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### TECHNOGENIC TERRORISM IN UKRAINE: GENESIS, TYPOLOGY, CHARACTERISTICS, OFFERS TO NATIONAL CONCEPT OF COUNTER ACTION

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**Abstract.** The article deals with the most dangerous topical issue related to the immediate safety of a person, society and the state as a whole - to technogenic terrorism. Technogenic terrorism represents an extremely complicated phenomenon in the social and legal environment of any state in the world and can have disastrous consequences for human security and for the world as a whole. This research focuses on the historical aspects of occurrence of hazard, it is analyzed individual objects of technosphere that carry potential danger, and it is defined the emergency essence as part of technogenic terrorism and it is provided their classification. Separately, it is focused on the technological safety state in Ukraine and finding of appropriate legal measures of counteractions to technogenic terrorism in Ukraine.

**Keywords:** technogenic terrorism, emergency, emergency legal regime, technosphere, counter-terrorism, national security of Ukraine.

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## 1. Introduction

Protection of human rights and citizen is one of the most actual task nowadays, which has long ceased to be a sphere of interest of individual states and human rights organizations, and it passed into the category of the world community's priority , and for Ukraine.

This is confirmed by the events that have arisen since the end of February 2014 in our country and due to external armed aggression against Ukraine in violation of international treaties and national legislation. These circumstances complicate the political and socio-economic situation in the country, leading to humanitarian disaster, a large number of casualties, including civilians, abuse of infrastructure system, destruction of material objects of different ownership which predetermined the numerous refugees and migrants from the territories. Such a complex situation in the country poses a real threat to national security and territorial integrity of Ukraine, which makes the state and local authorities to take urgent emergency management decisions on the basis of existing legal acts. In addition, the optimization of public administration encourages to adopt promptly new legal mechanisms on introducing of special legal regimes in these circumstances, to ensure the legitimacy and normalization of law and order in the state.

On April 15, 2014 the Law of Ukraine “On the rights and freedoms of citizens and legal regime of the temporarily occupied territory of Ukraine” [On the rights and freedoms of citizens and legal regime in the temporarily occupied territory of Ukraine 2014] was adopted. It aims on determination of the status of temporarily occupied territory of Ukraine establishes a special legal regime in this area, defines features activities of state agencies, local governments, enterprises, institutions and organizations during the regime, observance and protection of human rights and civil and human rights and legitimate interests of legal entities. It is supposed, in this situation there is a social need, which provides the legal basis for the introduction of other kinds of special legal regimes, including those introducing and implementing mechanisms are provided by the Law of Ukraine «On legal regime of emergency» [On legal regime of emergency 2000], other laws and regulatory acts.

A large number of global hazards of various origins requires special legal mechanisms regulating social relations that arise in emergency situations. The important issue of security of the population and territory of Ukraine is technogenic threat of acts of terrorism on potentially hazardous objects of the country.

## **2. Historical background emergence of hazard**

The danger technosphere for population and environment is caused by the presence - in industry, energy and utilities sector - of large amount of radiation, chemical, biological, and explosive fire- industries and technologies. According to the State Service of Emergencies of Ukraine, there are about 30 thousand units of hazardous activities in the state.

The threat of danger to society by terrorist organizations chosen the means of achieving of their goals and planning terrorist actions on objects technosphere occurred long ago. The concept of technogenic terrorism as a new form of terror began in 1946 considered carefully and was developed in 1970-th. [Bonner 1989]. But until recently, the issue under discussion was not the focus of the specialists involved into counter-terrorism activity.

Recently, among the acts of terrorism we can see negative qualitative changes. Among them we must distinguish the increasing attacks on human life and health while reducing fate encroachment on material objects; increasing of terrorism acts with the number of casualties; spreading of violence and terrorist acts; sharp increasing of terrorism acts on technosphere objects. The information data and tactical resource mutual support terrorist groups and unions, both in individual countries and internationally. You can watch the unification of political and criminal terrorism against the background of the merger and cooperation of extremist illegal and legal structures with nationalist, religious, sectarian, fundamentalist and other groups on the mutual interest basis.

Terrorism is distributed across the planet under the epidemic laws. But today in Ukraine it has not only developed the concept of effective protection of individuals, society and the state against terrorism at the state level. To build the national concept of combating terrorism is a very important analysis of this complex of social and legal phenomenon. The strategy of combating terrorism must necessarily be based on the conceptual and legal definitions. This is necessary in order not to repeat the faults that were made in the construction of the state system of combating organized crime.

We call terrorism as socio-legal phenomenon because of its content and genesis of this phenomenon is social and legal aspect in its legal assessment, in forming of state system of prevention and response to terrorist acts. Terrorism should be distinguished from a number of phenomena that are essentially favorable environment, where terrorism is formed. We understand that the concept of terrorist act covers such a motive, as a favor, revenge, economic competition, irrationalism, mentally sick, etc. The traditional perception of terrorism as phenomenon only of political motives in the narrow sense prevents understanding the true motives of the phenomenon and to program and perform adequately deal with it.

Based on the above, we understand terrorism at global, historically variable social and legal phenomenon that causes an extraordinary danger for society (regardless of motives) and is manifested in the actions that reflect

above confrontation type of relationship of a person or group of people to the state, several states, civil society or the world community in general, state or public figure, based on the philosophy of violence.

The philosophy of violence is combining fundamental system of views on violence as the most effective, versatile and virtually the only way to resolve any conflict of specific individuals, state agencies and organizations. This philosophy makes illegal the nomination requirements for individuals and legal entities, increase in such requirements, increasing of pressure at displays of weakness signs from the opposite side. Philosophy violence defines violence and enhance refinement methods of action of terrorists willingness to use against the state, public figures or people maximum random violence.

For a long time people thought about the content, origin, consequences of terrorism. "Terrorism is nothing but as a form of makkiavelizm. Makkiavelizm is not only poisoned and sly policies of depraved monarchies; it is a brutal policy of bloodthirsty democracies ...

Whence did we receive the theory of terrorism? It came to us from the XV century, the most treacherous of all the centuries, it has come to us from the tyrants homeland, flatterer Medici, friend and supporter Borgia was its teacher"[Hesse 1908].

In the future, it is necessary to focus on the analysis of the tehnogetic terrorism genesis. A human being appeared on the Earth as a result of complex and long process of historical- evolutionary development. At the stage of his/her origin a person lived in harmony with nature. According to the widespread view, the evolution of the human branch split off from a common stem from apes about 12 - 15 million years ago in the evolutionary process of development primogenitors began to lose their instinctive life program, which was associated with the development of employment and culture, the emergence of new method of treatment. Having appeared out of natural harmony, a human being had lost biological usefulness, he/she had rid of knowledge of nature, which became hatred. In turn, about 12 thousand years ago environmental crisis had appeared that, according to some scientists, threatening the existence of mankind as species. There were adverse climate change mega-fauna became to extinct, which was the main source of human nutrition. In fact, relations between a person and nature were so weak that the threatened loss of his/her ecological niche and ecological destruction of them as species. Humanity has responded to these crises by transition to a new existence mode and reproduction - to the producing economy, which in turn led to the creation of artificial nature for human existence.

### **3. Technosphere as the object of terrorist threat**

This artificial nature to mankind was the technosphere. Technosphere (from the Greek. Techne - art, craft, skill and sphaira - layer). Technosphere is a collective term that refers to the broad and narrow senses. In its broad sense it is part of the biosphere that a person has changed as a result of their activities; here refers to arable land, cut down forests, areas of radiation and chemical pollution, artificial reservoirs, structures and mechanisms created by human being and etc. By definition of scientists Technosphere now covers almost 80% of the biosphere, and 95% of humanity is living within the technosphere. Technosphere in its the narrow sense is the aggregate of human activities that are created for the implementation of production processes and maintenance of non-production needs of society. In our research technosphere will be used in its broad sense.

At first technosphere objects really significantly reduced the risk associated with exposure to a human being of negative natural processes and phenomena, but creating powerful engineering complex, humanity creates a new, extremely complex system of laws which are not known. Increases uncertainty information on its operation, entropiynist processes that occur in it.

Many facilities are technosphere potential danger. From year to year the number of technogenic disasters in the world, according to leading experts in technological security, the number of these disasters increases in its expansion [Porfyrev 1991]. This happens for three reasons: the lack of knowledge about the construction features, the functioning of the technosphere, or property protection from the effects of disasters on human

negligence, detached instances when a person intentionally damages the Technosphere facility order to apply a negative factor catastrophe losses to persons, society or state. By its motivation and purpose, these cases are divided into: technogenic sabotage, industrial vandalism, industrial terrorism and technogenic disaster with aim to conceal another crime.

Technogenic disasters have great social and psychological impact on society. Because terrorists increasingly turn to acts on technosphere objects. A classic example is worst in scale and the number of victims of the terrorist act that took place on September 11, 2001 in New York (USA), which claimed about 7,000 lives. In this case, the aircraft were used for terrorism in an unusual role of terrorist acts and the object of the act was elected 110-storied World Trade Center building, where the working day can be up to 150 thousand people at once. These giants are not designed to crash and almost an hour twin buildings fell.

Recently a negative trend can be traced of increasing in the scale and number of terrorist acts carried out on the most dangerous objects technosphere. Since 20 March 1995 the followers of the sect "Aum Senrike" committed terrorist act in Japan. As a result of this act 16 underground subway stations were affected. 12 people died and 3796 people got various degrees of poisoning.

Cases of terrorist attacks in subway are not isolated. Thus, in February 1993, an explosion in London subway station (no information about the victims); in March 1993 - in the subway of Santiago (no information about victims); in December 1994 - in the subway car at the station "Fulton Street" in New York (suffered 43 people); in October 1995 in Paris subway train (injured 29 people); in October 1995 in the underground of Baku (killed 286 people, injured more than 200 people); in July 1996 in the subway near the station "Tula" in Moscow (killed 4 people, injured 17 people); in 1997 at the station "Izmailovsky" (no victims); in 1998 - at the station "Pushkinskaya" (11 people killed); in 2000 at the station "Belarus" (no victims).

There is also a big problem trafficking of nuclear and chemical materials, due to the existence of organized crime. The possibility that nuclear and chemical materials can be transferred to terrorist groups in order to blackmail them is a reality of our days. On March 3, 1999 in Moscow an ensign of the Ministry of Emergency Situations of Russia tried to sell about 100 liters of dichloroethane. Experts estimated that amount was sufficient to fatal poisoning of tens of thousands of people [Rotani 1999]. November 23, 1995 Chechen leader Basayev said on NTV that in the vicinity of Moscow 4 containers with radioactive cesium were hidden. In Izmailovsky Park it was found one container of cesium weight of 32 kg. Each year it is recorded more than 200 cases of detention nuclear smugglers in the world. Typically, trafficking begins in one of the countries established in the former Soviet Union, and transshipment bases are Slovakia, Czech Republic, Germany, Lithuania.

One of the reasons of possible terrorist attacks is the lack of reliable physical security in large parts of potentially dangerous objects, and where it is, it needs improvement. According to GAN of Russian Federation "access of people and transport in areas where nuclear power is free. This can contribute to sudden secret preparation of terrorist acts on or near the object, complicate preventive measures changes in various conditions. In addition, the water area on the outskirts of the coastal pumping stations at all nuclear power engineering and technical facilities are not equipped, which is the vulnerable point in the protection of nuclear power plants. "[The annual report on the state of protection of the population and territory of the Russian Federation from emergency situations of natural and man-made 1997]. According to official data of the Federal Security Service of Russia from 1990 to 1997, the leadership of Kursk, Rostov nuclear power stations received letters threatening explosion or capture terrorists [Luneeva 1997]. And in case of an explosion on the Kursk and Rostov nuclear power plant will be affected a large area of Ukraine. Now the east hostilities are conducted at a distance less than 200 km. of Zaporizhzhya NPP.

#### **4. State of technological safety in Ukraine (risks of technological terrorism)**

We offer further to review the state of technological security in Ukraine by means of the annual reports of the State Service of Emergencies of Ukraine [Analysis of emergency in Ukraine 2009, 2011-2014: 15, 18-21]. Thus,

according to the Ministry of Transport in Ukraine more than 900 million tons of cargo, including a large number of hazardous and more than 3.0 billion passengers annually are transported by public transport. From the total volume of goods 15% are potentially dangerous (explosive, flammable, chemical and other substances). In recent years capital renewals of railway transport dramatically are reduced. The technical state of rolling stock is critical: the degree of its wear is an average of 77%, to be replaced over 20% of tracks, and 16% of tracks are in a dangerous condition. the State of technical means can not fully protect the railway transport using.

According to the State Emergency Service, the state economy has more than 1200 explosion and fire facilities, which as of 2008 was concentrated over 13.6 million tons of solid and liquid explosive and flammable substances. More than 10 million hectares of the territory of Ukraine covered with forests and peatlands, which are potential sources of fire.

At present, Ukraine has five nuclear power plants with 16 nuclear reactors, two experimental nuclear reactors and more than 8,000 businesses and organizations that use in manufacture, research work and clinical practice in a variety of radioactive substances. Radiation accident at the nuclear reactor in the destruction of one of the 10% release of radioactive products outside the buffer zones of stations can create zones of contamination (with various levels of radiation) of total area of 431,200 km<sup>2</sup>, in which 5249 settlements are situated with a population over 22, 5 million people. More than 80% of the units at thermal power plants of Ukraine already exceeded their design life, and 48% are higher than the limiting resource. In addition, 40 - 50 thousand kilometers of electric power had been put in operation before 1970 and they almost have worked out their resources.

According to the Ministry of Energy and Coal Industry of Ukraine, the last 25 years in the coal mines of the country nearly 600 people died in accidents. Mining and concentrating production company operate in Ukraine 2700 different kinds of piles, which hold about 3.6 billion m<sup>3</sup> of rocks, 219 industrial and hydraulic total capacity reaches 2.26 billion m<sup>3</sup>.

Totally at the beginning of 2009, 1,806 industrial facilities operated in Ukraine, where highly toxic substances, including - 9.2 thousand tons of chlorine and 194 thousand tons of ammonia are stored or used in the production. About 23 million people live in all areas of possible chemical contamination from these sites, but over the past five years the replacement or upgrade of fixed assets of these facilities practically were not carried out. Chemically dangerous objects that use and keep a large amount of chlorine, ammonia and other volatile toxic substances, mostly are fitted with outdated or obsolete equipment, which worked out its allotted time.

According to the Ministry of Regional Development, Construction and Housing and Communal Services of Ukraine data, the fourth part of the water treatment plants and networks actually worked out its lifetime, 22% of networks are in disrepair. It has ended the lifetime of every fifth pumping station. Today in Ukraine more than 17,000 bridges are operated. Almost all of them do not have appropriate supervision, their condition is not checked. 34% of bridges were built before 1961 on the roads of common use, although the estimated service lifetime of them is less than 30 - 40 years.

The area of Ukraine is full of many pipelines objects: length of main gas pipelines is over 35,200 kilometers, domestic and transit pipelines - 7900 km. Their work provides 31 compressor oil pumping and gas compressor 89 compressor stations, and product length is 3400 kilometers.

The system of large reservoirs of the Dnieper cascade caused raising of water level in the river from 2 to 12 meters, which resulted in flooding of vast areas of the Dnieper. There is a catastrophic degree of infestation by this process (50%) in the area of influence of the Kremenchuk reservoir.

According to scientists, it is possible occurrence of catastrophic flooding in the destruction of dams, culverts 12 and 16 hydroelectric reservoirs rivers the Dnieper, the Dniester, the Southern Bug, the Seversky Donets. Their total area can reach 8294 km<sup>2</sup>, where 536 settlements and 470 industrial facilities for various purposes

are situated. Potentially catastrophic flooding zones in the destruction of facilities Dnieper cascade hydropower stations, which gets part of the territories of eight regions with a total area of over 8000 km<sup>2</sup>, 463 towns and over 200 industrial companies are very dangerous in its consequences. Because of this phenomenon it is possible the disruption of power (damage to 2,000 kilometers of power lines), failure of networks and facilities of gas facilities, water supply.

The Ministry of Health of Ukraine drew attention to the dangerous tendency of various deteriorating health situation in Ukraine. Infectious of human diseases, such as leptospirosis, rabies, anthrax, rickettsial, trichinosis, tularemia and others appeared recently in the country. Epifitotychna and epizootic situation are complicated. It is not excluded the likelihood of such cells due to acts of "biological" terrorism.

Scientists' researches show a negative outlook on the number of negative effects of technological (including technological acts of terrorism), who are studying the impact of solar activity on the earth processes. Considering helio-physical expired at the number of negative phenomena, scientists have concluded that at intervals of 9 - 11 years depending on the periods of solar activity splash negative phenomena of various kinds (social, natural, technological) happen [Kiselev 1997].

The tendency of uprising of the number of technological anomalies, severity of their consequences indicate that the social transformation process in Ukraine significantly weakened the governance in the field of technological safety. There is a lack of labor and technological discipline, reducing of the safety expences, physical protection of facilities, prevention and forecasting of disasters and catastrophes, which lead to additional difficulties and losses. There is a way beyond the boundary of the main project resource transport, energy, chemical plants and vehicles. The above factors affect the growth of the number of technological acts of terrorism.

The reality of technological threat of terrorism for new aspects of complicating unified state policy to protect the individual, society and state from technological acts of terrorism, defining a number of specific issues of counter-terrorism activities, provision of physical protection of potentially dangerous objects of technosphere.

In order to solve the above problems it is appropriated:

- to develop a comprehensive legislative framework with a package of proposals in the form of departmental and interagency legal acts, considering various measures to prevent terrorist acts on objects technosphere;
- Identify the most vulnerable of potentially dangerous objects containing radioactive sources, chemical, biological contamination;
- Clarify and, in some cases radically changing the system of physical protection of potentially dangerous objects of technosphere. Creating and comprehensive application of effective technical means of physical protection. Thus, the western experts' idea deserves an interest of need of maintenance of air defense parts to protect the nuclear power plant of crash captured terrorists on these stations;
- Real planning for the transport of nuclear and chemically hazardous materials.

Technological terrorism is a quite complex, dynamic, multifaceted phenomenon and represents one of the possible forms of different types of terrorism. Selecting of targets of terrorist influence dangerous objects technosphere as means of achieving of the goals inherent, as analysis showed, to political terrorism.

Considering technological terrorism as socio-legal phenomenon should be noted that unlike conventional displays of terrorism (hostage-taking, kidnapping, bombings in public places and robbery, seizure of vehicles) technological terrorism is characterized by additional negative factors. This is a great destructive power, which is in addition to big casualties and material damage factor in moral and psychological and physical impact of terrorist activities on the participants of antiterrorist activity and society.

The past decade was marked by dramatic changes in the military-political situation in the world, which could not affect the internal situation in Ukraine. Changes were occurred in the geopolitical, military, economic, so-

cial and legal situation in Ukraine. The above changes have marked new aspects of safety of technosphere. We believe it is necessary to distinguish the following external and internal aspects, including the external aspects include:

- The lack of a stable military and political stability, the emergence of the former Soviet Union and the world in general contentious international, legal, territorial and other problems, which in turn develop into military conflicts;
- Destabilization of peaceful initiatives of some states in the most important military and political aspects of international security;
- Increasing of the availability of illicit trafficking of nuclear and chemical materials;
- Illegal migration;
- Smuggling of weapons, ammunition, poisonous substances.

The internal aspects are:

- Destabilization of the situation in credit- financial, scientific and production activities;
- Acute crisis in socio-political sphere;
- Escalation of organized crime in anti-social system.

Classification of technological terrorism by forms, content, sources, scope and implications should also be used to determine the subject of the fight against terrorism, the decision on the legal regulation of such a struggle, determination of competence power structures, etc.

In our opinion, the classification of technological acts of terrorism in scope and objects technosphere, which aimed to use terrorism provisions on classification emergencies by their level, because every act of terrorism actually causes an emergency.

## **5. Emergency as part of technological terrorism, their classification**

Emergency is a general clearly defined in the legislation of Ukraine the concept used in most legislation concerning the fight against terrorism.

Emergency is a violation of normal life and activities at the facility or territory caused by accident, disaster, natural disaster or other factors that led (could lead) to the death of people, animals and plants, considerable material damage and (or) cause damage to the environment.

In accordance with this provision of the object encroachment of technological acts of terrorism can be divided into:

- Acts of terrorism on transport;
- Fires, explosions;
- Acts of terrorism connected with the release of highly toxic substances;
- Acts of terrorism associated with the presence of pollutants in the environment above the maximum permissible concentration;
- The release of radioactive substances;
- The destruction of buildings;
- Acts of terrorism in power systems;
- Acts of terrorism on life-support systems;
- Acts of terrorism on systems and telecommunications;
- Acts of terrorism in the treatment plants;
- Acts of terrorism in the hydrodynamic facilities;
- Biological contamination.

It should again be emphasized that in its genesis, terrorism is a social phenomenon that is danger factor there in the social sphere, the above classification applies only to specific objects of technosphere, where terrorists

commit their acts. State Classifier of Emergencies correctly distinguishes terroristic acts between emergencies of socio-political nature, they are:

- Armed attacks, seizure and retention of important objects or real threat of such actions;
- Attempt on the state leaders and people's deputies of Ukraine;
- Assault, attempted at a crew air or high-speed sea (river) vessels, theft or attempted theft, destruction or attempted destruction of such ships, taking hostages from among the members of a crew or passengers;
- The establishment of an explosive device in a public place, institution, organization, enterprise, residential areas and transportation;
- Objects stolen from storage, use, recycling and during transport: firearms; ammunition; armored vehicles; artillery weapons; explosives; radioactive substances; highly toxic substances; drugs, medicines and raw materials.

Each emergency situation is defined by classification criteria (physical, chemical, engineering, statistics, etc.). And special features that characterize the threat or emergency. Also the agency of central executive body is responsible for the specification of each concrete emergency.

The scale of classification divides emergencies at four levels: at facility, local regional and national, in our opinion, this list is have to be added with an international level. In the process of determining the level of emergency consistently considered three groups of factors: the territory of distribution; size of caused (expected) economic losses and human losses.

Appealing to the certain danger categories of emergency allowed to increase objectivity when entering appropriate emergency of legal and administrative regimes, and thus reduce the administrative discretion of authorities. Thus, the legal regime of emergency state is introduced in emergency situations not below the national level - Art. 1 of the Law of Ukraine "On legal regime of emergency" [On legal regime of emergency 2000].

In the classification for the purpose of committing terrorist acts we support some authors and believe that there are three classes: political; criminal; mental. M.P. Kireev, had examining cases of terrorism acts on air transport, concluded that 25% of such acts are committed for political reasons, 25% - criminal reasons and 50% are committed by individuals with various mental illnesses [Kireev 1998].

Ranging in size and organization of terrorist acts we distinguish between unions (including clandestine sects and organizations), organized groups, terrorist groups and spontaneous single.

Given the content in the population structure the fate of people with mental illnesses and other abnormalities, mental health criterion, anomalies within sanity and abnormalities that lead to the conclusion that insanity, we also considered that is necessary for classification.

There can be classified:

- Applying to a loss of - mass, group, individual losses, differentiation of victims of religious demographic and social characteristics;
- In relation to the damage - especially large, large, small;
- Applying to moral and psychological damage - causing panic, fear of people, mistrust of authority;
- Regarding the weapons' use - weapons of mass destruction, automatic weapons, close combat weapons, non-lethal weapons, special means.

Important seems sub-classification use and features such as sources of financial support for terrorists, sources of weapons, terrorists corrupt ties with official authorities, etc. The combination of all the above features allows you to enter in the framework of a strict classification of a variety of technological manifestations of terrorism, which further allows the formalization of such notions as legislative or normative acts related to the fight against terrorism.

## 6. Countermeasures to technogenic terrorism in Ukraine

The main measure in the fight against terrorism is criminal liability. Optimization of legal regulation of combating terrorism, man-made, in our opinion, should include expansion units possible target, interpretation of the relevant acts as multiple element (with the possibility of isolating the main and additional facilities), including the relevance of attacks on mass loss of population, life and the health of certain population groups, for information, energy, food resources and life support systems on dangerous objects technosphere. The expansion, in our view, needs to describe the methods and consequences of terrorist crimes as aggravating circumstances (including, forcing the operator to carry out the sources of increased dangerous actions, regularity, perseverance in implementing the goals). As part of the criminal law it is necessary to determine the specific risk at a reasonable stopping terrorist actions and responsibility for the inaction and neglect the duties as to prevent and suppress criminal acts (in relation to decision makers dangerous objects technosphere).

It should be used a number of ideas and foreign laws in the optimization of legal regulation, including the Criminal Code of the Federal Republic of Germany for details methods and consequences of terrorism (nuclear explosion, ionizing radiation, flooding areas, poisoning of reservoirs, important public infrastructure). Also work on optimization of legal regulation has complete direction in domestic law of international instruments ratified in accordance with the law Ukraine. This refers to the European Convention on Combating Terrorism, UN Resolution 40/61, the Convention against detention of hostages seizure of nuclear materials, aircraft, etc. Recently, many questions arise regarding the justification of individual terrorist acts, as measures of the liberation struggle. General guideline here should be the idea of international instruments that the aim does not justify the means, and, therefore, any terrorist act should be treated as criminal offense, regardless of the purpose and reasons.

As the improvement of criminal procedural law to investigate terrorist acts can offer contactless interrogation, removal from the case of data on witnesses identify, empowerment for the control of banking operations and so on.

Also, it should be noted that the fight against terrorism can not be limited only by means of criminal responsibility. Since terrorism is complex social and legal nature, its causal complex covers many different areas of public life, so need a system different-legal means. This means of prevention, both at national level and internationally, is operational-search, information retrieval, organizational and technical measures regime, including special operations. In our opinion, it would be true to perceive the system of criminal activities as subsystem of a large system.

By the way, with the help of sociologists, psychologists and social psychologists need to develop specific methods of measuring the impact of this phenomenon on changing of public opinion, psychology of society. To counter this influence we must develop common ways to neutralize the "contamination" of panic rumors' spreading, intimidating and video information, negative effect of sensationalism in the media.

One of the issues is the development and study of strategic integrated technological system to combat terrorism. Counter-terrorism should be viewed as a set of ideological, information-analytical, operational and military measures agreed for period goals, content, objectives, targets prevention and actors participating in it. The principles of the Counter-Terrorism Strategy, in our view, are: proactive nature; activity; universality; resources; system-level approach; variability; interaction; differentiation of tasks.

In Ukraine there is no inter-sectoral state system that would coordinate activities of services to fight against terrorism. This is not effectively counter terrorism in state of interaction and coordination in this field at the national, regional and local levels it needs improvement and regulatory consolidation. The practice indicates the need for a special interdepartmental management of counter-terrorism system, such as the Unified state system of prevention and response to emergency situations of technogenic and natural character. But we can already identify the bodies of coordinating anti-terrorist influence: at the national level - the National Secu-

riety and Defense Council of Ukraine, Antiterrorist center of the Security Service of Ukraine, Departmental and interdepartmental commission on emergency situations, permanent operational headquarters in the state enforcement agencies. At the regional, local and site level there are the Commission for Emergencies, operational headquarters of regional enforcement structures of the state. The bodies of daily administrative system of antiterrorist impact are: Centers of Crisis administration and specialized units of state executive bodies of relevant levels, alternate, dispatching service, operational duty of the Security Service of Ukraine, Ministry of Internal Affairs of Ukraine, Ministry of Defense of Ukraine, Ministry of Health. That remains to complete the construction of system to determine the permanent system of anti-terrorist authorities influence: the particular administration (departments) in the central apparatus of the Security Service of Ukraine, Ministry of Internal Affairs of Ukraine, Ministry of Defense of Ukraine. Also there are relevant structural units of preventing and responding to terroristic acts at the regional level of governance.

Specific objectives of the anti-terrorist system of influence should be: development of legal acts and regulations and standards on the prevention of terrorist acts, legalization of their impact; conducting search operations and administrative and preventive measures to prevent terrorist acts; collection and analytical processing of information on terrorist organizations, stocks, prepared, etc; preparedness of central and local executive bodies subordinate forces and means to conduct counter-terrorist operations, the elimination of the consequences of terrorist attack; scientific and technical programs to combat terrorism; warning people of the dangers; participation in international cooperation in the fight against terrorism; actions and conduct search operations on the facts terrorism and others.

It is necessary to emphasize the issue of creating subsystem information support counter-terrorist activities. It is proposed to create a single information system with different levels of access regulations and accounting information between actors counterterrorist activities. In practice it is low rate and lack of necessary information lead to serious errors in the implementation of anti-terrorist activities. "In particular, the opportunities of system (IWeTS) Interpol in arms and explosives isn't used, which is an unique source for identifying illegal proliferation of weapons and terrorism" [Kravchenko 1999].

Another important aspect of state system of counter-terrorism cooperation in the exposure is anti-terrorist activity. The effectiveness of the national system of measures to combat terrorism in large degree depends on cooperation of all entities involved in process. Interaction allocated to interdepartmental, interagency and international. In practice, the main problem is the interaction occurring at the interdepartmental level. The main bodies that carry out counterterrorist activities are the Security Service of Ukraine, Ministry of Internal Affairs of Ukraine, Ministry of Defense of Ukraine. The distribution of competence is based on objective terrorist act - political or venal. If goal is venal, this terrorist act should be eliminated by the Ministry of Internal Affairs of Ukraine if it is political by the Security Service of Ukraine. But this statement of fact does not give rise to a clear division of functions and roles of the Security Service of Ukraine and the Ministry of Internal Affairs of Ukraine in the organization of the combat against terrorism. Indeed the question now is not solved: what terrorist acts are considered political and what are venal. We are interested in the distribution of political terrorism and criminal just because technogenic terrorism in most cases are political ones.

Given the analysis of foreign experience we try to formulate hallmarks of political terrorism and venal, particularly to political terrorism should include:

- Bound by ideological concepts, for which terrorist act is committed;
- The strategic goal is reforming of society;
- Subjects are members of extremist parties, groups, nationalists, clerics, religious fanatics;
- Development of medium- and long-term programs of action;
- Advertising of goals, attempt to influence the general public;
- Committed actions are right, existing laws are not true;
- The nusus to save the hostages' lives, to support the image;
- The possibility of self-sacrifice.

Venal terrorism includes:

- Lack of ideological concepts;
- The purpose of obtaining wealth;
- Subjects are representatives of professional or organized crime;
- Short-term of terrorist plans;
- Public support is not required;
- Understanding of illegality of their actions;
- Planning the death of hostages;
- Never going to sacrifice.

In this world the idea is realized in practice that the organization of the fight against terrorism is a very important preventive activity of special services and other actors in this struggle, which requires cooperation and coordination of efforts of all government agencies and the public through a specially created for this purpose centers.

In carrying out of counter-terrorism activities is not enough without operational measures. First, special administrative regimes of the potential dangers during transporting dangerous goods, etc. Such regimes in its content with the following measures: protection of zone object, implementation of access control, tracking of sanitary-epidemiological, radiological and environmental condition on the closed area, prevention of illegal actions against objects that are protected, the protection of information of state secret, restrictions on the entry and residence restrictions on flights lethal devices over this territory, limiting driving economic and entrepreneurial activity, use of natural resources.

The regime of controlled zone is established throughout the closed administrative-territorial entity object to restrict people onto this territory. To make unauthorized access of persons and vehicles have travel checkpoints. Such regimes are nothing but means of prevention of various technologic disasters, including acts of technological terrorism. Among these acts regime can be called the Law of Ukraine "On Protection of Environment" [On environmental protection 1991] "On legal regime of territories contaminated by the Chernobyl disaster" [On legal regime of territories contaminated by the Chernobyl disaster 2001], «On increased risk» [About an increased risk 2001] "On Radioactive Waste Management" [On Radioactive Waste 1995] and others.

Subsequent events associated with regime since the onset of negative consequences if a large probability of their occurrence. In the Administrative law theory such regimes are fixed as special emergency ones. The legal basis of counter-terrorist operation regime is precisely the laws, namely the Law of Ukraine "On legal regime of emergency" [On legal regime of emergency 2000] "On legal regime of martial law" [On legal regime of martial law 2000] "On the zone of ecological emergency" [On the zone of ecological emergency 2000] and others. Extraordinary legal and administrative regimes are like on the edge of the legal system and its content are the most intensive law-restricted for citizens without the use of which is not possible to eliminate the danger. These measures such as the introduction of labor; the introduction of curfew; verification documents to citizens, and if necessary, conduct of personal inspection, inspection items, vehicles, baggage and cargo, office space and housing citizens; ban the manufacture and distribution of information materials that could destabilize the situation in the country and others.

These modes limit the absolute power of administration in terms of danger. Thus Article 4 of the Law of Ukraine «On legal regime of emergency» [On legal regime of emergency 2000] points directly to the state of emergency in the event of mass terrorism involving loss of life or destruction of important critical infrastructure. It is proposed to supplement other forms of this technogenic disasters, destruction hazard, accident vehicles carrying dangerous goods and more.

Also, there are many questions concerning the operation of Article 17 of the Act "Additional measures of emergency state due to technogenic emergencies or natural disasters." [On legal regime of emergency 2000] Measures such as the evacuation of people from dangerous places to live, establishing housing obligations, establish-

ing quarantine and others who need the liquidation of technogenic terrorist acts can not be used, based on the fact that the above-mentioned measures are applied only upon the occurrence of conditions that are in p. 1 of Article 4 of the Act [On legal regime of emergency 2000]. But just mentioned measures are necessary for successful localization of hazards caused by technogenic terrorist acts. In our opinion, this case should be expected in the law.

Based on the experience liquidation of accidents at nuclear power plants, large enterprises petrochemical industry it should be noted that the limitation of emergency mode for a period of 60 days is not advisable, since the elimination of negative factors required a great time. In this case the proposed legislation to make the transition in certain circumstances, to the exclusion of negative anthropogenic factors on the situation of emergency state regime to environmental emergency that is not limited by time and has a sense measures aimed at localization and liquidation is negative anthropogenic factors.

But not always appropriate to enter the emergency state. More acceptable is considered one of the lower-level modes, the Administrative law combines regimes under the collective term of special status, such modes are provided by the Code of Civil Defense of Ukraine [Code of Civil Defense of Ukraine 2012], the Law of Ukraine «On ensuring sanitary and epidemiological welfare» [On ensuring sanitary and epidemiological welfare 1994] and several others. But today there is no a special emergency mode, which can be directly used for counter-terrorism operations, in addition to the above one. Law enforcement agencies adapt other regimes for combating this phenomenon. So, the regime of emergency state is entered under the provisions of the Code of Civil Defense of Ukraine and the regime of counterterrorist operation in accordance with the Law of Ukraine «On Combating Terrorism». [On Fighting Terrorism 2003]

## Conclusions

At the head of the legal framework of combat terrorism must be comprehensive conceptual law regulating the overall state policy in the fight against terrorism. Such law must have its content and special emergency of administrative-legal regime defined list of events held during counter-terrorist operations.

It is advisable to establish and consolidate the legislation order in which every political, ideological, economical solution was subjected to anti-terrorist expertise in effect. Such an approach would be consistent with a provision stating that the fight against terrorism is one of the priority tasks of the state and society.

Thus, tensions focus both within Ukraine and outside its borders promote the growth of terrorism threat on potentially hazardous objects technosphere. These circumstances make it necessary to develop a comprehensive strategy against this systemic threat. The issue of prevention of technogenic terrorism, prevention of this phenomenon and prompt response to it requires further radically increased efforts in all areas and in all areas of counter-terrorism activities focus on integrated and responsible approach to this activity.

## References

- About an increased risk .2001. Available on the Internet: <<http://www.rada.gov.ua>>
- Analysis of emergency in Ukraine .2009. Regional overview MES Ukraine, Kiev, 15 p.
- Analysis of emergency in Ukraine. 2012. The summary of. MES Ukraine, Kiev, 18 p.
- Analysis of emergency in Ukraine. 2011. The summary of. MES Ukraine, Kiev, 19 p.
- Analysis of emergency in Ukraine. 2013. The summary of. MES Ukraine, Kiev, 20 p.
- Analysis of emergency in Ukraine. 2014, The summary of. MES Ukraine, Kiev, 21 p.
- Bonner, D. 1989, Combating terrorism in the 1990-s: The role of the prevention of terrorism (Temporary provisions) act, L.: Publ. Low, 212 p.
- Code of Civil Defense of Ukraine. 2012, Available on the Internet: <<http://www.rada.gov.ua>>

- Hesse, V.M. 1998, Exceptional position, St. Petersburg, 410 p.
- Kiselëv, S.L. 1997. Gemogeofizicheskoe forecasting Crime and Emergencies, Moscow: ARII MIA of Russia, 119 p.
- Kireev, M.P. 1998. The fight against terrorism on air transport, Moscow: Academy of Management, MIA, 211 p.
- Kravchenko, Y.F. 1999. Police in Ukraine, Kiev: Genesis, 432 p.
- Luneeva, V.V. Crime of the 20th century. 1997. World criminological analysis, Moscow: Lawyer, 255 p.
- On ensuring sanitary and epidemiological welfare. 1994. Available on the Internet: <<http://www.rada.gov.ua>>
- On environmental protection. 1991. Available on the Internet: <<http://www.rada.gov.ua>>
- On Fighting Terrorism. 2003. Available on the Internet: <<http://www.rada.gov.ua>>
- On legal regime of emergency. 2000. Available on the Internet: <<http://www.rada.gov.ua>>
- On legal regime of martial law. 2000. [http://www. Available on the Internet: rada.gov.ua](http://www.rada.gov.ua)>
- On legal regime of territories contaminated by the Chernobyl disaster .2001. Available on the Internet: <<http://www.rada.gov.ua>>
- On Radioactive Waste. 1995. Available on the Internet: <<http://www.rada.gov.ua>>
- On the rights and freedoms of citizens and legal regime in the temporarily occupied territory of Ukraine .2014. Available on the Internet: <<http://www.rada.gov.ua>>
- On the zone of ecological emergency. 2000. Available in the Internet: <<http://www.rada.gov.ua>>
- Porfyrev, B.N. 1991, Gosudarstvennoe upravlenie v chrezvichainih sityaciyah - Moscow: Science 137 p.
- Rotani N. 1999, February, 1, Apokalipsa ne budet, no ygroza realna. Tak schytaet ekspert Vladimir Orlov. Moskovskaya Pravda.
- The annual report on the state of protection of the population and territory of the Russian Federation from emergency situations of natural and man-made. 1997. *Security concerns in emergencies*, Moscow, Vol. 8.