

# ANALYSIS OF CONCEPTUAL APPROACHES TO ORGANIZING INFORMATION SECURITY IN THE REPUBLIC OF KAZAKHSTAN

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## **Abstract**

Today, the Government of the Republic of Kazakhstan is making significant efforts to develop a strategy to ensure the massive introduction and use of modern information and communication technologies. Information is becoming one of the strategic resources of the state, therefore, the formation of the country's information infrastructure, integration into the global information space, the development of information services, the improvement of the legal framework for regulating ongoing information processes are the main factors of socio-economic, technological and cultural development. Along with the progress of new information technologies, the main problems emerged: protection intellectualproperty and copyright; privacy and personal data, the problem of ownership in the media, concentrating the positive and negative aspects of this progress. It is these circumstances that determine national interests in the information sphere and the state's need to ensure information security.

### **Kewords**:

Government, Kazakhstan, framework, socio-economic.

# Introduction

Information security is a state of security of the information space, which ensures its formation and development in the interests of citizens, organizations

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and the state as a whole; the state of the information infrastructure of the state, in which information is used strictly for its intended purpose and does not have a negative impact on the information or other systems of both the state itself and other countries when using it.

Information security is one of the areas where the dependence of the effectiveness of state policy on its resource capabilities is most clearly traced.

The formation of information resources, the improvement of information and network technologies, their intensive implementation in all spheres of human activity requires a constant increase in the level of knowledge on the protection of information, the ability to develop a strategy for finding ways and methods of solving problems to ensure information security.

Information security is the most important component of Kazakhstan's national security. The rapid development of information technologies, the widespread use of computer technology and telecommunication facilities have basically led to the beginning of Kazakhstan's transition from an industrial to an information society and the formation of new information relations. The formed information sphere is the base and an integral part of the existing spheres of activity of modern Kazakhstani society, the level of development of which is determined by the level of development of the information structure and information resources of the country. The national information resource is today one of the main sources of socio-economic development, military power of the state and its national security. Organizational and legal support for information protection should be a highly

ordered set of organizational decisions, laws, regulations and rules governing both the general organization of work on information protection across the state and department, and the creation and operation of information protection systems at specific facilities.

In Kazakhstan, there is a fairly developed legislation regulating the field of information security:

- The Law of the Republic of Kazakhstan "On National Security", which contains a number of provisions on the principles of ensuring the information security of the state;
- The Law of the Republic of Kazakhstan "On State Secrets", which defines the legal framework and a unified system for protecting state secrets in the interests of



ensuring the national security of the Republic of Kazakhstan and regulates public relations arising in connection with the classification of information as state secrets, their classification, disposal, protection and declassification;

- The Law of the Republic of Kazakhstan "On Informatization", which contains a number of articles reflecting the specifics of the accumulation, processing, transfer, storage and other issues of protecting confidential and secret information; regulating relations in the field of informatization, development and protection of information resources and information systems; establishing the competence of state bodies, the rights and obligations of individuals and legal entities in the field of informatization [1, 2, 3].

These are the norms of the Constitution of the Republic of Kazakhstan, and the improvement of the Law of the Republic of Kazakhstan "On National Security", which considers provisions that determine the threat of computer crime and cyber terrorism.

Not all information resources are available to the average user. Its various categories - state secrets, commercial secrets, and just information about the personal life of a particular person - are protected by law in the field of unauthorized access to it. These are the norms of the Constitution of the Republic of Kazakhstan, the Civil Code of the Republic of Kazakhstan, the Criminal Code of the Republic of Kazakhstan, the laws of the Republic of Kazakhstan "On National Security", "On State Secrets", etc.

In many countries, personal data stored or processed on a computer are subject to data protection laws. The UK has Data Protection Act 1984. Examples of other countries where such legislation exists, is a country's Western Europe and North America as well as Australia, New Zealand, Israel and Japan.

The Law on Electronic Digital Signature (EDS) is already in force in many countries of the world (in the USA since 2000, in the Republics of Belarus and Turkmenistan since 2000, in Russia since 2002). On July 1, 2003, a similar law came into effect in the Republic of Kazakhstan.

The adoption of the law on digital signatures is due to the ever-increasing tendencies of replacing paper document flow with electronic one. Although the legal features of the use of digital signatures are enshrined in legislative acts, the transition to the use of digital signatures should be carried out with the provision of



mandatory understanding by users of its properties and technical requirements for digital signatures, taking into account the requirements of domestic and global standards in this area.

An analysis of the problems in the field of information security in electronic document management shows that, in addition to protecting the authorship and authenticity of an electronic document, it is sometimes necessary to ensure its confidentiality, to carry out identification and authentication procedures in electronic exchange. The means to ensure confidentiality and integrity of information are cryptographic means of protecting information. The technical characteristics (primarily, security) of these tools depend on the cryptographic algorithms and key lengths.

P onimanie the importance of information security issues is reflected in the State program of formation and development of the national information infrastructure of the Republic of Kazakhstan and the Program of research and technological development in the field of information security. The provisions of these programs directly envisage "conducting scientific research, development work and the formation of a scientific and technical base to ensure the release and technical support of domestic hardware, software and hardware and software information security tools."

One of the normative documents governing the general organization of work on information protection is a standard that establishes the basic terms and their definitions in the field of information protection. The terms established by this standard are mandatory for use in all types of documentation and literature on information security. The terms established in the standard reflect the system of concepts in this area of knowledge. There is one standardized term for each concept.

Analyzing the existing provisions and the legislative framework in the field of security, we can say that today information security issues have become a serious problem in the development of the information society against the background of the continuing high level of conflict in international relations.

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