

RESEARCH OF THE CONCEPT OF CRITICAL INFRASTRUCTURE FACILITIES BY THE TOOLS OF THE FORENSIC SCIENCE

Batiuk O. V.

ORCID ID: 0000-0002-2291-4247

*Candidate of Law Science, Associate Professor,
Associate Professor at the Department of Political Science,
Management and State Security
Lesya Ukrainka Volyn National University
Lutsk, Ukraine*

Niczyporuk Janusz

ORCID ID: 0000-0003-1632-1784

Prof. Dr Hab.

*Kierownik Katedry postępowania administracyjnego
Uniwersytet Marii Curie-Skłodowskiej
(Lublin, Polska)*

Problem statement and its connection with important scientific or practical tasks. The confrontation in the conditions of undeclared hybrid war against the enemy, which has much greater resources, requires considerable efforts from Ukraine and the definition of specific priorities in its further development. This involves the directing of attention, efforts and appropriate material costs and organizational and legal measures primarily to protect key sectors of the economy and social structure, facilities, nodes, networks, systems, which play a crucial role in the functioning of state institutes, economy, politics, sphere of health care, etc. for the providing the normal life of the population, the maintain calm in society and, in fact, the existence of the state itself. Such a category of facilities in the developed world is called a critical infrastructure. The problems of critical infrastructure protection in Ukraine have arisen for a long time, in fact since the moment of the formation of the young independent state. Our country is not an exception to the general trends of the current of geopolitical and economic processes in the world. It is obvious that this issue is considered relevant for every country and international security in general.

The term «critical infrastructure» has been used in the turnover of business, scientific and diplomatic communication since the mid-1990s and was originally associated with information infrastructure [1, p. 151]. Critically important infrastructure facilities act as a life support system for daily existence of people. The communities of people are supported by a rather complex and complicated network of infrastructure systems. Citizens expect and rely on the functioning of institutions and services in their countries in relation to their health, physical security, safety and economic

well-being. The incapacitation, serious failures and even minor but permanent deficiencies in the operation and functioning of a particular infrastructure or its elements can create threatening and sometimes critical situations for a normal livelihood situation.

The scientific approaches to understanding and defining the very concept of «critical infrastructure», which is understood today as systems and resources, physical or virtual, which provide functions and services, the violation of which will lead to the most serious negative consequences for the livelihood of society, social economic development and the providing of national security, were systematized in the Green Paper on issues of the critical infrastructure protection in Ukraine that was published in 2015 [2].

Domestic scholars also suggest something else, but not very different from the wording of the term «critical infrastructure» as physical and virtual systems, objects and resources, the destruction, destroying or reduction of efficiency of which will pose significant threats to the country, its national security, safety and security and health of society [3, p. 176].

The legislative and departmental normative uncertainty in the area of critical infrastructure protection has led to that scientists, offering their own options for determining such a list of components, interpret its subject-object composition differently [4, p.88]. For example, domestic scientist O.M. Sukhodolia includes to the main sectors of critical infrastructure in Ukraine: the fuel and energy complex, the transport, the networks of livelihood, the telecommunications and the communications, the financial and banking sector, the bodies of government and law enforcement, the sector of security and defense, chemical industry, the emergency services and the services of civil protection, the food industry and the agro-industrial complex [5, p. 65].

In the process of pre-trial investigation of crimes at critical infrastructure facilities, it is necessary to establish the following fact data and circumstances that are related to the very understanding of the critical infrastructure: scale (in particular – the geographical coverage of the territory for which the loss of the elements of critical infrastructure has caused the significant damage); the relationship between the elements of critical infrastructure; the duration of harmful influence of emergencies (how and when the damage has been discovered that is associated with the loss or failure, breakdowns or malfunction of the critical infrastructure facilities and how long the negative influence of the event lasted); the vulnerability of the facility to the influence of dangerous factors; the severity of consequences by indicators in the following groups: the economical security (impact on GDP, the amount of economic losses – both direct and indirect, share of the production in the market, number of employees, tax revenues to the budget); the health and safety of the population (number of victims, in particular,

dead, persons who suffered injuries of varying severity, as well as the number of evacuees, costs of the work of emergency rescue services, emergency assistance to the population); the domestic political, state security (loss of confidence in the efficiency of the government, the authority of the state, the violation of management of government); the defense capability (the reduction of combat capability of the armed forces, disclosure of secret information); the environmental safety (influence on the environment), etc.

In conclusion, it should be noted that the understanding of the essence of critical infrastructure, knowledge of its constituent elements and the relationship between them and other facilities of criminal encroachment has an important forensic importance. This allows the prosecutor, investigator to correctly determine the actual circumstances of the committing of a crime at such facilities, to put forward versions regarding the essence of the event and its causes, to establish the circle of probable suspects, to put forward and to verify the reasonable versions. The knowledge of the location and significance of a particular facility where a criminal event occurred, will give the opportunity to establish the true intent and focus of actions of perpetrators of a crime, will specify directions for the search of traces and other evidences, will help in their search and seizure, in the general system of critical infrastructure.

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