

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

UDC 351.862

УДК 351.862

P. B. Volyanskiy, Doctor of Public Administration,
Associate Professor,
V. N. Mikhailov, Candidate of Science in
Public Administration

П. Б. Волянський, д. н. держ. упр.,
доцент,
В. М. Михайлов, к. н. держ. упр.

ORGANISATION MANAGERIAL GROUNDS OF POLISH FIRE AND RESCUE SERVICE: EXPERIENCE FOR UKRAINE

ОРГАНІЗАЦІЙНО-УПРАВЛІНСЬКІ ЗАСАДИ ДІЯЛЬНОСТІ ПОЛЬСЬКОЇ ПОЖЕЖНО-РЯТУВАЛЬНОЇ СЛУЖБИ: ДОСВІД ДЛЯ УКРАЇНИ

Urgency of the research. The analysis of the consequences of fires and emergencies in Ukraine indicates an increase in their number as well as a rise in fatalities and injuries.

Target setting. The state fire and rescue service in our country do not always respond swiftly because of their remote location from the sites of fires and emergencies. In many European countries, including Poland, innovative fire and rescue service has been created, the main peculiarity of which is its large-scale operation.

Actual scientific researches and issues analysis. A significant contribution to the development of the theory, methodology and history of fire and rescue studies, particularly in the Republic of Poland, was made by N. Y. Vovchasta, Z. H. Hontar, O. O. Trush, V. O. Tyshchenko, Y. Y. Kharlamov, K. M. Deineha.

Uninvestigated parts of general matters defining. At the same time, domestic scientists have not sufficiently investigated the main aspects of the formation and role of the Polish fire and rescue service, especially the implementation potential of its best practices in Ukraine.

The research objective. The research of peculiarities of the Polish fire and rescue service alongside highlighting its key differences from that operating in Ukraine with a view to its subsequent implementation in our country is under consideration.

The statement of basic materials. The article outlines the main aspects of the functioning of the Polish fire and rescue service as an integral part of ensuring the country's internal security. The main challenges of the fire rescue service in Ukraine and areas of its reform are considered in the light of the Polish experience.

Conclusions. Improvement of the territorial subsystem of civil protection and its constituents will contribute to the effective protection of our country's people and economic entities in case of fires and emergencies.

Keywords: fire and rescue services, volunteer fire services, fire, emergency, civil defense, territorial communities.

DOI: 10.25140/2410-9576-2018-2-1(13)-41-46

Urgency of the research. The rapid development of civilization in the past century triggered the emergence of new types of man-made and natural threats. However, fires have always been there. Their occurrence irreversibly destroys the achievements of individuals as well as society on the whole. The statistics of fire and rescue brigades' response efficiency confirm that we still cannot control fire. Every hour, on average 8 people in the world die in the fire, let alone hundreds of victims. According to

Актуальність теми дослідження. Результати аналізу наслідків пожеж, надзвичайних ситуацій в Україні вказують на збільшення їх кількості, зростання смертельних випадків та травмувань людей.

Постановка проблеми. Державні пожежно-рятувальні підрозділи в нашій країні не завжди забезпечують своєчасне реагування через їх віддаленість від місць виникнення пожеж і надзвичайних ситуацій. У багатьох європейських країнах, в тому числі в Польщі, створено еволюційну пожежно-рятувальну службу, особливістю якої є її масовий характер.

Аналіз останніх досліджень і публікацій. Значний внесок у розвиток теорії, методології та історії пожежно-рятувальної справи, зокрема в Республіці Польща, здійснили Н. Я. Вовчаста, З. Г. Гонтар, О. О. Труш, В. О. Тищенко, Ю. Є. Харламова, Х. М. Дейнега.

Виділення недосліджених частин загальної проблеми. У той же час вітчизняними вченими недостатньо досліджено основні аспекти становлення та ролі польської пожежно-рятувальної служби, зокрема можливої реалізації її кращої практики в Україні.

Постановка завдання. Дослідження особливостей діяльності польської пожежно-рятувальної служби, виділення ключових відмінностей для впровадження в нашій країні.

Виклад основного матеріалу. У статті визначено основні аспекти функціонування польської пожежно-рятувальної служби як невід'ємної частини забезпечення внутрішньої безпеки країни. Висвітлено основні проблеми пожежно-рятувальної служби України та напрями її реформування з урахуванням польського досвіду.

Висновки. Удосконалення територіальної підсистеми цивільного захисту та її ланок сприятимуть ефективному захисту людей та об'єктів економіки нашої країни у разі виникнення пожеж і надзвичайних ситуацій.

Ключові слова: пожежно-рятувальна служба; добровільна пожежна охорона; пожежа; надзвичайна ситуація; цивільний захист; територіальна громада.

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

very conservative estimates, fires cause a loss of around 1 % of GDP in all the countries of the world. In other words, we work 3 to 4 days a year in order to compensate for the losses caused by fires [1].

According to the State Emergency Service of Ukraine (hereinafter SESU), in 2016 there were 74,221 fires registered in our country, resulting in 1,872 fatalities (including 57 among children) and 1,351 injuries (including 121 among children). Material losses from fires amounted to 5,166,872,000 UAH. In 2016, on average 203 fires occurred every day in Ukraine, resulting in 5 fatalities and 4 injuries, with fire destroying or damaging 58 buildings and 11 units of equipment. Daily material losses from fires amounted to 14,200,000 UAH. Each fire caused the state direct losses amounting to 21,900 UAH. Over the 9 months of 2017, 71,516 fires have been registered, which clearly indicates a rise in their number by 17,6 % as compared to the same period in 2016. An increase in the quantity of fires means an upsurge in the number of fatalities and injuries. As of September 2017, 1,222 people (including 45 children) were killed and 1,118 (including 100 children) were injured in fires. Direct material losses for the 9 months of 2017 have increased by 35,7 %, whilst indirect ones have soared by 81,5 %, compared with the same period in 2016. The number of destroyed or damaged buildings, structures and equipment as well as obliterated plants and animals has also increased. The overall percentage of fires in the countryside is up to 35 % [2].

Target setting. Provided with the relevant organizational skills and technical conditions, many European countries have set up innovative fire and rescue services to ensure safety of the population. A similar service operates in our country, too. However, state fire and rescue services do not always respond swiftly because of their remote location from the sites of fires. What is more, they are also constrained in their attempts to form efficient groupings whose aim involves coping with the negative consequences of large-scale emergencies, including those in a special period. There are many arguments in favour of the possibility and practicality of adopting the Polish experience in this area throughout our country. Its efficiency is mainly due to the fact that the annual average number of fatalities caused by fire is 1,5 per 100,000 people in Poland (compared to 2,8 in Ukraine) [2; 3].

Actual scientific researches and issues analysis. The cooperation of Polish and Ukrainian rescuers on fire and emergency response training is becoming more and more active these days. This is due to scientific conferences and seminars organized in the framework of cross-border cooperation; international public action "Security without borders"; joint exercises, etc. Rescuers from Ukraine are improving their skills in Polish educational institutions. Volunteer rescue organizations in Poland are also imparting their experience of eliminating large-scale fires and emergency response [2; 4].

Researchers are also interested in the fire and rescue services of both countries. Thus, N. Y. Vovchasta reveals the historical practices and origins of the large-scale volunteer fire brigades movement of as well as professional training of specialists of the Polish fire and rescue service. Z. H. Hontar conducts a comprehensive study of the main areas of activity of the state administration bodies of Poland concerning the development of fire science in Western Ukrainian lands. O. O. Trush and V. O. Tyshchenko present the European Union member states' experience of constructing and operating the civil protection system, with a highlight on Poland. Y. Y. Kharlamova explores the mechanisms of training civil protection service specialists throughout European countries, including Poland. The experience of the Republic of Poland in various areas of public administration is highlighted in K. M. Deineha's research.

Uninvestigated parts of general matters defining. Meanwhile, it should be noted that the main aspects of Polish fire and rescue service formation and functioning as well as its implementability in our country's system of civil defense have received insufficient coverage in domestic scientists' studies.

The research objective. Involves a study of the features of the Polish fire and rescue service alongside highlighting its key differences from the one operating in Ukraine, with a view to its subsequent implementation in our country.

The statement of basic materials. The National Fire and Rescue Service is an integral part of ensuring the internal security of Poland. The main prerequisite for its establishment was the creation of a unified system that would combine different interconnected rescue teams' efforts in efficient emergency rescue management and fire suppression. Thus, in 1995, it integrated fire departments a-

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

long with institutions and organizations (inspections), which, in accordance with the requirements of regulatory acts, are involved in fire and rescue operations. The main functions of the national fire and rescue service are: protection of human life, health, property and the environment; prediction and elimination of fires, natural disasters and local threats in the context of the objectives pre-set by the fire and rescue units of the State Fire Service of the Republic of Poland. National fire and rescue service departments are located in voivodeships and city counties, whilst smaller-scale fire and rescue units, in particular volunteer fire brigades, are based in villages. The structure of the Polish fire and rescue service provides the accomplishment of fire and rescue objectives by brigades adapted to responding to a variety of natural and man-made threats, which involves the realization of fire and rescue operations in view of the specific types of risk that may result from a fire, catastrophe or natural disaster [3].

The main peculiarity of the fire and rescue service of Poland is its large-scale operation which results from relying on numerous volunteer fire brigades. Their number exceeds that of the fire and rescue units of the State Fire Service of the Republic of Poland. Therefore, albeit professional units form the core of the security system, it is volunteer fire units, distributed throughout the country, which determine its efficiency. In European countries, the number of volunteer fire and rescue units protecting territorial communities from natural and man-made threats exceeds the number of state fire and rescue units threefold or even fourfold.

The State Fire Service of the Republic of Poland, as the basis of the fire and rescue service, is financed from the state budget, whilst volunteer fire protection relies heavily on municipal budgets as well as on annual state subsidies stimulating their activities. Together the two eliminate consequences of fires and emergencies throughout the country. Their partnership is also realized through fire and rescue training [3; 5].

The Commander of the State Fire Service of the Republic of Poland organizes fire protection. He is responsible to the Minister of Internal Affairs of the Republic of Poland, who controls the functioning of this ministry. The units of the State Fire Service of the Republic of Poland have resources for specialized rescue operations, allocated among 153 emergency rescue groups: 44 water rescue groups; 28 groups of high-rise rescue workers; 23 technical groups; 13 groups in charge of search and rescue operations; 45 groups focused on radiation and chemical protection. Specialized rescue teams, located in Warsaw, Poznan, Lodz, Gdansk, and Krakow, have been trained to carry out search and rescue operations in urban areas. Fire brigades based in the cities of Katowice, Torun, Rzeszow and Gorzow-Wielkopolskie are equipped with high volume pumping units. These units are integrated into the European Union civil protection system. Forces and facilities for extinguishing forest fires are based in Krakow, Bialystok, Poznan, Olsztyn, Szczecin, and Wroclaw. Special forces and facilities charged with the detection and disposal of chemical, biological, and radioactive waste, are located in Warsaw, Katowice, Krakow, and Poznan.

Volunteer fire departments in Poland constitute a nationwide, self-governing, non-profit organization with a legal entity status. At the central level, they are accountable to the Union of Volunteer Fire Brigades, which has local departments in accordance with the administrative division of the state: 16 – based in voivodeships, 339 – in counties, and 2,229 in gminas. Each local branch of the Union of Volunteer Fire Brigades is a separate association registered with the relevant local authority [6]. In order for a volunteer fire brigade to be involved in the activities of the national fire and rescue service, it must be supplied with a heated garage, two fully equipped fire trucks, remote alarm activation (from the State Fire Service of the Republic of Poland) and have 12 trained rescuers and 4 drivers in their staff. The personnel, provided with protective clothing and rescue equipment, must be insured against the risk of injury during fire and rescue operations, including training and testing professional skills.

The activities of the national fire and rescue service of Poland are organized at three levels corresponding to the administrative-territorial division of the country:

- rural areas – the basic level of rescue operations, organized by the municipality;
- provinces – the level of support and coordination of rescue operations in the voivodeship;

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

- national level – the level of support and coordination of rescue operations in case the voivodeship's forces and means are insufficient.

The operation of the fire and rescue service of Poland is coordinated by:

- the burmistrz or city mayor – in respect of the tasks set by the voivode;
- the starosta (head of county administration), who sets tasks and controls their implementation at the county level, and, assisted by the county emergency response group, is in charge of managing the service in case of an extraordinary threat to human life and health, the environment and property;
- the voivode, who sets tasks and controls their implementation in the voivodeship, and, assisted by the voivodeship emergency response group, is in charge of managing the service in case of an extraordinary threat to human life and health, the environment and property.

The operational readiness of units of the Polish fire and rescue service, in particular the availability and qualification of the personnel as well as the accessibility of emergency rescue equipment, allows them to respond as quickly as possible to the elimination or minimization of potential threats on the site. Depending on the region of the country, up to 85% of the population can receive adequate protection from fires and emergencies within 15 minutes. Annually, the average number of registered fires eliminated by Polish volunteer fire brigades amounts to 35 %.

Volunteer fire brigades in Poland are well-organized and trained, and have modern equipment. This is a large social group including about 700,000 volunteer firefighters, of which up to 470,000 are active members, directly involved in rescue operations [5]. Volunteer fire departments carry out the following rescue operations: eliminating fires – both internal (in confined spaces within buildings) and external, outside buildings or merely in the open (forests, crops, open landfills, vehicles, etc.); carrying out technical rescue operations on roads; administering qualified first aid; conducting water rescue operations; minimizing risks associated with natural disasters. Volunteer fire brigades, that are integrated into the national fire and rescue service, also perform additional tasks related to civil protection: lighting and emergency power supply; primary decontamination as a stage of mass decontamination; fulfillment of humanitarian tasks in emergencies caused by snowfalls, droughts, floods, etc.; logistical support during natural disasters, such as providing drinking water, food, and creating conditions for the survival of people evacuated from the affected areas; execution of other tasks (as needed by local authorities) that can help protect the population.

The daily readiness of the forces and means of the national fire and rescue service of the Republic of Poland involves at least 5,100 firefighters in 5,307 fire vehicles stationed in 501 fire-rescue units accountable to the State Fire Service of the Republic of Poland; about 20,000 volunteer firefighters in 9,500 vehicles stationed in 4,194 fire departments providing fire protection also within the national fire and rescue service.

State fire and rescue units in Ukraine, established at the raion level and above, meet one of the basic human needs – ensuring people's safety. Therefore, these divisions are in charge of performing full-scale work on preventing and eliminating fires and various types of emergencies on a regular basis. The daily operational readiness of Ukraine's state fire and rescue units involves about 7,000 people in 5,000 general-purpose and specialized fire and emergency rescue vehicles [2]. However, the state fire and rescue units of our country manage to provide a minimum level of protection against emergencies and fires. Due to the fact that these units operate at the raion level and above, rural population is not always efficiently protected from fires and emergencies. It turns out that the current economic situation makes it impossible to increase operational readiness, which would involve proper manning as well as material and technical support [7]. Therefore, the efficiency of the state fire and rescue units in Ukraine is now being achieved thanks to the rescuers' selflessness and professionalism alone, unlike in European countries. In addition to the state fire and rescue units, the civil defense forces of our country also include local and volunteer fire and rescue units, created by local authorities at the basic level [8]. However, their number today is almost four times smaller than the number of similar units in Poland.

The Polish reform of local authorities has radically "cut off" the local communities from the central government. For more than 15 years now, the main issues in this country have been solved at the local level, where funds are allocated to provide safe living environment. Implementation of the

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

administrative reform in Ukraine translates into the need for profound social transformations, including those of ensuring fire safety in the territorial communities of the basic level. In accordance with the effective Ukrainian legislation, territorial communities should obtain the full range of powers which are currently assigned to cities of oblast significance (city municipalities). Today, merged territorial communities in our country dispose of more resources than they did when existing separately. The refore, the financial provision of the expenses, related to the civil protection that they exercise, should rely on local budgets. To ensure protection of territorial communities from fires and emergencies, the state may transfer funds to local governments in the form of grants and subsidies. They are also entitled to apply for additional funding from the State Fund for Regional Development.

The Civil Protection Code of Ukraine [8] has clearly defined the powers and strengthened the role of local authorities in emergency response and fire elimination. Within their administrative territory, merged territorial communities should establish a system of civil protection, led by the head of the respective territorial community. In order to provide protection against fire and emergencies, each territorial community must create local and / or volunteer fire brigades at such a rate so that people can receive adequate protection within 20 minutes [9]. State fire and rescue units as the leading forces of civil protection of the country will, if necessary, provide assistance in rescue operations for local and voluntary fire brigades.

Merged territorial communities need to know where and why fires and emergencies occur in order to elaborate the long-term strategies of reducing their risks. Conclusions resulting from the elimination of fires and emergencies are an important part of implementing threat prevention techniques. The authorities responsible for the internal security of our country, in particular at the local level, must understand the real causes underlying the occurrence of up to 10 fires every hour and the reasons why 5 people die in fires per day. This awareness will build up the momentum for investigating their causes, save financial and material resources, and protect people from death and injury.

Reform initiatives in Ukraine are being implemented according to the European model. The efficiency of our country's fire and rescue service depends greatly on effective legislation. Therefore, there is a need for its constant improvement and adaptation to the provision adopted in the member states of the European Union. Strong steps are being taken to improve the civil protection system, which should become the key element of the internal security system and provide response to all threats. A proper provision of fire safety in the newly created territorial communities as well as a sound management of local and voluntary fire protection units' activities require a greater cooperation between the state authorities and the local ones.

Conclusions. Undoubtedly, fires and emergencies, due to their spontaneity and complexity of the nature, are among the main threats to modern civilization. They have caused many problems and, despite the development of science and technology, will trigger more in the future. Protecting human life and health is the most important of the tasks assigned to the forces of civil defense, prioritized in each type of fire and rescue operations.

The current situation in the Polish national fire and rescue service enables effective response by all rescue operation units. Organizational, technical and financial potential in the national fire and rescue service proves that the latter is not an isolated component of public safety, but an important factor in the successful organization of safe living environment as well as an efficient response to any negative changes in the environment. As exemplified by the Republic of Poland, it becomes clear that the national fire and rescue service brings significant benefits both to the society and to the economy, and, most importantly, aims at improving safety as one of the basic human needs.

Today, as never before, our country needs to use the best European models to implement efficient changes in protecting the population from fires and emergencies. Poland's experience in organizing the national fire and rescue service activities is important for Ukraine. It can be borrowed with emphasis on those provisions that will be most appropriate in the period of the administrative-territorial reform and decentralization of power. Provision of fire safety for citizens residing in remote settlements is one of our state's priorities. Thus, the burden on budgets of all levels will be reduced, and the released funds will be allocated for equipping state fire and rescue units as well as specialized ones (involving

УПРАВЛІННЯ ПІДПРИЄМСТВОМ

fireworkers, divers, radiological and chemical contamination avoidance experts, etc.) to overcome the negative consequences of major emergencies, including those in a special period.

References

1. Piotr Guzewski. (2016). *Red book of fires. Selected fire problems and their consequences*. Retrieved from <https://www.cnbop.pl> [in Polish].
2. Ofitsiyni sait DSNS Ukrainy [Official website of the State Emergency Service of Ukraine]. *dsns.gov.ua*. Retrieved from <https://www.dsns.gov.ua> [in Ukrainian].
3. Regulation of the Minister of Interior and Administration of February 18, 2011 on detailed rules for the organization of the national rescue and fire-extinguishing system *isap.sejm.gov.pl*. Retrieved from <http://isap.sejm.gov.pl/DetailsServlet?id=WDU20110460239> [in Polish].
4. Mizhnarodna diialnist [International activity]. (n.d.). *lviv.dsns.gov.ua*. Retrieved from : <https://lviv.dsns.gov.ua> [in Ukrainian].
5. The official website of ZOSP RP. *zosprp.pl*. Retrieved from <https://www.zosprp.pl>. [in Polish].
6. Як борються з вогнем у Польщі? [How to fight fire in Poland?]. (n.d.). *monitor-press.com.ua*. Retrieved from <http://monitor-press.com.ua/extensions/statti-ua/3517-13739.html> [in Ukrainian].
7. Pro zatverdzhennia planu priorytetnykh dii Uriadu na 2016 rik: Rozporiadzhennia Kabinetu Ministriv Ukrainy vid 27.05.2016 № 418-p [On Approval of the Action Plan of the Cabinet of Ministers of Ukraine for 2016 : the Cabinet of Ministers of Ukraine Intended of 27.05.2016 № 418-p] (2015). *zakon.rada.gov.ua*. Retrieved from <http://zakon3.rada.gov.ua/laws/show/184-2016-%D1%80?lang=uk> [in Ukrainian].
8. Kodeks tsyvilnoho zakhystu Ukrainy vid 02.10.2012 № 5403 [Code of Civil Protection of Ukraine]. (2012, October 2). *zakon.rada.gov.ua*. Retrieved from <http://zakon2.rada.gov.ua/laws/show/5403-17> [in Ukrainian].
9. Leshchenko, O. Ya., Mikhailov, V. N., Romanyuk, N. M., Skakun, V. O. (2017). *Orhanizatsiia tsyvilnoho zakhystu pid chas reformuvannia mistsevoho samovriadvannia ta terytorialnoi orhanizatsii vlady v Ukraini [Organization of civil protection during the reform of local self-government and territorial organization of power in Ukraine]*. Kyiv: TOV "Interdruk" [in Ukrainian].

Література

1. Piotr Guzewski. Czerwona księga pożarów. Wybrane problemy pożarów oraz ich skutków / Guzewski Piotr // CNBOP-PIB. – 2016. – Tryb dostępu : <https://www.cnbop.pl>.
2. Офіційний сайт ДСНС України. [Електронний ресурс]. - Режим доступу : <http://www.dsns.gov.ua>.
3. Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 18 lutego 2011 r. w sprawie szczegółowych zasad organizacji krajowego systemu ratowniczo-gaśniczego. Tryb dostępu : <http://isap.sejm.gov.pl/DetailsServlet?id=WDU20110460239>.
4. Міжнародна діяльність. [Електронний ресурс]. - Режим доступу : <http://lviv.dsns.gov.ua/ua/Seminarnavchannya.html>.
5. Oficjalna strona internetowa ZOSP RP. Skutków. Tryb dostępu : <http://www.zosprp.pl>.
6. Як борються з вогнем у Польщі? [Електронний ресурс]. - Режим доступу : <http://monitor-press.com.ua/extensions/statti-ua/3517-13739.html>.
7. Розпорядження Кабінету Міністрів України від 27.05.2016 № 418-р "Про затвердження плану пріоритетних дій Уряду на 2016 рік" [Електронний ресурс]. - Режим доступу : <http://zakon3.rada.gov.ua/laws/show/184-2016-%D1%80?lang=uk>.
8. Кодекс цивільного захисту України від 02.10.2012 № 5403 [Електронний ресурс]. - Режим доступу : <http://zakon2.rada.gov.ua/laws/show/5403-17>.
9. Організація цивільного захисту під час реформування місцевого самоврядування та територіальної організації влади в Україні / О. Я. Лещенко, В. М. Михайлов, Н. М. Романюк, В. О. Скакун. – Київ : ТОВ "Інтердрук", 2017. – 125 с. – (Практичний порадник).

Received for publication 25.11.2017

Бібліографічний опис для цитування :

Volyanskiy, P. B. Organisation managerial grounds of Polish fire and rescue service: experience for Ukraine / P. B. Volyanskiy, V. N. Mikhailov // Науковий вісник Полісся. – 2017. - № 1 (13). Ч. 2. – С. 41-46.