https://doi.org/10.33271/nvngu/2023-6/113

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ACTIVITIES EFFICIENCY ASSESSMENT OF THE GOVERNING BODY'S TASK FORCE UNDER ENVIRONMENTAL EMERGENCY

Purpose. To work out the method for activities efficiency assessment of the governing body's task force under environmental emergency. In order to achieve this goal, it is proposed to apply an integrated approach that allows increasing the effectiveness of its work

Methodology. The method for activities efficiency assessment of the governing body's task force under environmental emergency was applied which allowed determining the degree of its capabilities realization. To study this process, a systematic approach was used, according to which the governing body is considered as a complex system that has a hierarchical structure and is a set of functionally interconnected structural units, united in their activities by the shared goal, concept and action plan.

Findings. As the task force's activity basis, a reasonable decision was determined of the governing body's head, at the development and implementation of which the task force's work is aimed. The task force's efforts coordination is carried out in accordance with the tasks, directions, areas, time and methods of tasks performing that are assigned to the subdivisions of the governing body. As the main factor in activities efficiency assessment, the training level of the governing body's task force was determined, that stipulates its professional and personal features.

Originality. The proposed method for activities efficiency assessment of the governing body's task force is estimated using an integral index – the degree of its capabilities realization to perform tasks. In the mentioned method, the criterion for activities efficiency of the governing body's task force is determined as a condition under which the quotient from division of the total capabilities realized by the governing body's task force indicator by the indicator of its total potential capabilities is in the range 0.8-1. A diagram of the method for assessing the task force's activities efficiency was elaborated, containing interrelated blocks (activities), direct connections and feedback, which generally characterizes the sequence and actions content of the governing body's head when implementing the mentioned method.

Practical value. An example of estimating the activities efficiency of the governing body's task force to achieve the goal in terms of an integral index — the degree of its capabilities realization to perform tasks, which is calculated using the proposed method, was considered. The initial data for calculation were the main tasks performed by the environmental emergency response headquarters' task force, standard time indicators and prescribed time for tasks performance designated by the governing body's head. On this basis, an analysis of the headquarters' actions on eliminating the emergency consequences connected with the blowing up of the Kakhovska HPP was carried out, its main tasks and features of the decision-making process in uncertain conditions were established. The directions of increasing activities efficiency of the governing body's task force were elaborated, in particular by increasing their professional competence, implementing innovative approaches to the transformation of governing styles, rational tasks distribution.

Keywords: assessment method, task force, governing body, environmental emergency, civil protection, ecological safety

Introduction. Nowadays, researchers and practitioners view environmental security as one of the fundamental parts of the national security of the state. The inconsistency of the security environment monitoring system with the information needs of the state-level management still remains the issue to be addressed in this field, in particular, regarding the state of the environment, emergency prevention and response, including environmental situations in which negative changes in the environment have occurred in certain areas that require exceptional initiatives and actions by the state.

Environmental security is defined as the level of protection of vital human interests, as well as the society, the environment and the state from real or potential threats caused by factors affecting the life of the population. At the same time, by ensuring safe living conditions, Ukrainian legislation guarantees the national interests of the state.

The State Commission on Technogenic and Environmental Safety and Emergency Situation is a permanent body for coordinating the work of central and local executive authorities whose activities are related to technogenic and environmental safety, protection of the population and territories from the consequences of emergencies, emergency prevention and response [1]. The activitiy of officials who are members of this public administration body largely depends on their level of expertise, and personal qualities.

An important prerequisite for ensuring a timely and effective emergency response is building the training system for the civil protection authorities and forces to act as prescribed. Therefore, examination of the legal framework on the issue is considered expedient.

The Resolution of the Cabinet of Ministers of Ukraine

No. 443 dated 26.06.2013 approved the Procedure for preparation of governing bodies and civil protection forces for the prescribed actions (hereinafter – the Procedure), which stipulates the preparedness mechanism for emergency prevention and response [2]. The main tasks of the Procedure include practicing the coordination of actions of civil protection authorities and forces, assessing the state of readiness of governing bodies and civil protection forces to act in emergency situations. Preparation of governing bodies in accordance with the Procedure is carried out by conducting command-staff exercises and drills with senior staff and specialists of executive authorities and local self-government bodies [2].

Assessment of governing bodies training level is carried out in accordance with the provisions of the Methodological recommendations for the preparation and conduct of command and staff drills of civil protection governing bodies and forces, approved by the Order of the State Emergency Service of Ukraine dated 29.01.2014, No. 44, which provides the methodology for assessing the level of training of civil protection governing bodies and forces to act on assignment in the conditions of threat and emergency incidents and special period

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(hereinafter – the Methodology) [1]. This Methodology sets groups of indicators for assessing the level of training of governing bodies, such as: percentage and completeness of the main tasks, compliance of the personnel of the emergency response headquarters with the legal requirements, organization of the activities of its working groups, practical actions of the task force in the emergency area, effectiveness of decisions made, design and quality of documents, and timeliness of their submission. The Methodology specifies the assessment of the above indicators in relation to the percentage of the main task fulfillment as follows: "high level" (the percentage of fulfillment of the main tasks in high alert and emergency mode was not less than 90 %), "sufficient level" – not less than 80 %, "satisfactory level" – not less than 70 %, "low level" – the conditions of assessment "satisfactory level" are not met [1].

In our opinion, these Methodology and indicators provide for an evaluation of the activities of the governing body in general and do not fully allow for an objective assessment of the efficiency of its operational personnel as its integral part. Therefore, we consider it a topical issue for the study to determine a method for assessing the results of the tasks facing the operational personnel of the governing body in the context of an environmental emergency.

Literature review. The issues raised in this study are closely related to those in the studies by other researchers, such as: M. Orlov proposed a method of complex analytical evaluation of the level of preparedness of executive branch personnel, the basis of which is the target function of assessing its readiness to perform administrative tasks on interaction by the following indicators: the degree of professional competence, the state of staff organization, the level of functioning when human resources are minimised [3].

The specified method, in our opinion, is expedient to use during complex checks of the state of preparedness of the governing body, but it cannot fully take into account the probable results of the practical activity of the operational personnel in the complex conditions of an environmental emergency incident.

Unfortunately, in Ukraine some burning issues of the state personnel policy concerning negative factors of personnel training in accordance with public needs still remain unresolved. Such negative factors in their combination cause an insufficient level of qualification of employees of personnel services, which is also influenced by transformation processes in compliance with European standards in the field. Thus, in order to solve these problematic issues, it is proposed to consider the improvement of performance appraisal system for senior civil protection officials as the priority objectives in personnel policy [4]. We share the opinion of researchers and emphasize the urgent need to develop an effective scientific and methodological apparatus for assessing the work of personnel of civil protection governing bodies.

Kaiman M., et al. claim that an important attribute of the performance of governing body's operational personnel is the determination of the necessary amount of resource potential to perform work package, to develop an action plan and evaluate its effectiveness. This, in particular, explains the fact that appropriate localization works in emergency situations will be successful only if the relevant professional level of personnel is ensured [5].

Martynenko V., et al. considered the methods of personnel evaluation covering all stages of personnel management. During the evaluation of personnel performance, the authors proposed certain operations, in particular, setting tasks and objectives of the stages of personnel management, results of their professional activity, abilities and qualities, professional potential, a set of necessary methods of personnel evaluation, development of documents for reproducing the results of evaluation, collection of initial data for personnel evaluation, preparatory work with the object and subjects of evaluation. We

agree with the conclusions of researchers who claim that the evaluation of the results of personnel performance does not ensure its objectivity because it is possible to objectively evaluate the activities of an employee during a certain period of time only together with constant accounting of the work performed by employees and the analysis of its quality and complexity [6].

Chevganova B. found a relationship between the system of personnel evaluation, management effectiveness and the performance of the organization overall. According to the author, the purpose of personnel assessment is to reveal the correlation between the requirements for a particular position in the organization structure and the functional responsibilities of the employee assessed by the criteria of their professional competence, quantitative and qualitative indicators of result-oriented work. The main indicators and criteria for personnel assessment are divided into the following groups: labor productivity, professional behavior, and personal qualities [7].

Personnel assessment, according to D. Sulimenko, requires application of all scientific approaches, their generalization and combination to achieve its efficiency, optimality and cost-effectiveness. The personnel assessment system is most fully implemented in a comprehensive evaluation of an employee, which should be developed for all categories of personnel in the organization. Objective evaluation can be achieved only on the basis of taking into consideration professional-qualification, personal and business characteristics of the employee [8].

Didur K. classified the methods of personnel assessment. The author believes that nowadays, the most used assessment methods are the method of classification based on the ranking of employees who are certified according to certain criteria; the method of evaluation by the norm of work, based on the norm for the work they perform (expressed in the categories of quantity, quality and time), and the method of situation modelling, the evaluation criterion of which is the employee's ability to organize and plan activities, their flexibility, work style, and resistance to stress [9].

The issues of performance assessment of governing bodies and subdivisions of the operational and rescue service during emergency incidents and determining of the relevant indicators were investigated by M. Kuleshov. The author proposed to assess the efficiency of the emergency response system by the criterion of degree of relevance of the system's results to its objectives based on the analysis of the operational activities of personnel, which characterizes the level of professionalism of the operational and rescue units and the competence of their authorities [10].

Insufficient level of professional expertise of governing bodies and civil protection units leads to a continuous growth of the affected population as a result of emergencies, which is confirmed by the analysis of the state of natural and technogenic safety in Ukraine, as evidenced by the identified shortcomings in the implementation of operational and practical measures on civil protection. We agree with those researchers who note that the insufficient level of interaction between the actors involved in emergency response directly affects the state of the national natural-technogenic security [11].

Researchers found that insufficient professional competence of the chief executives potentially pose a threat to emergency rescue tasks (search, detection and evacuation of people) due to the fragmented focus on studying the problem and practical implementation of risk management actions. We draw the same conclusions as the researchers who note that the shortcomings in managing emergency response are mainly related to both the professional training of executives and their qualities revealed in complex operating environment [12].

The fulfillment of important tasks assigned to the State Emergency Service of Ukraine depends primarily on the professionalism of civil protection specialists, which is determined by the quality of training the personnel in this field [13]. We also agree with the researcher about the rational use of scien-

tific sources related to the training of specialists of internal affairs bodies for further detailed analysis and exploiting these theoretical developments in the training of civil protection specialists [13].

Koval M. emphasized the urgent need to modernize the professional training of civil protection specialists, which can be solved by updating the methodological support for the instruction process. In this respect the author shifts the emphasis to the need to acquire professional skills in the application of modern means of civil protection, in the use of automated technologies of avoidance, prevention, localization and elimination of consequences of disasters, in the development of high adaptive and professional mobility and the desire to improve employees' professional expertise [14]. We share the expert's opinion and stress an urgent need to develop a toolkit for assessing the work of the governing bodies' personnel of the civil protection agencies.

The same opinion is held by A. Parkhomenko-Kutsevil and Z. Gbur, who consider personnel assessment as a process of correlation of the constituent elements, which are under examination, with a standard, and as correspondance of the main personal and professional qualities with the main requirements [15]. We endorse the reserachers' view and believe that the main criterion for assessing the work of personnel is their effectiveness and quality of task fulfillment.

Postyn O. studied the current state of training of security professionals, focusing on developing their communicative and socio-psychological abilities to effectively perform official duties and identify key gaps in this area. The author believes that having acquired the appropriate level of professional competence, they often remain unprepared to establish relationships with subordinates and make mistakes during professional interaction due to the gaps in the instruction process of higher education institutions [16]. Partially agreeing with this opinion, we believe that having gained knowledge, specialists should improve their abilities to fulfill official duties during inservice training and independent work.

Diagnostic techniques of criteria for the formation of structural components of the readiness of future civil protection specialists for self-preservation in professional activity were developed in [17]. We believe that these techniques should be introduced in the training system of civil protection authorities.

According to D. Sereda, R. Klimas and L. Maladyka, personnel evaluation can fully perform its inherent functions under conditions of objective, reliable, valid, comprehensive assessment and be able to predict the potential growth of staff [18]. Together with researchers, we emphasize the importance of the predictive function of personnel assessment, which makes it possible to anticipate the professional growth of employees.

Unsolved aspects of the problem. However, despite the numerous research on the issue, in our opinion, the problem of objective assessment of the work of the governing bodies' operational personnel during an environmental emergency is not sufficiently addressed.

Formulation of the purpose of the article and setting of tasks. Based on the previous research findings, analytical materials and legal framework for civil protection, to develop an assessment method and directions for improving the efficiency of the governing body's operational personnel during an environmental emergency, and to fulfill the practical application of this method by the example of a large-scale man-made disaster caused by the explosion at the Kakhovska Hydroelectric Power Plant (HPP).

Description of methods (structure, sequencing) for conducting the research. The study applied the methods of system analysis, synthesis, comparison and systematisation to comprehensively study the process of assessing the efficiency of the governing body's operational personnel during an environmental emergency, in particular, for literature review. The

method of mathematical modelling was also used when developing a method for assessing the efficiency of the governing body's operational personnel under specified conditions, and when giving example of how to measure the performance efficiency according to the method developed. In addition, the method of scenario building was applied, which is based on the establishing the sequence of actions of the operational personnel in the conditions of probable changes in circumstances and which ensures that the consequences of possible scenarios for the development of an environmental emergency are taken into account and the main stages of action are played out.

Presentation of the main research and scientific results obtained. The working methods of the head of the governing body in the conditions of an environmental emergency can be varied and depend on the circumstances, relevant training, professional expertise, personal qualities, and other factors. However, we believe that the management of the governing body's operational personnel will be effective when employees successfully use their capacities to achieve action objectives, and the head assigns people to their areas of activity. The head of the governing body should work with the operational personnel in such a way that all their capabilities are revealed in order to maximize the achievement of the goal of operation. In our opinion, an important issue in the activities of the head of the governing body is to assess the efficiency of the operational personnel in order to highlight areas for further improvement.

The process of assessing the efficiency of the operational personnel of the governing body was investigated using a system approach, according to which the governing body is viewed as a complex system with a hierarchical structure and as a set of functionally interconnected structural subdivisions united in their activities by a common goal, concept, and action plan. From our point of view, the work of the operational personnel of the governing body should be aimed at developing proposals for the head to make an informed decision and put it into practice. In the course of this work, the head of the governing body distributes and coordinates the efforts of the operational personnel by tasks, directions, areas, time and ways of performing the tasks assigned to civil protection units in the context of an environmental emergency incident.

This paper proposes a method for assessing the efficiency of the governing body's operational personnel, which is determined by the level of their capabilities to undertake assignments. Partial indicators are determined by the specified method, such as: the indicator of total potential capabilities of the operational staff $\sum P_n$ (dimensionless quantity) (the ability to perform a certain number of tasks within the time regulated by legal documents and directives from the senior executive), the indicator of total capabilities implemented by the operational personnel, $\sum P_r$ (dimensionless quantity) (the number of tasks performed by the operational personnel of the governing body during the time regulated by legal documents and instructions from the senior executive), and the integral indicator, that shows to which extent the capabilities of the governing body's operational personnel to fulfill their tasks are implemented, E_{os} , and is calculated by the formula

$$E_{os} = \frac{\sum P_r}{\sum P_p}.$$
 (1)

This study uses Harrington's desirability scale to assess the extent of implementation of the capabilities of the governing body's operational personnel to fulfill the E_{os} tasks. Under this condition, the maximum efficiency of the operational personnel of the governing body may approach the formula: $E_{os} = 1$. In this method for assessing the efficiency of the work of the governing body's operational personnel in an environmental emergency, the main factor affecting the extent of implementation of the capabilities of the governing body's operational personnel is the level of training of these personnel that, together with professional and personal qualities,

enables them to act in emergency situations. According to our assumption, at the disposal of the governing body's operational personnel there are technical means for obtaining, processing and transmitting data, the relevant information, calculation tasks and mathematical models, which allow performing the tasks outlined by the head of the governing body in the specific conditions of the environmental disaster with permissible deviations of the values of indicators (not more than 10 %); the impact of other factors on the efficiency of the governing body's operational personnel in this method is not considered.

Below is an illustration of determining the efficiency of the governing body's operational personnel to achieve the objectives by the indicator of the extent of implementation of their capabilities to perform tasks, which is calculated according to the proposed method. A diagram of the method for assessing the performance efficiency of the governing body's operational personnel is shown in Figure. The main tasks of the emergency response headquarters, as outlined in the Headquarters Regulation, shall serve as the basis for determining the efficiency of the governing body's operational personnel in this paper [19]:

- 1) identifying the emergency area and the potential exposure zone, the number of people and their location, rescue and assistance arrangements, prevention of property damage;
- 2) gathering data on the situation in the emergency zone, their analysis and consolidation, forecasting of events and consequences of the emergency;
- 3) identification of the main directions of emergency response, development of operational plans for emergency response and implementation of the planned activities;
- 4) determining the composition and number of civil protection forces required for emergency response, the terms of their involvement in accordance with emergency response plans, plans of interaction of civil protection authorities and forces in case of an emergency event, as well as plans of localisation and elimination of accident consequences;
- 5) preparation of directives from the head of the emergency response to eliminate the consequences of the emergency and ensure the safety of victims, registration of the directives in the prescribed order after signing up and communicating them to the executors;
- 6) ensuring the implementation of directives from the head of emergency response concerning the organization and coordination of rescue and other urgent work to eliminate the consequences of the emergency;
- 7) direct organization and coordination of actions of the civil protection forces, the Armed Forces of Ukraine and other military formations, bodies and units of internal affairs, as well

as public organizations and volunteers involved in liquidation of the consequences of an emergency situation;

- 8) interaction with the special commission on emergency response;
- 9) keeping records of works performed by civil protection forces during the emergency response;
 - 10) maintainance of emergency casualty records;
- 11) informing the population about the consequences and forecasting the development of the emergency situation, the status of its elimination and the rules of conduct in the emergency area;
- 12) implementation of information interaction with the disaster management centers of the appropriate level of an emergency;
- 13) organization of logistic support for rescue and other urgent works;
- 14) maintenance of operational, technical and reporting documentation for the emergency response headquarters.

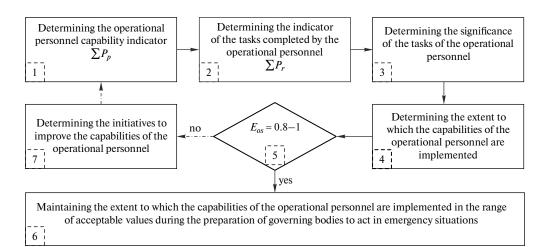
The importance of achieving the objective of actions in specific circumstances of an environmental disaster, which is addressed by the operational personnel of the governing body, will be determined by applying a method for ranking of these tasks, involving experts [20].

The implementation of the proposed method for assessing the efficiency of the governing body's operational personnel is suggested to be considered on the example of performing the specified tasks.

Initial data: the operational personnel of the governing body have the potential to perform 14 tasks $\sum P_p$ within the period specified by the regulatory documents and instructions from senior executives (item 1, Figure). During the specified period, the indicator of implementation of the capabilities of the governing body's operational personnel $\sum P_r$ amounted to 12 tasks (item 2, Figure). Two tasks (9 and 10) were assessed by experts to determine their significance for achieving the objective of the governing body's actions and impact on its performance. These tasks, which were not fully completed, were recognized by experts as having a certain impact on the fulfillment of the general task of the governing body in specific conditions of an environmental emergency. Based on the results of the experts' assessment, the significance of the tasks of the governing body was calculated (item 3, Figure).

The performance efficiency of the governing body's operational personnel in achieving the objective in terms of the extent of implementation of their capabilities to perform the assigned tasks within a stated period and according to the specified dependence was calculated (item 4, Figure)

$$E_{os} = \frac{\sum P_r}{\sum P_p} = \frac{12}{14} = 0.85.$$
 (2)



Thus, according to this method for determining the efficiency of the governing body's operational personnel during an environmental emergency incident and the initial data in the illustration, the criterion for investigating the efficiency is achieved, which is assessed as "very high" (item 5, Figure).

If the criterion for assessing the efficiency of the governing body's operational personnel is not met, activities to improve their capabilities are planned and implemented (item 7, Figure).

If the criterion for assessing the efficiency of the governing body's task force is met, measures are taken to maintain the extent to which their capabilities are implemented within the range of acceptable values and while preparing the governing body for actions in an environmental emergency (item 6, Figure).

As a result, due to the inverse relationship in the scheme (subject to the identification and implementation of capacity-building activities for the operational personnel of governing body), the value of the necessary degree of implementation of their capabilities to perform tasks in a certain range is achieved: E = 0.8-1

It should be noted that according to the proposed method, the calculated efficiency of the operational personnel of the governing body does not have a stable value and may be different if the conditions of an environmental emergency change.

We have analyzed the actions of the emergency response headquarters which were deployed after destruction of the Kakhovska HPP. It was established that the headquarters performed the main tasks, such as:

- rescue and evacuation of the population affected by the emergency;
- providing the affected population with water, food, medicines and electricity;
 - providing medical assistance to the victims;
 - overcoming sanitary and epidemic threats;
 - ensuring life support in the flooded areas;
 - restoration of the region's ecosystem [21].

It was found that the scope and complexity of tasks of the operational personnel in the conditions of emergency response to the destruction of the Kakhovska HPP differ significantly from the tasks of the headquarters in the conditions of partial waterlogging caused by flooding [22], because in the first case, the time for making managerial decisions was constrained by uncertainty, rapid changes in circumstances and the suddenness of the emergency event.

In our opinion, the main directions for improving the efficiency of the governing body's operational personnel under the conditions of an environmental emergency are the following:

- improving the level of professional training both the head and the operational personnel of the governing body;
- motivation of the operational personnel of the governing body by the head, application of an individual approach, assessing employees' professional and personal qualities and taking them into account in practical activity;
- rational task distribution among the governing body's operational personnel and establishment of working groups with regard to their level of training and personal qualities;
- encouraging the governing body's operational personnel to self-improve, to manifest creativity when executing tasks, delegating them maximum autonomy in the performance of duties:
- application of the progressive leadership styles by the head while working with governing body's operational personnel.

In view of the above, we emphasize the key importance of the internal integrity of the governing body, in particular regarding the preparation of the governing body for actions during an environmental emergency event.

Conclusions. Based on the analysis of the previous research and the legal framework for this field, we have developed the method for assessing the efficiency of the operational personnel of the governing body during an environmental emergency incident, as well as the scheme and the illustration of its application. The method involves determining the degree of imple-

mentation of the capabilities of the governing body's operational personnel to perform tasks within a certain period of time. The criterion for the efficiency of the governing body's operational personnel is the condition when the share of dividing the realized total capability indicator by the indicator of total potential capabilities of the operational personnel is in the range of 0.8–1. The application of this method makes it possible to increase the efficiency of the governing body as a whole.

The main directions for improving the efficiency of the governing body's operational personnel are proposed, which relate to enhancing employees' professional expertise, introducing innovative approaches to the transformation of leadership styles. and rational task distribution. The developed method can be used by the governing body's leadership in preparing the authorities to act in any possible emergencies in all modes, such as: daily activities, high alert, emergency event, state of emergency, and in examining the operation of the civil protection information and analytical support system in these modes in order to find out shortcomings in the structure and practice, as well as to develop areas for further improvement. This conclusion is confirmed by the verification of the developed method through investigating the actions of the headquarters' operational personnel during emergency response to the large-scale man-made disaster caused by explosion at the Kakhovska HPP.

Further prospects for research are aimed at the scientific substantiation of the methodology for a comprehensive assessment of task implementation by civil protection units in an environmental emergency.

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Оцінювання ефективності роботи оперативного складу органу управління в умовах надзвичайної екологічної ситуації

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Мета. Розробити метод оцінювання ефективності роботи оперативного складу органу управління в умовах надзвичайної екологічної ситуації. Для досягнення мети запропоновано застосовувати комплексний підхід, що уможливлює підвищення результативності його роботи.

Методика. Застосовано метод оцінювання ефективності роботи оперативного складу органу управління в умовах надзвичайної екологічної ситуації, що дозволив визначити ступінь реалізації його можливостей. Для дослідження цього процесу застосовано системний підхід, згідно з яким орган управління розглянуто як складну

систему, що має ієрархічну структуру та являє собою сукупність функціонально взаємозв'язаних структурних підрозділів, об'єднаних у своїй діяльності єдиною метою, замислом і планом дій.

Результати. Основою діяльності оперативного складу визначено обгрунтоване рішення керівника органу управління, на розробку та втілення у життя якого спрямована робота оперативного складу. Узгодження зусиль оперативного складу здійснюється за завданнями, напрямами, районами, часом і способами виконання завдань, що ставляться підрозділам органу управління. Основним чинником оцінювання ефективності роботи визначено рівень підготовки оперативного складу органу управління, що передбачає його професійні та особистісні якості.

Наукова новизна. Запропонований метод оцінювання ефективності роботи оперативного складу органу управління визначається за допомогою інтегрального показника – ступеня реалізації його можливостей щодо виконання завдань. У зазначеному методі критерієм ефективності роботи оперативного складу органу управління визначені умову, коли частка від ділення показника сумарних можливостей, реалізованих оперативним складом органу управління, на показник його сумарних потенційних можливостей перебуває в інтервалі 0,8-1. Розроблена схема методу оцінювання ефективності роботи оперативного складу органу управління, що містить взаємозв'язані блоки (заходи), прямий і зворотний зв'язки, яка характеризує послідовність і зміст дій керівника органу управління під час застосування вказаного метолу.

Практична значимість. Розглянуто приклад визначення ефективності роботи оперативного складу органу управління із досягнення мети за інтегральним показником – ступенем реалізації його можливостей щодо виконання завдань, що обчислено за запропонованим методом. Вихідними даними розрахунку слугували основні завдання, які виконує оперативний склад штабу з ліквідації надзвичайної екологічної ситуації, нормативні часові показники й директивно встановлений час на виконання завдань, визначених керівником органу управління. На цій основі проведено аналіз дій штабу з ліквідації наслідків надзвичайної ситуації, пов'язаної з підривом Каховської ГЕС, встановлені його головні завдання та особливості процесу прийняття рішень в умовах невизначеності. Запропоновані напрями підвищення ефективності роботи оперативного складу органу управління, зокрема шляхом підвищення їхньої фахової компетентності, упровадження інноваційних підходів до трансформації стилів керівництва, раціонального розподілу завдань.

Ключові слова: метод оцінювання, оперативний склад, орган управління, надзвичайна екологічна ситуація, цивільний захист, екологічна безпека

The manuscript was submitted 22.05.23.

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