Legislative Regulation of Information Space

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ABSTRACT

The urgency of the stated in the article the problem stems from the fact that in modern conditions when the information has become not only a means of knowledge, the subject of communication but also a means of control, impact on the socio-economic relations, the issues of formation and state regulation of the information space occur. The purpose of the article is to determine the mechanism of legal regulation of information and the creation of structures of information law. On the basis of various scientific approaches category information space is regarded as a universal sphere of information circulation, as a set of objects of information relations and as a system of information relations, which are the subject of special legal regulation. The main object of the study is mechanism of information relations legal regulation, its consistency and specificity. The leading method of this issue investigation is the simulation method which allows to reconstruct a model of social relations legal regulation, chosen by the legislator by examining the reasons that prompted the legislator to take a decision and identify main ideas laid the basis for the legislator legal model. Subjecting the study of the Kazakhstan information legislation, the authors seek to identify inherent in any development of the modern state legal ideas that underlie the regulation of the information space. As a result, the features of the mechanisms in information space legal regulation are revealed, the stages of information legislation development are evaluated. The authors studied different scientific definitions of information, information society, common information space, information resources, information infrastructure, legal and informational relationships and information law. In order to justify the need for the provision of information law the analysis of national legal system was conducted. There was proposed a system of information law.

KEYWORDS

Information law, information rights, legislative regulation of information

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Introduction

As a result of globalization, almost all countries have been involved in international political processes in the world's financial, technological and information flows. There is a rapid growth of business activity, the manifestation of personal and group contacts at global level, which is reflected in the huge amount of legal activity and relations. Globalization refers to the need for increased...
penetration capacity (regulatory capacity) law in areas previously inaccessible to it. First of all, it applies to transnational social networks and contacts. Increasing the areas of law, expanding the limits of the legal space are objectively predetermined by the factor of globalization (Ivanets & Chervonyuk, 2003).

Technologies began to provide the movement and processing of the huge reservoir of information. It has changed the traditional concepts not only of economic activity prevailing in our society, but also pushed to new basic research of the phenomenon of information and its role in the development of civilization (Brent, McGee & McDonald, 2015; Dahiyat, 2016).

Information law is one of the youngest organizational legal structures in the Republic of Kazakhstan. Increasing integration of legal systems of different countries puts forward a number of other pressing practical problems. The role of joint agreements and recognition of common regulatory principles is constantly increasing in states relationships, and it identifies the need for unity of law and legal harmonization at the international level. This compatibility of law may be regarded as a rational instrument of legal regulation in the same conditions depending on people from the consequences of terrorist acts. In this regard, it quite acceptable a well-known "unification" in legal terms, due to the unity of the flow of socio-technical processes of the information and electronic interactions, which implies the protection of human values (Bachilo, Lopatin & Fedotov, 2001; Gorodov, 2009; Rassolov, 2010).

The novelty of the work is shown in the comprehensive research of information legislation, the proposal of systematization of legislation. The novelty of the study is also due to produce a coherent structure of not only the information rights of citizens and organizations, but also of information law as a branch of national law.

**Literature Review**

Information Law was the subject of many scientists’ in legal area researches. In particular, it can be specified that the research of legal informatics and cybernetics in legal problems originate since the 60s of the twentieth century. Despite the increasing number of publications on specific aspects of the selected by authors issues, there wasn't a system, comprehensive study on the conceptual level, organically bounding theory and practice. Information rights of the individual, information law as an independent complex branch of law in modern studies were considered at different aspects and refractions.

Some authors investigated the problem of governmental regulation of information space (Sharma, 2013; Roberts, 2000), the others studied informational rights of a human being, (Coppel, 2014; Mendel, 2003), some scholars considered information as an intellectual property right, (Cornish, Llewelyn & Aplin, 2013; Bently & Sherman, 2014), law was also investigated by some of them as social regulator of information (Kobersy et al., 2015), and some researchers emphasized attention on the right of freedom for information (Dietz, 2014; Birkinshaw, 2010).

There are not so many studies specifically dedicated to legal regulation of information space (Lloyd, 2014; Ackerman & Sandoval-Ballesteros, 2006). The mechanisms of information relations legal regulation, its consistency and specificity are not the main objects of such studies, but, nonetheless, they are reflected in a greater or lesser extent depending on the context of the issues. In this context, wide coverage received such issues as specific problems of legal regulation of information space, relating to human rights for freedom of information (Leoni, 2012);
technological problems of public administration (Pollitt, 2011); the role of information technology in local government (Isaac-Henry & Barnes, 2000); the impact of information legislation on political processes (Ward, 1986). Recently, the increasing number of research issues on the rights and freedoms of an individual for information in the conditions of legal state formation in the Republic of Kazakhstan can be marked in the domestic jurisprudence. However, such studies are in the early stage of development and are incomplete.

**Methodology**

The methodological framework of the study is based on methodological and ideological setting adopted by the authors: recognition of the need for interdisciplinary research, based on the fact that issues related to the legal regulation of information technology, are located at the junction of branches of science - computer science, political science, law and others.

Accordingly, the study was conducted using as general scientific methods (complex, logical, system analysis and generalization of legal norms and scientific materials), as well as particular scientific methods (comparative law, formal law – legal-dogmatic – and others).

Leading methodological orientations of the authors while conducting the research was the scientific study of the current law through legislature plan clarification in order to reconstruct the legal regulation of the chosen by the legislator model of social relations by means of examining the reasons that prompted the legislator to take such or another decision, and identifying main ideas laid by the legislator in the basis of the legal model. Such approach reveals patterns of legal regulation through the analysis of the influence of public relations nature on construction of a legal model, designed to regulate them.

Subjecting the study of the Kazakhstan information legislation, the authors seek to identify inherent in any development of the modern state legal ideas which are the basis of information space regulation, among which, of course, applies as much as possible to ensure full and equal enjoyment of rights and freedoms of a human being and a citizen.

**Results**

1. In the structure of society can be arbitrarily detached information sphere which is generated by information activities that finally result determine development of information legislation.

2. There is a group of information rights in the structure of individual rights and civil rights which can be classified according to the criterion of their place in the information process.

3. The structure of information space includes two independent object: information resources and information infrastructure. Information space thus can be considered as the totality of social relations connected with the creation, operation and maintenance of information resources and information infrastructure.

4. There is a need and prerequisites for the legal regulation of the information space. Background of legal regulation are manifested, firstly, in the growing role of information activities and the information itself; secondly, in the establishment of a common information space of the country a sign of the state and statehood at the present stage of development; thirdly, in a possibility of inclusion into the scope of
the legal treatment of objects of information relations and the objective necessity of such exposure on the part of the state with a view to streamlining the system of relations in which, directly or indirectly, the objects appear. The need for legal regulation of the information space is based on these assumptions, as well as the very nature of law as a social regulator.

5. The following features of the mechanism of information legal regulation exist:
- regulation of information activity;
- usage of technical and technological tools in law enforcement;
- availability of contractual legal effects on social relations and self-regulation of information relations participants’ behavior;
- NGO participation in legal regulation;
- usage of technical standards.

6. The study concluded that the law enforcement practice of information space, especially in the regulation of relations arising in the Internet, needs considerable improvement, especially in the area of rule-making. Such new forms of rights abuse like "spam" and "cybersquatting", as well as new types of services, for example, "hosting" are gaps in legal regulation which must be overcome (Ehrett, 2016; Spahiu, 2015).

7. The history of information legislation in Kazakhstan is conditionally divided into dissertation research into four stages:
- the first stage – 1992-1997;
- the second stage – 1997-2001;
- the third stage – 2001-2004;
- the fourth stage – since 2004 till the present.

8. There is a need of information legislation codification in Kazakhstan in accordance with modern requirements of international legal regulation of relations in the sphere of the information circulation.

Discussion

The present study was carried out by the authors in the following sequence. At the initial stage fundamental terms operated by the authors which create a general idea of the trends in the development of society and the law were analysed: "Information", "information sphere" and "information operations", "information society". The issue of the standard cycle of information circulation was studied that is subsequently used as a criterion to systematize the information rights of citizens and organizations. The future direction of the study was devoted to the presence and justification of the independence of information rights of individuals where an attempt to classify these rights has been made, sanctified issues guarantees of such rights. In particular, the authors conducted an analysis of subjective information rights of citizens and organizations on the basis of such parameters as the outward manifestation, features of performance, substance, applicability in public relations segments, possible limitations, the presence of a special personality and produced counter charge.

As a result, the authors came to the conclusion about impossibility of creating a coherent system of information rights on the basis of any of these
parameters, criteria or on the basis of traditional parameters: characteristics of
the subjects of information rights and the level of certainty of a subject. That
leads the authors to a suggestion to accept as a parameter of information rights
differentiation of the above-mentioned standard cycle information of turnover.

It was concluded that information rights include:
- Right to receive information;
- Right to seek information;
- Right to request the implementation of the necessary information (public
  authorities);
- Right to create information;
- Right for privacy of information, as well as possible channels of such
  information transmissions;
- Right for transmission of information;
- Right on the mass distribution of information;
- Right to use the content of the information;
- Right for reproduction of information, including a copying;
- Right for information storage;
- Right for information withholding.

Next we were studied objects on which is based the information space. We got
author's interpretation of the concept of information space and its structural
elements, such as the major hallmarks of the relationship, which can be recognized
qualitatively alienated, and therefore in need of special legal regulation.

The main objects of the information space include the following:
1. Information Resources: 1.1. files of documents; 1.2. databases and data
  banks; 1.3. all kinds of archives; 1.4. library; 1.5. museum collections; 1.6. other
  information resources, objectively embodied in tangible media, and systematically
documented and provided with consumer usage characteristics.
2. Information Infrastructure 2.1. information and communication structure -
  geographically distributed government and corporate computer networks,
telecommunication networks and systems, special purpose and general use, network
and data channels, means of communication and information management,
including the system of mass media; 2.2. information, computer and
telecommunication technologies.

Information resources is a synthetic special organizational form of information,
based on the concentration of individualization, as a rule, the documented
information that most clearly reveals its functional purpose. The authors identify
and analyse the following information resources features: 1) document; 2) system; 3)
adequacy; 4) determination of accessibility; 5) legality; 6) continuity of cultural
achievements; 7) acceptability of information; 8) replicability and copies for; 9)
relativity; 10) comparability; 11) identity; 12) confidentiality; 13) technical support;
14) sustainability; 15) practical significance.

Considering the features of information resources, the authors conclude that a
single document cannot be the information source, as this would conflict with a
number of above-mentioned features.
Informational system is a technological system, which is a set of technical, program and other means, integrated structurally and functionally to provide one or more types of information processes and information services (Bradbury, Beaumont & Barlow, 2016).

Requirements for Informational systems: 1) variation on the use of modes; 2) validity of the access restrictions; 3) security; 4) legal regulation of activity; 5) congruence; 6) technological isolation; 7) use of recognized communication systems.

Information technologies might be regarded as a sets of objects, actions, and rules relating to the preparation, processing and delivery of information at the personal, mass communication and production, as well as all technologies and sectors, providing integrated these processes (Sokolova & Seniv, 2013).

Emphasizing the special importance of the information space, we note that in this case, information space will be regarded as a totality of social relations connected with the creation, operation and maintenance of information resources and information infrastructure.

Another important conclusion was the recognition of a single information space as an essential attribute of the modern state.

The next stage of the work was aimed at the study of the mechanism of legal regulation of information. The primary issues are considered background and the need for such a mechanism. The authors regard as the background of legal regulation the increasing role of information technology in production activities; establishment of a common information space of the country as a necessary attribute of a modern state; as well as the availability and the need to include objects of information relations in the sphere of legal regulation.

As a mechanism of legal regulation of information we will assume a legal system of means by which the legal regulation of information relations is maintained. Mechanism of legal regulation of information, as well as general mechanism of legal regulation, comply with the following steps, elements:

1. Establishing status of participants in public relations, as manifested the determination of rights and obligations at the legislative level, it is not impact of individualized rights, this stage corresponds to the element “legal norm”;

2. Appearance of subjective rights and legal responsibilities (optional stage is possible: application of law without which the relationship could not appear). at this stage individualization and concretization of rights and obligations occur. This step corresponds to an element of legal relations;

3. Implementation of subjective rights and duties (there is also a possible optional step: application of the law, without which it is sometimes impossible to carry out rights and duties) – implementation of rights and responsibilities of specific entities; elimination of violations of subjects' rights and interests. Acts of rights and responsibilities as an element of legal mechanism of regulation occur here and determine the true behaviour of the subjects, activities of legal entities in realizing requirements stipulated by law are realized here as well. At this element mechanism of legal regulation stops, as the result desired by legislator is provided;

4. An important component, stage of legal regulation mechanism is enforcement. A special feature of this component in the information field will be a combination of contractual and administrative principles, as well as the presence of special rules for dispute resolution.
Designating the base, integrated features of the mechanism of information legal regulation, we have identified the following features:

1. Reglementation of information activity. Reglamentation of legal regulation of information activity and information space mechanisms as a kind of bases of allocation of new organizational and legal structure is the first feature of such a mechanism. The goal here determines the content. Features information as an object of regulation and human rights in the field of information have been analysed above. However, it should be noted also the specifics in regulation of information activity which manifests itself in legal field as the embodiment in legal information of human rights and organizations regarding the implementation stages of the information process, what determines the presence of specific species and subjects and objects, and the particular content, and the special order of occurrence, changes and termination of the rights and obligations in the information area of society. Information activities induces the formation of legal information which, undoubtedly, are the subject of legal regulation;

2. Usage of technical and technological tools in legal regulation. Technical tools themselves do not make amendments in methodology of legal regulation but their application leads to changes in the content of legal material and, consequently, in the content of legal regulation. I.e., changes in directions of legal effects or principles of legal protection are possible. As an example, Internet cyberspace can be regarded, where due to the nature of technological and architectural features it is possible to control or regulate behaviour of the network members directly through the network protocols and technical specifications.

3. Presence of legal treaty impact on social relations and self-regulation on behaviour of information relations participants. In our opinion, the problem of the contractual and legal regulation of information technology should be considered as part of a more general problem - civil-legal tools of regulation at a whole. It should be emphasized the need to combine legislative and contractual and legal tools for the proper level of regulation of social relations in the sphere of information technologies. Since, despite advantages of contractual regulation in the form of a wide and flexible impact on civil matters, which is especially important for the sphere of information technology, this impact is limited by the subjects and time frames;

4. Participation of non-governmental organizations in enforcement. Involvement in the process of information space regulation non-governmental organizations, which in itself though not new, but it is still a rather unusual means of ensuring the rule of law in the information field of society. There is a network of non-governmental organizations involved in coordination of activities of separate national companies for the management of Internet protocol national electronic information resources as well as the organization of the architectural (software) structure itself in the field of virtual network using the Internet. In addition, these organizations are involved in consideration of possible legal disputes on the basis of the developed its own rules and procedures. This situation requires a detailed study, and the indicated conception might be revised;

5. Technical standards usage. The ratio of technical and legal regulation is a well-known problem in the theory of law. On the one hand, technical standards are not a kind of social regulation, although regulate social relations, it is subject and object relationship. On the other hand, it is significant and necessary influence of the state on such relationship, often issued in form of legislative acts. Technical
regulation is legal and normative regulation of relations connected with the
definition, establishment, implementation and execution of mandatory and
voluntary requirements for products, services, processes, including the conformity
assessment activities, accreditation, state control and supervision over observance of
the established requirements, with the exception of health and phytosanitary
measures. Thus, these processes involve activities for the implementation of
standardization, certification and accreditation. Ensuring reliability and
manageability of the field of information and communication based on the network
technological features on the basis of common standards on the territory of the
Republic of Kazakhstan is the principle of state regulation in the field of information
and communication.

Analysis of information law and legal information led to the following main
conclusions:
- standards of information law have the main distinguishing feature of
regulating legal norms, namely realization of the rule of law does not entail any
violation of law and order that appears in the legislative practice of fastening
information norms in articles of normative legal acts mostly without direct
indication of the sanctions;
- current information legislation objectively cannot be detailed, therefore the
norms of information law contain mainly abstract hypothesis and normal
disposition that is manifested in a large number of standards, definitions,
classifications, rules, regulations, transfers, the latter circumstance leads to the
possibility of concealment and norms of hypothesis;
- information relationships generally have all such features as any other
relationships, except that the subjects of such relationships can and should be
classified and, in accordance with that, shall be authorized, depending on their role
in the information process.

It was made an analysis of enforcement practices, studied the problem of the
settlement of disputes and applicable law on the Internet. In particular, we
investigated some ways of overcoming gaps in legal coverage of the
communications network. Weak legal regulation of the Internet provides great opportunities for right
abuse such as "spam" and "cybersquatting".

The authors summarized the history of information legislation in Kazakhstan
development and regard it in four stages of development. The first stage is isolated
stage in the formation of Kazakhstan legislation. In the second phase the
government pays attention to the need for a common policy in the information
space, which raises a number of important bylaws. The third period in fact draws a
line of information legislation branch formation. The fourth period is more
evolutionary than revolutionary. It brings amendments into direction for solving
more practical issues faced in the field of construction and ensures normal
functioning of the information space.

Conclusion

Despite a relatively large time period of implication of new information and
communication technologies into legal usage (both as direct objects as well as tools
of legal influence on the public system), issues of legal regulation of relations arising
in this area continue to cause controversial discussions both theoretical and
practical sense. The main conclusions arrived at by the authors as a result of the
study are as follows:
Community development paralleled, if not to talk on the direct interdependence of means and methods of general information activities implementation, i.e. processes for production, transmission, creation, use, storage of information. Development of such tools and techniques determines the high importance of information activities. After all, in the presence of huge amounts of information, plurality of channels capable to provide such arrays immediately, serious threats of significant damage both to information and to the tools of information it is necessary to highlight the ability to navigate in the flow of information, finding required and useful information, protect oneself and own achievements through knowledge and skills. Information activities have long stood apart and become on a par with certain types of economic activity, creating a kind of sphere of human existence, which is called the informational sphere. Information sphere in our opinion has no systematic object of legal effects, except for information activities which, as it was mentioned, is a prerequisite for allocation of such a sphere. The authors are convinced that interest in the legal regulation is an information space as a set of certain objects which can be extended to legal regulation. The very same information activities could potentially cause the most diverse range of relationships that does not allocate special, unique relationship that need besides a special legal ordering. Thus, the generalized public relations structure will be allocated relationships relating to the operation of information resources, information systems and communication facilities.

An additional impetus for the development of information legislation is becoming more segregated information rights of citizens and organizations. This direction legal array development can be regarded as a priority, since the conditions of rule of law and strengthening the foundations of civil society the rights and freedoms of individuals should be particularly guaranteed through recognition of their primary protection from both judiciary and state at a whole. However, an important principle of such protection is to establish the balance of interests of an individual, state and society that would not allow to abuse law by individuals.

Information rights can be defined as the totality of available capacity of a person to implement some operations with certain information, recognized by state and enshrined in regulations. Information rights can be classified according to the criterion of correspondence to a stage in the information process, and thus prerequisites for the formation of legal institutions are created.

Another important aspect of such mechanism investigation becomes identification of specific features in the regulation of social relations inherent in such a mechanism. Information standards are characterized by the fact that implementation of the rule of law does not involve violation of the rule of law which is manifested in the legislative practice of fastening information norms in articles of normative legal acts mostly without direct indication of the sanctions. Furthermore, in view of the complexity of technical and technological aspects of information processes which are, moreover, susceptible to the trend of rapid changes current information legislation objectively cannot be detailed, referring to what norms of information law contain predominantly abstract hypothesis and usual disposition that appears in a large number of standards-definitions, standards, classifications, standards-transfers, the latter circumstance leads to the possibility of concealment and regulations hypothesis.

Considering information relationships as elements which correspond to the stages of implementation of the law, the authors come to the conclusion that there
are special relationships which are built from objects information environment, and in accordance with that marginalize mechanism of information of legal regulation and thus have the potential to create new branch of law that, as it should be noticeable, is the leitmotif of the whole thesis.

Thus, as a result of the study, authors conclude that legal regulation of the information space is a complex process involving many components of the legal validity and, despite the narrowing of the study only analyses the legal tools, this topic has great potential for further basic and fundamental researches.

**Disclosure statement**

No potential conflict of interest was reported by the authors.

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