constitution of Ukraine of June 28, 1996 URL: https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text (date of access: 06.12. 2021).

- The possibility of implementation certain strategic goals in accordance with
 the existing system of regulation in the field of security. As the Information
 Security Strategy of Ukraine occupies a logical place in the hierarchy of
 normative legal acts in the field of security with the corresponding harmonization of their norms, the possibility of realization of the outlined strategic goals is obvious.
- Restraining information aggression aimed at overthrowing the constitutional order and territorial integrity of Ukraine. The provisions of the Strategy form a "road" map for deterring information aggression in the direction of overthrowing the constitutional order and territorial integrity of Ukraine.
- Opportunity to ensure international cooperation in combating information challenges and threats at the global level. A clear delineation of the range of global challenges and threats to information security allows us to find common ground in information security policy with international partners.
- Creating a system to counter misinformation and manipulative information. Implementation of the task of creating such a system can ensure prevention, effective detection of information threats and adequate response to them by the state and society.
- Insufficient substantiation of the crisis communication system as one of the
 threats to information security at the national level. We believe that effective interaction between the state, local governments and the population is
 especially important in exacerbation of crises, especially at their peak, and
 therefore the formation of a communication system can ensure constructive dialogue between the parties, develop common tactics of behavior and
 crisis management.

Along with the outlined advantages and opportunities, the Strategy contains some, in our opinion, discussion provisions, which we consider it appropriate to take into account when finalizing it.

1. Inconsistency of certain terminological aspects of the Strategy with other legal acts. In particular, this applies to differences in the official interpretation of the term "information security" in accordance with the Information Security Strategy and the current Law of Ukraine "On Basic Principles of Information Society Development in Ukraine for 2007-2015" of 09.01.2007 $N = 537 - V^4$

 $^{^4}$ Law of Ukraine "On Basic Principles of Information Society Development in Ukraine for 2007-2015" of January 9, 2007 $\,\rm N\!^{\circ}537\text{-}V.$ URL: https://zakon.rada.gov.ua/laws/show/537-16#Text (date of access 06.12.2021).

- 2. Discussion priority of strategic goals of the state in responding to threats. In our opinion, the sequence of defined strategic goals reflects the level of their importance and urgency to achieve. However, we believe that this priority does not correspond to the urgency and importance of the challenges and threats stated in the Strategy and, first of all, it concerns the information reintegration of the inhabitants of the temporarily occupied territories to the all-Ukrainian information space, which is strategically inferior, in particular, to the comprehensive development of Ukrainian culture and the formation of national identity.
- 3. Expediency of greater emphasis on key actors in generating challenges and threats to information security. We believe that the Strategy does not pay enough attention to the subjects that pose challenges and threats to information security, and outlines only in general terms.
- 4. Insufficient substantiation of the crisis communication system as one of the threats to information security at the national level. In our opinion, there is a partial coherence between the national threat to information security weak coordination of counteraction to external and internal information threats and the strategic goal of creating and further developing a system of crisis communications.

Achieving the goals described in the strategy, as well as taking into account the reasonable aspects of our discussion, will ensure the achievement of the expected results of the Strategy:

- ✓ protected information space;
- ✓ effective operation of the crisis communication system;
- ✓ effective counteraction to the distribution of illegal content is carried out;
- ✓ a sustainable process of reintegration of residents of the temporarily occupied territories into the information space of Ukraine is ensured;
- √ improved image of Ukraine in the international arena;
- the level of media culture and media literacy of the population is significantly higher;
- √ the constitutional rights of a person to freedom of expression and protection of privacy are respected, the rights of journalists are protected;
- √ formed national identity.

Conclusion

In general, the Information Security Strategy is aimed at the general reformatting of the information space of Ukraine, the development of information relations in general. Defining the principles of information security of Ukraine, counteracting threats to national security in the information sphere, protection of

individuals' rights to information, the document aims to ensure information security of Ukraine as one of the most important functions of the state, the cause of all Ukrainian people. However, in our opinion, discussion aspects may hinder its successful implementation and achievement of the expected results, and therefore require appropriate attention from developers.

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Information Security Strategy: New Challenges and Prospects for Ukraine

(summary)

The dynamic development of the digital society involves the introduction of advanced tools for regulating the information environment and the development of modern means of information security. This article deals with the study of a key tool for ensuring information security at the national level – the draft Information Security Strategy of Ukraine. The study describes the features and structural components of the Strategy. To analyze the Strategy, the use of the author's concept of SOD-analysis (Strengths, Opportunities, Discussion) has been proposed. The author's vision of the discussion provisions of the Strategy is substantiated, taking into account which will increase the probability of achieving the expected results. In the process of research some general scientific methods were used i.e. analysis, induction, modeling, concretization.

Bibliography

- Doctrine of information security of Ukraine. Approved by the Decree of the President of Ukraine of February 25, 2017 № 47/2017. [in Ukrainian] // URL: https://www.president.gov.ua/documents/472017-21374 (date of access 05.12.2021).
- Draft Information Security Strategy. [in Ukrainian] // URL: https://mkip.gov.ua/files/pdf/45698712365.pdf (date of access 05.12.2021).
- Law of Ukraine "On Basic Principles of Information Society Development in Ukraine for 2007-2015" of January 9, 2007 №537-V. [in Ukrainian] // URL: https://zakon.rada.gov.ua/laws/show/537-16#Text (date of access 06.12.2021).
- National Security Strategy of Ukraine "Human Security Country Security", approved by the Decree of the President of Ukraine dated 14.09.2020 № 392/2020. [in Ukrainian] // URL: https://www.president.gov.ua/documents/3922020-35037 (date of access 06.12.2021).
- Law of Ukraine "On National Security of Ukraine" of June 21, 2018 № 2469-VIII. [in Ukrainian] // URL: https://zakon.rada.gov.ua/laws/show/2469-19#Text (date of access 06.12.2021).
- Constitution of Ukraine of June 28, 1996 [in Ukrainian] // URL: https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text (date of access: 06.12.2021).