

STATE REGULATION OF MINE ACTION: THE CASE OF UKRAINE



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Abstract. Today, Ukraine is part of a sad group of almost forty countries for which the mine problem remains relevant even in the XXI century. Moreover, it is one of the five most "mined" countries, along with Afghanistan, Iraq, Syria and Somalia.

In Ukraine, the occupied part of Donetsk and Luhansk regions is about 18 thousand km², taking into account the surrounding areas of at least 20 thousand km². According to the estimates of the UN Office for the Coordination of Humanitarian Affairs, published in 2015, only along the demarcation line, the "mine-contaminated" area covers an area of over 300 km². In 2016 alone, 43 anti-tank mines killed 43 people and injured 58 others. Among the victims, 69% were military and 31% were civilians.

In 2018, the Verkhovna Rada adopted the Law of Ukraine "On Mine Action in Ukraine". Note that similar laws do not exist in European countries that are concerned about ammunition pollution and mine. This law defines the legal and organizational principles of mine action in Ukraine and the peculiarities of state regulation. In particular, the list of objects and subjects of mine action, requirements to experts in this sphere, sources of financing, the order of the account of operators and rendering of the aid to victims. The latest amendments to this law stipulate the creation of a new executive body – the Mine Action Center and two new centers: a mine action center – on the existing funds of the Ministry of Defense and a humanitarian demining center – on the funds of the Ministry of Internal Affairs.

Based on the results of processing an array of scientific information on the researched problem, we found that in 2018 "The National Standard of Ukraine DSTU-P 8820: 2018 – Mine Action was been adopted. Management processes. Substantive provisions". This standard sets out the basic provisions for mine action management processes in the organization of measures to protect the

public from the effects of explosive devices, based on United Nations regulations on mine action (IMAS) in order to implement international requirements for mine action in Ukraine.

The United Nations Mine Action Plan (IMAS) defines Mine Risk Education (MRE) as an activity aimed at reducing the risk of injury from mines and explosives by raising awareness and promoting change in public behavior, including the dissemination of public information, education and training, and communication with mine action in the community.

Keywords: *regulation, mine action, training, risk, safety, victim.*

Introduction

Formulation of the problem. Currently, there is an awareness of the current state of security of each person leads society to the urgency of a large-scale task of reviewing the existing attitude to security by forming a new mass culture – security culture, when every Ukrainian consciously chooses a position, acquires the necessary knowledge and skills. At the same time, the state creates favorable conditions for its vital activity, preservation of health and working capacity.

Since 2014, about 16,000 square kilometers of the territory of Luhansk and Donetsk oblasts was been contaminated with mines and explosives. The presence of such a danger affects the lives of about two million people and threatens vital infrastructure, impedes freedom of movement, blocks access to livelihoods and limits opportunities for the free development of society as a whole.

In 2018, the Verkhovna Rada adopted the Law of Ukraine "On Mine Action in Ukraine". Note that similar laws do not exist in European countries that are concerned about the problems of mine and ammunition contamination, which determines the legal and organizational principles of mine action in Ukraine and the peculiarities of state regulation. In particular, the list of objects and subjects of mine action, requirements to experts in this sphere, sources of financing, the order of the account of operators and rendering of the help to victims. The latest amendments to this law stipulate the creation of a new executive body – the Mine Action Center and two new centers: the mine action center – on the existing funds of the Ministry of Defense and the humanitarian demining center – on the funds of the Ministry of Internal Affairs.

According to experts of Ukrainian Scientific Center for Political Studies with the necessary funding, work on full humanitarian demining of Donbass can take up to 15 years.

In October 2015, an agreement was been reached in Paris between the leaders of Ukraine, France and Germany that Paris and Berlin would assist Ukraine in demining the territory, which will be carried out under the auspices of the OSCE. The OSCE Project Coordinator in Ukraine is directly involved in humanitarian demining, as reflected in its 2016 priorities, and the total budget for OSCE projects in Ukraine this year was been increased from € 3 to € 3.6 million. As part of the OSCE project "Assistance to the Government of Ukraine in clearing the territory of eastern Ukraine from the remnants of war" in December 2015 launched an Information Management System for Mine Action (IMSMA), which allows mapping of potentially dangerous areas and contains a database of demined facilities. Equipment was been delivered, Ukrainian sappers were trained and information campaigns were conducted in educational institutions and for

the civilian population from the liberated territories.

The OSCE Mine Action Center was been joined by the Geneva International Center for Humanitarian Demining, which conducts activities to assist in the preparation of the necessary legal framework for Ukraine, the provision of recommendations for the organization of work and the implementation of humanitarian demining.

Analysis of recent research and publications. According to the analysis of sources of scientific information, it is established that the vast majority of scientific publications on humanitarian demining and mine action relate to the technical aspects of this activity and are relevant to the subject.

Analysis of publications. Numerous scientific studies have focused on the technical component of humanitarian demining. They says that the topic of demining the area from various types of ammunition is certainly relevant. Especially when there is a long period of hostilities with the use of a huge number of different types of engineering ammunition. There are a large number of machines in the world that work on different

principles, but serve one purpose, namely to make passages in minefields or to conduct continuous demining. Each of the methods of demining has its disadvantages and advantages.

In view of this, it should be noted that there is a significant number of news reports and speeches by experts in the media on the importance of this issue. Among the studied content it is necessary to note single works devoted to specifics of professional training of sappers and experts in demining, and formation of culture of mine action at the population.

Issues of forming a culture of mine action safety and the possibility of its implementation in Ukraine were investigated by Havaza A. O. (Havaza, 2021, p. 47). Where it is noted, thoroughly investigated activities aimed at reducing the risk of injury due to mines and explosives by raising awareness of the population in areas contaminated with explosives, by acquiring skills of safe behavior.

Rodikov V. G. it established that the professional mine competence of a sapper can be determined only in practice (Rodikov, 2014, p. 158). Therefore, we propose to check the readiness of the sapper (demining specialist) during the overcoming of the so-called "Sapper Trails", which is developed in accordance with the specific planned future application, or specific conditions of future professional activity and which the sapper will have to overcome after training. We consider the implementation of such training possible only when determining and implementing certain professionally oriented training conditions.

Research methods. To achieve this goal, general scientific and special methods were used, in particular: abstraction, idealization, generalization, grouping, synthesis (determination of prerequisites for policy making in the sphere of mine safety); comparison, analogy (study of the evolution of regulatory support in the sphere of mine action); abstract-logical, dialectical, induction, prognostic (theoretical generalization of research and formulation of conclusions).

The experience of countries involved in mine risk education programs, such as Cambodia, Thailand, Lebanon, Sri Lanka, Afghanistan, Iraq, Angola, Sudan and Mozambique, focuses on the impact on the behavior of those directly affected by

mine/explosive contamination items. The example of Croatia and Bosnia and Herzegovina shows a variety of approaches, including targeting journalists, local celebrities, tourists and the public, in order to create positive patterns of behavior for the local population. The example of countries such as Afghanistan, Iraq, Angola, Sudan and Mozambique should be noted in such an interesting learning option as child-to-child, is the dissemination by children of information received at school among peers and relatives.

It is determined that the content of information materials is determined depending on the target audiences, encouraged patterns of behavior and the factors that are most likely to affect the target audiences so that they adopt the desired pattern of behavior. Information materials should be culturally, linguistically and socially acceptable, have a positive character, and make the public feel that the activities offered in the information materials can be lifesaving.

The importance of integrating public awareness of the risks associated with mines and explosive remnants of war into the curricula of all educational institutions in the country to implement appropriate curricula and to ensure the training of teachers and the acquisition of relevant teaching materials for better teaching of this critical material for security environment.

The purpose of the article is to analyze the genesis of state regulation of mine action in Ukraine and ways to further improving this security area.

Presentation of the main research material. Recently, the threat to the lives of citizens and economic activities in the country has critically increased in Ukraine due to mine danger, because of which injuries and deaths of both civilians and servants of the Armed Forces of Ukraine and other military formations have significantly increased in eastern Ukraine. This state of affairs is due to the following:

- as a result of the aggression of the Russian Federation against Ukraine, a large area of Donetsk and Luhansk regions in the area of the Anti-Terrorist Operation was contaminated with a significant number of explosive devices;
- on the territory of Ukraine annually find a large number of explosive objects – the remnants of two world wars;

- as a result of long uncontrolled military activity of the Soviet army in peacetime on the territory of Ukraine there remained uncleansed from explosives military training grounds which are not used at present;
- after the collapse of the Soviet Union in 1991, significant stockpiles of mines remained on the territory of Ukraine, including today about
- 5.5 million anti-personnel mines that Ukraine must destroy in accordance with its international obligations.

That is why mine action now remains an urgent and difficult task. In the absence of active hostilities in eastern Ukraine in recent years, one of the main threats to the lives of both Ukrainian servants, law enforcement officers and civilians living in the area of Operation Allied Forces have been mines, unexploded ordnance and explosive remnants dotted territory of Donbass. Sapper units of the Ministry of Defense (MoD) and the State Emergency Service of Ukraine (SES), the Department of Explosives Service (DVTS) of the National Police of Ukraine are working to eliminate them. However, the experience of the Western Balkans, whose territory was not yet been completely cleared, shows that a comprehensive and effective solution to this problem is possible through comprehensive humanitarian demining. Demining Humanitarian demining - activities that eliminate threats from mines and explosive remnants of war (ERW), including technical inspections, mapping, clearing, marking, documentation after clearing, communication with communities on mine action and transfer of the cleared territory. Various non-governmental organizations, commercial companies, national military or mine action bodies units can carry out humanitarian demining. Demining can be care out both in the event of an immediate emergency response or during the normal course of events.

Now, the most profitable for Ukraine is demining by the forces and means of its own specialists, because the involvement of international specialists is a long and bureaucratic process that can take a long time. Along with this, concluding direct contracts with foreign demining companies is quite expensive. For example, in the period from 1998 to 2005, Croatia spent more than \$ 240 million for this purpose.

However, whatever model of demining Ukraine chooses, it will not be effective without the parties to the conflict passing minefield maps to a single focal point. After all, mines and "stretch marks" are regularly find in the controlled territories of the "DPR/LPR", as well as in frontline towns and villages on the Ukrainian side, almost every day.

At present, there is considerable experience in humanitarian demining gained in demining missions in peacekeeping missions. Ukrainian sappers have destroyed hundreds of mines and explosives in Lebanon, the former Yugoslavia, Eritrea, Iraq and other countries. General Staff of the Armed Forces of Ukraine (The Armed Forces of Ukraine, 2003, p. 4).

In the previously uncontrolled territories, the state will face the need for global demining in the areas of hostilities. Moreover, this process can take decades and will be complicated by the fact that in most cases, minefields and fields were place illiterately and without mapping minefields. This was evidence by the analysis of the Ukrainian Institute for Strategies for Global Development and Adaptation, is today there are three options for Ukraine to demine the territory of the Donbass.

The first option is that at the same time as the peacekeeping contingent, Ukraine should ask for international support and invite demining specialists.

The second option is to enter into direct contracts with private foreign military companies for demining their territory.

According to the third option, Ukraine must conduct demining on its own (Khromyak, 2015, p. 364).

It can be argued that the practical experience of solving similar problems in the developed world (Landmine and Cluster Munition Monitor) shows that the creation of a mine action system is a broad process of joint activities of the government, its ministries, agencies and, in some cases, international organizations.

Mine action is regulate in accordance with international standards for humanitarian demining programs, which were first proposed by working groups at an international technical conference held in Denmark in July 1996. It was then that the requirements and technical criteria for all aspects of the demining process, recommended technical

standards, etc. were established. At the end of 1996, an UN-led working group developed, and in March 1997, the United Nations Mine Action Service (UNMAS) published "International Standards for Humanitarian Demining Operations".

It should be noted that these standards are regularly updated (improved) due to the constant change of operating procedures, practices and norms. Currently, this document is called "International Mine Action Standards" (IPMAS). Work on updating and revising these standards is ongoing by international organizations. These standards were intended to provide an understanding of key issues in the design and organization of mine action programs to assist governments and other organizations involved in the process.

International Standards (IMAS 01.10. Guidelines for the Application of International Mine Action Standards (IPMAS)) it is determined that mine action is a broad process that includes:

- demining and neutralization (destruction) of explosive objects;
- training in the risks associated with explosives;
- destruction of surplus ammunition, ammunition unsuitable for further use and storage, as well as ammunition subject to destruction in accordance with international obligations;
- assistance to victims;
- propaganda of the ban on the use and application of anti-personnel mines.

Initially, the only legal act in Ukraine regulating the division of responsibilities for demining the territory of Ukraine was the resolution of Cabinet of Ministers of Ukraine "On streamlining the detection, disposal and destruction of explosives", approved in 1999.

With the adoption of the Law of Ukraine of 22.12.2004 № 2281-IV "On the adoption of the Protocol on Explosives of War" our state has undertaken to conduct operations in the sphere of mine action in accordance with international standards of mine action (IMAS 09.30. Second edition). The key and most difficult part of PMD is demining. The tasks of demining (detection, neutralization and destruction) of explosive objects are performed by groups of pyrotechnic works of the State Emergency Service, demining groups of the Armed Forces of Ukraine and the State Special Transport Service.

In order to standardize the legislation in the sphere of mine action, the Verkhovna Rada of Ukraine in 2018 adopted the Law of Ukraine dated 06.12.2018 № 2642-VIII "On mine action in Ukraine". Which defines the legal and organizational principles of mine action, defining humanitarian demining procedures, which are the protection of civilians and the territory of Ukraine from the social, economic and environmental impact of explosives. The Law is creating sufficient conditions for safe activities of civilians, as well as legal and organizational principles of mine action, rights and responsibilities of personnel, conducting humanitarian demining, determination of social guarantees for persons involved in the performance of humanitarian demining tasks and persons affected by explosions of explosive devices, as well as the procedure for monitoring mine action.

The law stipulates that Ukraine has normative documents in the sphere of mine action (national standards), which are developed taking into account the provisions of international mine action standards and current legislation and are mandatory in the course of mine action.

According to Art. 18 of the Law "On mine action in Ukraine" stipulates that state regulation and management in the sphere of mine action be carried out by:

- formation, coordination, approval and implementation of national mine action programs;
- approval, approval and implementation of national standards developed taking into account the provisions of international standards in the sphere of mine action;
- development of conceptual bases of state policy in the sphere of research and implementation of mine action measures in the interests of public safety;
- training, retraining and advanced training of specialists in the sphere of mine action and demining;
- introduction of the procedure for accreditation of mine action operators and monitoring of compliance with accreditation requirements;
- introduction of effective information management in the sphere of mine action;
- control and quality assurance of mine action activities.

In order to implement international mine action standards in Ukraine by the Department of Environmental Security and

Mine Action of the MoD of Ukraine in the framework of a joint project and the OSCE Project Coordinator in Ukraine "Enhancing Ukraine's Mine Action Capacity". Other members of that is Geneva Center for Humanitarian Demining, the non-governmental organization "The HALO Trust" and members of TC-176 "Standardization of Defense Products" developed a national standard "Mine Action. Management processes. Substantive provisions".

In accordance with the order of the National Standardization Body of the State Enterprise "Ukrainian Research and Training Center for Standardization, Certification and Quality" dated 19.12.2018 № 511 "On the adoption of national standards" adopted the national standard DSTU-P 8820-1: 2018 "Mine action. Management processes. Basic Provisions" as a trial entry into force on April 1, 2019.

The standard designed primarily to ensure that all mine action entities use common terminology in this area; ensuring compliance with safety measures during non-technical, technical inspections and clearing/demining, ensuring the rights and interests of citizens related to mines and explosive remnants of war, preserving the environment and fulfilling the state's international obligations on mine action.

The standard will promote the use by mine action entities of the same rules for the planning, organization and implementation of mine action activities by its main components.

The application of the national document will allow perform the tasks:

- establishment of general (unified) requirements for the procedure for implementing mine action measures;
- definition of the main criteria and provision of recommendations on planning, organization and implementation of mine action measures;
- implementation of the requirements of international standards in the sphere of mine action.

Art. 8 of the Law of Ukraine "On Mine Action" identified sources of funding for mine action, in particular the fact that to finance mine action may involve financial resources of donors, including international technical assistance, repayable and non-repayable financial assistance of international organizations, charitable assistance and other

assistance, are not prohibited by the legislation of Ukraine.

In order to facilitate the involvement of international operators in mine action in Ukraine, the Verkhovna Rada of Ukraine adopted amendments to the law in 2019, which stated that financial resources provided by donors directly to mine action operators to implement mine action activities in the territory Ukraine. They are not subject to enrollment in the state budget and was been used by such operators in the areas agreed with the authorized operational body of mine operations (mine action center).

In order to clarify the subjects of mine action in Ukraine, the Law of Ukraine "On Amendments to the Law of Ukraine" On Mine Action in Ukraine", which states that the subjects of mine action are: national mine action authority; authorized executive bodies in the sphere of mine action, local state administrations and local self-government bodies; mine action center and humanitarian demining center and mine action operators.

The main purpose of the adopted law is to implement the system of formation and implementation of state policy in the sphere of mine action through the creation of the above special bodies: the Center for Mine Operations and the National Mine Action Authority (NMAA). In addition, the law was adopted: changes the structure of special bodies in the sphere of mine action and their powers; significantly expands guarantees of social protection and rehabilitation of mine victims; eliminates a number of safety risks of mine action operators and creates preconditions for improving the efficiency of their work.

The adopted law amended the previously envisaged system of special mine action bodies and their powers. The key changes in the mine action system are as follows:

- Establishment of two separate mine action centers: instead of a single operational center provided by the first version of the relevant law, two such centers will be established with similar powers but different subordination: Mine Action Center – a budget institution subordinated to the MoD; The Humanitarian Demining Center is a budgetary institution subordinated to the Ministry of Internal Affairs.
- Chairmanship of the National Authority: The Minister of Defense chairs the meetings of the NMAA until the restoration of the territorial integrity of Ukraine within

the internationally recognized borders, after which the chairmanship passes to the Minister of Internal Affairs.

- Establishment of the Secretariat of the National Authority: in addition to supporting the activities of the NMAA, the Secretariat will also coordinate the activities of the Mine Action Center and the Humanitarian Demining Center.
- Elimination of the Quality Control Inspectorate and the Accreditation Commission: the functions of these two bodies will be performed directly by the operations centers.

An important point is the definition in Art. 23 of these law issues of the national body for mine action. Accordingly, it is determined that for the organization of coordination of ministries, other central and local executive bodies, local governments, enterprises and organizations regardless of ownership (except those belonging to the sphere of management of ministries and other central executive bodies) involved in carrying out activities in the sphere of mine action. The Cabinet of Ministers of Ukraine forms an interdepartmental subsidiary body, which operates on a collegial basis under the leadership of the Minister of Defense of Ukraine.

It is note that after the restoration of the territorial integrity of Ukraine within the internationally recognized state border by decision of the Cabinet of Ministers of Ukraine leadership in the national mine action authority is transferred to the head of the ministry, which ensures the formation and implementation of state policy in civil protection and prevention of their occurrence, liquidation of emergencies, rescue work.

Given the scale of the demining problem, about 200 pyrotechnicians from the SES of Ukraine were involved in demining the Donbass. To this end, the SES of Ukraine has developed a Plan for humanitarian demining of Donetsk and Luhansk regions for 2015. The approximate area of areas in need of demining was defined as 7 thousand km². From March to November 2015, 250 specialists and 50 units were involved in the ongoing demining tasks up to 500 personnel will be involved in the implementation of the measures, taking into account the rotations.

On July 30, 2015, the SES of Ukraine concluded a joint project with the OSCE

"Assistance of the Government of Ukraine in the cleared territories in eastern Ukraine from the remnants of war" on the supply of technical assistance for demining of Donetsk and Luhansk regions. The total cost of the project was 995 thousand euros. The donor of this project was Germany. The SES together with the OSCE compiled and agreed on a list of equipment for equipping 4 pyrotechnic calculations of the SES with a total number of 22 personnel. The project was designed to supply technical means for demining.

It is worth mentioning that since 2001 in Kamianets-Podilskyi, Khmelnytsky region (Demining Center of the Armed Forces in Ukraine). The only Demining Center of the Armed Forces in Ukraine was been created and is successfully training sappers. Its specialists have successfully established themselves during the peacekeeping mission in Lebanon and during the war in Iraq. However, whatever model of demining Ukraine chooses, it will not be effective without the parties to the conflict passing minefield maps to a single focal point. After all, mines and "stretch marks" are regularly found in the controlled territories of "DNR/LNR", as well as in frontline towns and villages on the Ukrainian side almost every day. According to the UN, since March 2015 in Donetsk and Luhansk regions at least 42 children were killed and 109 others were injured in mine and ammunition-related accidents.

Currently, the issue of training demining specialists is regulated by the Standard of professional (vocational) education in the profession of sapper (demining), approved by the order of the Ministry of Education and Science of Ukraine from 13.05.2019 № 778. According to which this specialist items within a defined area, use devices and equipment for pyrotechnic works; to control the quality of the tasks; keep records of work performed by the unit; observe safety measures; to organize special training and education of personnel in methods of search and destruction of explosive objects, observance of safety measures and rules of use of technical means.

Conclusions

Analysis of the legislation of Ukraine, which provides for state regulation of mine action in Ukraine, shows a long time of its formation, which was explained by the neglect of the importance of this issue before the start of hostilities in eastern Ukraine.

It was revealed that the legislation of Ukraine defines the main provisions for the implementation of state policy in the sphere of mine action in general, and defines the basics of building a system of humanitarian demining.

Based on the results of processing an array of scientific information on the researched problem, we found that in 2018 the National Standard of Ukraine DSTU-P 8820: 2018 – Mine Action. Management processes. Substantive provisions. This standard sets out the basic provisions for mine action management processes in the organization of measures to protect the public from the effects of explosives, based on United Nations mine action regulations (IMAS) in order to implement international mine action requirements in Ukraine.

The United Nations Mine Action Plan (IMAS) defines Mine Risk Education (MRE) as an activity aimed at reducing the risk of injury from mines and explosives by raising awareness and promoting behavior change, including the dissemination of public information, education and training, and communication with mine action in the community.

It was proved that the above-mentioned legislative acts define the powers of central executive bodies in this area and the requirements for mine action operators. In addition, it was investigated that the problem of state regulation of mine action is the interaction of state, non-state and international humanitarian structures in the process of mine action, in particular the training of specialists in this sphere as professionals, as well as local deminers.

Further research should focus on the study of algorithms for the interaction of state, non-state and international humanitarian structures in the process of mine action with local authorities at the level of united territorial communities.

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