

Information Security in Uzbekistan: Problems and Solutions

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Abstract — *The article deals with the problems of information security in Uzbekistan and solutions to these problems. The share of the population using the information and telecommunication network "Internet" in the information zone of Uzbekistan is analyzed. The priorities of state policy in the fields of information security in the region are indicated.*

Keywords — Information security, information zone development strategy, Internet network, information and telecommunication networks, government policy, basic infrastructure.

Introduction

The development of information technology leads to a change in our lives. In the modern world, the well-being, and sometimes health, and the life of people depend on the degree of information security. Such is the price for the complication and widespread distribution of automated information processing systems.

Information security is a comprehensive security of an information system from unauthorized interference that can harm the user of information [1].

Currently, 3 key principles of information security are identified:

- Availability (the ability to receive the required information service within a reasonable time);
- Integrity (relevance and consistency of information, its security from destruction and unauthorized changes);
- Confidentiality (protection against unauthorized reading).

Information security is a complex task that aims to ensure the security of information resources. The problem of information protection is multifaceted and complex and covers a number of important tasks. The problems of information security are constantly becoming more complicated, with the penetration of technical means of processing, data transmission and computing systems into all spheres of society.

There are 3 main groups of information security problems in Uzbekistan:

1. Problems of a humanitarian nature (illegal use of personal data of citizens, interference with private life, disinformation, etc.).
2. Problems of an economic and legal nature (theft, distortion of commercial and financial information, etc.).
3. Problems of a political nature (information wars, distortion of information and misinformation of leaders at various levels of government).

Materials and methods

Information security problems cover all spheres of human life, therefore, their solution requires an integrated approach.

To form an information security regime, it is necessary to solve a complex problem consisting of 5 levels:

- 1) Legislative and regulatory (laws, regulations, standards, etc.);

393

- 2) Moral and ethical (all kinds of norms of behavior, non-compliance with which leads to a drop in the prestige of a particular person or an entire organization);

- 3) Administrative and managerial (general management actions);

- 4) Physical (mechanical, electro- and electronic-mechanical obstacles on possible routes of penetration of potential violators);

- 5) Hardware and software (electronic devices and special information security programs).

The entire complex of these measures should minimize the possibility of damage by forming a unified information protection system.

Information security today is not only a technical problem, which is the prerogative of special bodies and services, the business of narrow specialists, but also a political problem of enormous national importance. The state of the country's information security is discussed at a meeting of the Security Council of the Republic of Uzbekistan. The President of Uzbekistan has set the task to form a single vertical of ensuring the information security of the state. It should include all levels and branches of public authority.

Result and discussion

Deputy Governor of the Samarkand, chief of staff of the head of the region Osman Khodzhaev noted in her report that Uzbekistan was and remains a zone of strategic importance for Uzbekistan; therefore, security issues in any area are especially

relevant on its territory. “The priority direction in the Information Zone Development Strategy is the creation of a modern information and telecommunications infrastructure. In this regard, special attention is paid to carrying out complex measures for informatization and information protection in Uzbekistan” Osman Khodzhaev said.

Over the past eight years, a regional telecommunications network has been deployed in the Republic of Uzbekistan, which is the basic infrastructure for the implementation of all projects in the field of informatization. An important priority project is the "Open Government", which allows the authorities to become more accessible by creating their own Internet resources for posting official information (Table 1).



1-Fig. General information about information security

Until 2017 - for the population aged 15-72. Since 2017 - for the population aged 15-74.

According to Table 1, the proportion of the population using the Internet is increasing every year. Since 2015, the number of Internet users has increased by 7.8%, which indicates that Uzbekistan is developing in the field of information security.

In addition, a system of interaction between state authorities and local self-government bodies for the protection of information has been established, the Regional Center has been accredited by the Ministry of Communications, which issues

electronic signature certificates, and a document circulation system has been created. Currently, work is underway to transition to unified standards for mail systems and network domains, which will eliminate the use of third-party information resources (according to the press service) [3].

The main task is to ensure the safety of people living in the extreme conditions of the Arctic region, to protect the information resources of the territory from threats, to create modern information and telecommunication systems in Uzbekistan. To date, the state has decided to develop Arctic tourism, where the proper levels of information technology and information security are required.

A state concept of information security has been developed in the Republic of Uzbekistan. It is planned to create a special lighting system for the information area about the current situation. The main goal of the state policy approved by the President of Russia "Fundamentals of the state policy of Uzbekistan for the period up to 2020 and beyond" in the field of information technology and communications is the formation of a single information space of the Republic of Uzbekistan in its information zone, taking into account natural features [5].

Conclusion

The main goals in the field of information technology and communications in Uzbekistan are as follows: firstly, the introduction of modern information and telecommunication technologies and means (including mobile) communications, television and radio broadcasting, ship traffic control and aviation flights, remote sensing of the Earth, conducting aerial surveys of ice cover, as well as systems of hydro meteorological and 62 hydrographic support and support of scientific expeditionary research; secondly, the creation of a reliable system for the provision of navigation, hydro meteorological and information services, ensuring effective control of economic, military, environmental activities in Uzbekistan, as well as forecasting and preventing emergencies, reducing damage in case of their occurrence, including through the use of global navigation satellite system and multipurpose space system.

Thus, these measures of state policy in the field of information technology and communications in the information zone of Russia should be aimed at the development and widespread use of the latest technologies for ensuring the information security of the region, including space vehicles for various purposes and multiprocessor universal geographically distributed networks.

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