

## **Lecture-11. Classification of violations in the field of information security**

### **Purpose of the Lecture**

The purpose of this lecture is to acquaint students with the types, classification, and characteristics of violations in the field of information security (IS), as well as with their causes, consequences, and methods of prevention. The lecture aims to help students understand how violations are identified, categorized, and assessed in terms of their impact on confidentiality, integrity, and availability of information.

Information security involves not only the protection of information and the stability of its processing systems, but also compliance with the information security requirements by the owners and owners of such information in IS, EIR, IR, etc. Those. the subject - the person violating IS can be not only some relatively third party, but also users, as well as the owners and owners themselves, as well as regulatory bodies. In this regard, violations in the field of information security by the subject (the person carrying out such a violation) are classified into:

- violations committed by owners or owners of IS, EIR, IR, etc.;
- violations committed by subjects (users, administrators, etc.) of IS, EIR, IR, etc.;
- violations committed by third parties not directly related to the above categories of entities;
- violations committed by authorized state bodies and organizations.

Violations of information security by owners or holders of IS, EIR, etc. can, for example, be expressed in the form of non-compliance with the requirements of legislation in the field of information security - for example, the operation of an IS that has not passed a mandatory test for compliance with the requirements of information security. IS violations by users, etc. can be expressed in the form of non-compliance with the provisions of the documents regulating their work - user agreements, technical documentation for IS, EIR, etc. IS violations committed by third parties may include, for example, attempts of unauthorized access to IS, etc. As for IS violations by authorized bodies, these can be, for example, requirements that IP owners have documentation that is not provided for by law, etc.

By type of activity, violations in the field of information security are divided into:

- resulting from active actions;
- resulting from inaction.

Active actions are any kind of activity, economic activity, work, etc. a specific person/group of people that resulted in an IS breach, incl. and committed outside the authority of these persons. Inaction, in turn, implies the absolute opposite - i.e. when, by virtue of authority, a person was obliged to perform certain actions, but did not perform them, as a result of which IS violations occurred.

According to the severity of the consequences, incl. public danger, violations in the field of information security are divided into:

- torts;
- offenses
- misdemeanors;
- crimes.

By area of activity/responsibility, violations in the field of information security are divided into:

- - civil;
- - disciplinary (labor);

- - administrative;
- - criminal.

### **Control Questions**

1. What is considered a violation in the field of information security?
2. What are the main criteria for classifying IS violations?
3. How do internal and external violations differ?
4. Give examples of technical, organizational, and human-related violations.
5. What are the main causes and consequences of IS violations?
6. What measures should be taken to prevent IS violations?
7. What laws and standards regulate responsibility for IS violations?

### **Recommended Literature**

1. Solove, D. J. (2021). *Understanding Privacy and Cyber Law*. Aspen Publishing.
2. Tipton, H. F., & Krause, M. (2019). *Information Security Management Handbook*. CRC Press.
3. Peltier, T. R. (2016). *Information Security Policies, Procedures, and Standards*. Auerbach Publications.
4. Federal Law of the Republic of Kazakhstan “On Informatization” (2015).
5. ISO/IEC 27001 and 27002 Standards on Information Security Management.