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## THE ANALYSIS OF NORMATIVELY-LEGAL PROVIDING OF DEFENCE OF STATE INFORMATIVE RESOURCES IN INFORMATION-TELECOMMUNICATION SYSTEMS

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*In the article the analysis of the system of the normatively-legal providing of defence of state informative resources is conducted in the informative, telecommunication and information-telecommunication systems. Basic conceptual documents, which influence any character on methodology of construction of estimation of security of state informative resources, the complex system for protection of information, are considered.*

**Keywords:** state informative resources, normatively-legal providing, the complex system for protection of information, informative, telecommunication, information-telecommunication system.

*Проведено аналіз системи нормативно-правового забезпечення захисту державних інформаційних ресурсів в інформаційних, телекомунікаційних та інформаційно-телекомунікаційних системах. Розглянуто основні концептуальні документи, які будь-яким чином впливають на методологію побудови оцінки захищеності державних інформаційних ресурсів, побудови комплексної системи захисту інформації.*

**Ключові слова:** державні інформаційні ресурси, нормативно-правове забезпечення, комплексна система захисту інформації, інформаційна, телекомунікаційна, інформаційно-телекомунікаційна система.

### Research actuality

Analysing basic directions of providing of informative safety on the whole [1], the element of which is state informative resources (SIR), it is possible to draw a conclusion, that for providing of complex system for protection of information from threats next basic directions of protection of information are separated: legal defence, organizational defence, technical defence.

Analysing the concept of the normatively-legal providing on the whole, it is possible to give determination in relation to the concept of the normatively-legal providing of defence of SIR, under which it follows to understand a body corporate and politic of laws, which determine the order of creation, legal status and functioning of the protected informative, telecommunication, information-telecommunication (farther ITS), regulate the order of receipt, transformation and uses of information and informative resources, which are property of the state.

The normatively-legal providing of defence regulates and determines the order of protection of information determined by the policy of safety of properties of information (to confidentiality, integrity and availability) during creation and exploitation of informative network; regulates the order of the effective rendering and warning of threats harmless for resources by the construction of the complex system of protection of information; status of the informative system is from the point of view of informative safety; rights, duties and responsibility of personnel whose work is related to

informative safety; legal positions of separate types of process of management and access control are in protected ITS; order of creation and use of protected ITS; stages of construction of ITS [1; 2; 3; 4].

It specifies a path in relation to the analysis and further development of methodological bases of estimation of security of SIR, construction of the complex system of protection of information, which must on the whole include measures and tools, which will realize methods and mechanisms of protection of information from:

1. To the source of information by technical channels;
2. Unauthorized actions and unauthorized division to information;
3. Special influence on information.

Clearly, that requirements to functional composition of complex of tools of defence (CTD) of SIR will depend on description of the processed information, computer systems (CS), physical environment, personnel and organizational subsystem. As a result of it, the ultimate goal of all measures on providing of defense of SIR is providing of safety of information during its treatment in IKC.

Thus a study and further improvement of one is of basic directions of protection of information - legal defense in relation to SIR, is actual.

### Analysis of the last researches and publications

Analysis in relation to the question of the normatively-legal providing (NLP) of informative safety on the whole was examined in works of

Yudin O. K., Marushchak A. I., Shvets M. Ya., Bogush V. M., Korchenko A. G., Chunaryova A. V., Chunaryov A. V., Boychenko O. V. and others.

But not much attention was spared exactly to the analysis of the normatively-legal providing of defence of SIR, especially it concerns the construction of the certain general (on the basis of existing normatively-legal base and suggestions to its improvement) system.

### **Purpose of the article**

Coming from all this the purpose of the article is realization of analysis of existing NLP of defence of SIR in ITS, working out of certain suggestions in relation to its improvement for further improvement their protection of information.

### **Exposition of basic material**

Let's analyse where and in what connection the concept of SIR can occur.

First officially the concept of SIR in Ukraine appeared in Law of Ukraine "On a protection of information in the information-telecommunication systems", where in article 10 in relation to plenary powers of public organs in the field of protection of information it is indicated, that they carry out measures on the exposure of threats to the state informative resources from unauthorized actions in the informative, telecommunicative and information-telecommunication systems and give recommendations on questions of prevention of such threats.

Thus a conclusion can be made, that for the construction of effective protection of information it is necessary: to reduce possible threats and give recommendations in relation to their prevention.

Later on Decree of President of Ukraine "About measures on protecting of informative resources of the state" from 10.04.2000 was produced.

It created Department of the special telecommunication systems and protection of information in the structure of Ukrainian security Service as an organ of state administration. Its goal is realization of public policy in the field of defence of state informative resources in the networks of telecommunications, cryptographic and technical protection of information.

Thus there was created the organ of executive power for realization of public policy in relation to defence of SIR.

Later on it was necessary to decide a question which would regulate certain procedure of realization of defence of SIR.

Such NLA became Order of new Department of special telecommunication systems and protection of information of Security Service of Ukraine "About claim of Order of defence of state informative

resources in the information-telecommunication systems" № 76 from 24.12.2001, which was operating more than five years (lost an action with Order of the same Department from 16.06.2006 № 74), in which first appears determination of concept state informative resources, which will be presented below.

Later on the concept of SIR can be traced in Decision of KМУ from November, 16 in 2002 № 1772 "About claim of Order of co-operation of organs of executive power on questions of defence of SIR in the informative and telecommunication systems", which determines the mechanism of co-operation of organs of executive power on questions defence of state informative resources in the informative and telecommunication systems. In the same NLA it is determined that organs of executive power with the purpose of defence of state informative resources in the informative and telecommunication systems:

- determine the list of the informative and telecommunication systems, which contain state informative resources, and coordinate them with Administration of the special state communication;
- carry out according to the requirements of NLA on questions a protection of information under methodical guidance of Administration of the special state communication measures on defence of state informative resources in the informative and telecommunication systems, including. connected to the global networks of transferrableness of data;
- collect, summarize and analyse information about the feausance of unauthorized actions and carry out measures on the removal of their consequences; without (during twenty-four hours) delay inform Administration of the special state communication of attempt of feausance or feausance of unauthorized actions;
- give upon Administration of the special state communication request information about technical and programmatic tools which are used for the grant of network services, and also about changes in methods or types of connecting to the global networks of transferrableness of data;
- update after recommendations of Administrations of the special state communication anti-virus programmatic tools, using here only those of them, which passed state examination.

Finally in Law of Ukraine "On Government service of the special connection and protection of information of Ukraine" from February, 23 in 2006 №3475 – IV, a term state informative resources is finally determined.

It denotes information which is property of the state and necessity of defence of which is determined by a legislation. In this Law in article 16,

duties of Government service of the special connection and protection of information of Ukraine in relation to SIR are denoted.

They consist in:

- development of order and requirements in relation to defence of state informative resources in the informative, telecommunication and information-telecommunication systems, cryptographic and technical protection of information, or information, which is property of the state with the limited access, a requirement in relation to defence of which is set by a law;

- methodical guidance and coordination of activity of public authorities, organs of local self-government, soldiery formings, enterprises, establishments and organizations authorities regardless of patterns of ownership in the field of cryptographic and technical protection of information, and also on questions, related to prevention of feaseance of security of information breaches in the informative, telecommunicative and information-telecommunication systems, by an exposure and removal of consequences of other unauthorized actions in relation to state informative resources in the informative, telecommunication and information-telecommunication systems;

- accumulation and analysis of data about a feaseance and/or attempts of feaseance of unauthorized actions in relation to state informative resources in the informative, telecommunication and information-telecommunication systems, and also about their consequences, informing of law enforcement authorities for the use of measures from prevention and stopping of crimes in the noted sphere; an estimation of the state of security of state informative resources in the informative, telecommunication and information-telecommunication systems, grant of corresponding recommendations;

- a concordance of projects of normatively-legal acts is on questions defence of state informative resources in the informative, telecommunication and information-telecommunication systems...;

- realization of the technical adjusting is in the spheres of defence of state informative resources in the informative, telecommunication and information-telecommunication systems.

Finally, as a result of further improvement of NLP of defence of SIR, “Rules of providing of protection of information appear in the informative, telecommunication and information-telecommunication systems”, ratified by Decision of KMU from 29.03.2006 № 373, which determine general requirements and organizational principles of providing of defence of state informative resources or information, requirement in relation to defence of which set by a law, in the informative, telecommunication and information-telecommunication systems.

Data of Rule came on changing of Order of Department of the special telecommunication systems and protection of information of Security Service of Ukraine “About claim of Order of defence of state informative resources in the information-telecommunication systems” № 76 from 24.12.2001.

Developing the question of defence of SIR in ITS a next important legal document which regulates the order of defence there is directly “Order of estimation of the state of security of state informative resources in the informative, telecommunication and information-telecommunication systems”, brought into an action in 2008.

NLA is given regulates legal and organizational principles of realization of estimation of the state of security of state informative resources in the informative, telecommunication and information-telecommunication systems of public authorities, organs of local self-government, soldiery formings, formed in accordance with the laws of Ukraine, enterprises, establishments and organizations regardless of patterns of ownership authorities.

Also the object of estimation of the state of security is certain in this NLA — as the state of security of SIR which are processed in the informative, telecommunication and information-telecommunication systems, regardless of presence of the complex system of protection of information and purpose of estimation of security of SIR, namely exposure of existent threats.

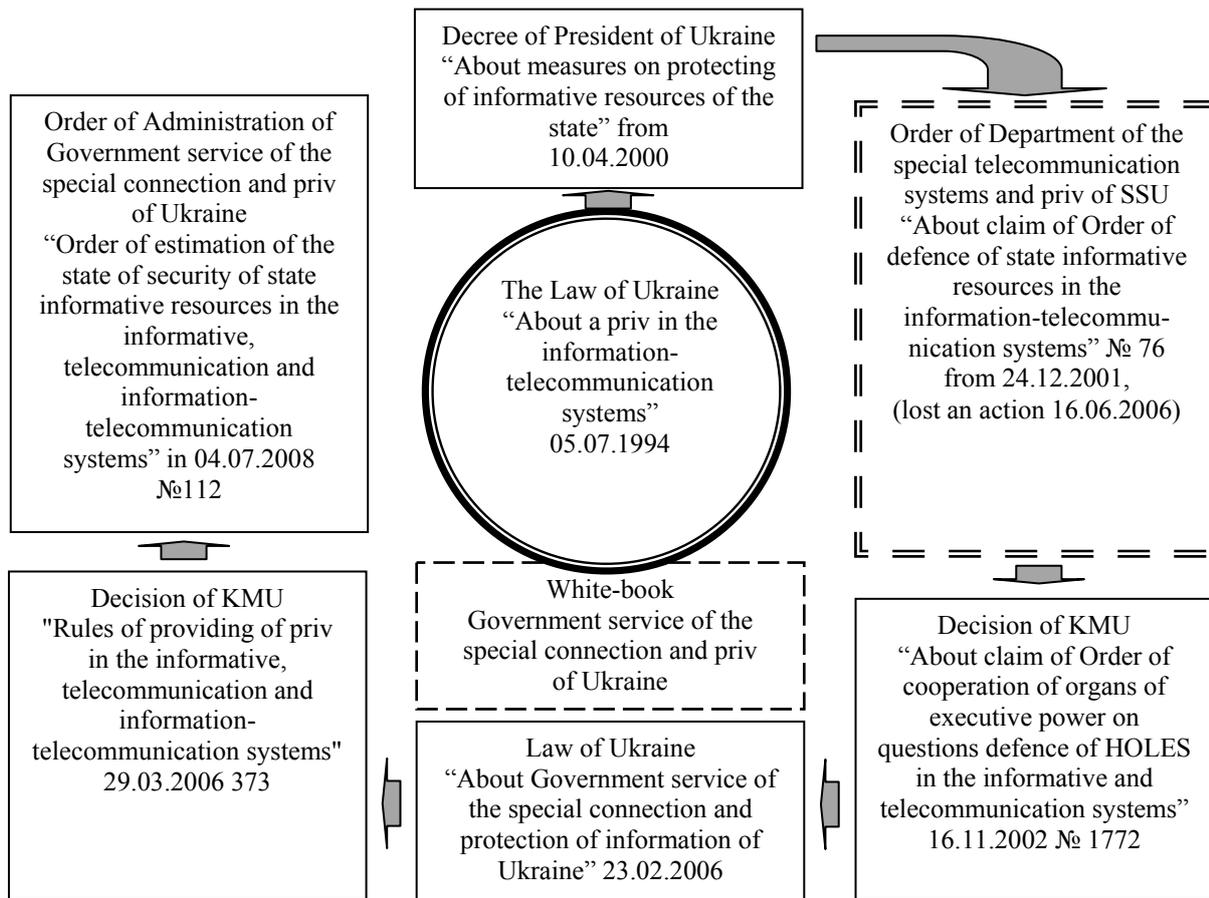
Already developing and summarizing all mentioned above, in the white-book of the special state communication [5] a whole division is entered sacred to defence of state informative resources in the information-telecommunication systems.

This part is devoted to the realization of public policy in relation to defence of state informative resources in the information-telecommunication systems, basic paths are set in relation to measures in accordance with set tasks, the basic practical measures of realization of defence of SIR in Ukraine, namely in the public organs of power.

### Basic results

On the basis of the brought analysis it is possible to present the general system of the basic normatively-legal providing of defence of SIR (see figure).

Determination of the normatively-legal providing of defence of state informative resources is offered, as a body corporate and politic of laws, which determines the order of creation, legal status and functioning of the protected informative, telecommunication, information-telecommunication systems, regulate the order of receipt, transformation and uses of information and informative resources, which are property of the state.



General system basic NLP to defence of SIR

## Conclusion

Thus, in the article were analysed basic acts, which contain the concept of state informative resources (SIR). Although this concept appeared in the Law of Ukraine "On a protection of information in the information-telecommunication systems", in 1994, self eventual determination over of this concept was brought only in Law of Ukraine "On Government service of the special connection and protection of information of Ukraine", 2006 p. Analysis of NLA in relation to defence of state informative resources in the informative, telecommunication and information-telecommunication systems testifies not-enough systematic character of corresponding activity. Coming [from 5], for the construction of effective protection of information it is necessary: to reduce possible threats and give recommendations in relation to their prevention. Basic NLP of defence of SIR is formed in this direction, but from the brought analysis it is possible to see that all questions are not considered yet, but some need further perfection.

Threats to different kinds of information are not clearly determined (or detailed not enough), on conceptual level the list of public authorities plenary powers which would allow fully to protect

the informative resources of the state is not envisaged, a standard is not worked out in relation to determination of concept state informative resources and its constituents. Position about the model of violator of state informative resources is not worked out. It would be possible to define intentions of violator, level of unconcern, category of persons which a violator can be among, supposition about qualification of violator and character of its actions. Not in a complete measure the worked out policy of safety of state informative resources, which would present the certain set of requirements, rules, limitations, recommendations which regulate the order of treatment of information and sent to protecting of state informative resources from certain threats. As indicated in [7], by the consequence of such, it would seem, only theoretical defects out-of-control unauthorized distribution of bases given, formed in public authorities, which contain the detailed information about the property state of physical and legal persons, their residence (registrations), numbers of telephones and other personal data, becomes, for example, although by law Ukraine "About information" from Octobers, 2, 1992 N 2657 – XII, article 11 – collection,

storage, use and distribution of confidential information about a person without his/her consent, except for cases, determined by law, and only in interests of national safety, economic welfare and defence of human rights are forbidden.

To confidential information about a physical person belong, in particular, data about her nationality, education, domestic position, religious persuasions, state of health and also address, date and birth-place. Free access to information which concerns him/her personally, except for cases, foreseen by a law, is provided to everybody. In this law in article 3, where basic directions of public informative policy are described, is absent the direction which concerns a concept of state informative resources.

Some contradictions can be found between present state of informative resources, which constantly grow on one side, and not determined terminology (absence of universal standard), the necessity of making alteration for a legislative base, the absence of model of violator and accordingly the absence of effective methodology of estimation of degree of security of state informative resources which stipulates actuality of further realization of researches in this direction.

## REFERENCES

1. *Yudin O. K.* Information Security. Regulatory support: textbooks. / O. K. Yudin. — K. : NAU, 2011. — 640 p.
2. *Chunarova A. V.* Analyze legal information security of modern IKSН / A. V. Chunarova, A. V. Chunarov / Information Security. — 2012. — Т. 2. — № 55.
3. *Yudin A. K.* Information security in data networks: textbooks / O. K. Yudin, G. F. Konahovich, O. G. Korchenko. — K. : Type of SPE “Interservice”, 2009. — 714 p.
4. *Bogush V. M.* Information security / V. M. Bogush, Yudin A. K. — K. : MK-Press, 2005. — 432p.
5. *White Paper* on State Service. — Mode of access: [http://www.dsszzi.gov.ua/dstszi/control/uk/publish/article?art\\_id=49942&cat\\_id=49941](http://www.dsszzi.gov.ua/dstszi/control/uk/publish/article?art_id=49942&cat_id=49941).
6. *Data* Protection in information and telecommunication systems: Law of Ukraine of 05.07.1994 № 81/94-VR / BD. — 1994. — № 31. — S.287.
7. *Maruschak A. I.* Information resources of the state: the content and the problem of protection / A. I. Maruschak. Legal Advisor, № 1. — 2009. — Mode of access:  
8. <http://www.yurradnik.com.ua/stride/ur/index.php?m=archive&y=2009&mag=34&art=700&dl=1>

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