HES
Human Error and Safety
HES 1(2): 66–74
ISSN 3062-8105

Institute for Advanced Science, Social and Sustainable Future
MORALITY BEFORE KNOWLEDGE

Risk management in defense program: Evidence from Ukrainian arm forces

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Received Date: July 25, 2024 Accepted Date: August 26, 2024

ABSTRACT
Latar Belakang: This research paper is of interest to representatives of the participants of the Internal Control Audit Service, managers at all levels within the system of the Ministry of Defense of Ukraine and the Armed Forces of Ukraine, and other stakeholders directly involved in the implementation of internal controls. may pull. About risk management. **Findings:** Timely detection and identification of threats and risks depends on the efficiency and timeliness of assigned functions. The research work formulates the scientific task of determining the necessary competencies of members of the risk assessment group for internal control. According to the preliminary procedures for organizing the internal control of the Ministry of Defense, the Armed Forces of Ukraine and the Armed Forces of Ukraine will establish the necessary risk assessment groups. **Conclusion:** Involvement of staff with the highest level of competence in the relevant field. As part of the course, a partial analysis of relevant documents regulating the structure and functioning of the Department of Defense's internal audit and internal control system is provided. **Methods:** This research paper uses the expert judgment method to determine the key competencies of members of the risk assessment group.

KEYWORDS: identification of threats; internal control; risk assessment; risk management.

1. Introduction

Resolution of the National Security and Defense Council of Ukraine dated May 20, 2016 “On the Strategic Defense Bulletin of Ukraine” approved by Decree of the President of Ukraine No. 240/2016 (2016) determined the operational goal of establishing an integrated risk management system as part of a defense planning system. The Ministry of Defense of Ukraine and the Armed Forces of Ukraine introduce a system of internal control, with its element being risk management at all levels of military management. The established system of internal control and risk management provides an opportunity to prevent and respond in a timely manner to the threats occurring in the course of any type of activity. The success of fulfilment of the planned tasks and achievement of the set goals are dependent on this process.

In the process of research on the implementation of the optimal risk management model in the defense department, the best international standards for risk management in the ISO series (ISO, 2009a; ISO, 2009b), Risk Management Standard (RM, AIRMIC and ALARM (FERMA RMS) (IRM, 2002), Integrated Framework Enterprise Risk Management -

Cite This Article:
Aulia, S. A. (2024). Risk management in defense program: Evidence from Ukrainian arm forces. *Human Error and Safety*, 1(2), 66-74. https://doi.org/10.61511/hes.v1i2.2024.1250

Integrated Framework (COSO ERM) (COSO, n./d.) and best practices of NATO partner countries (NSA, 2013; NATO, 2012; Jenison and Kubica, 2016; Department of Defense, 2013) were analyzed. In accordance with Clause 1.4 of the Interim Procedure for the Organization of Internal Control and Risk Management in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine (Ministry of Defense of Ukraine, n./d.), a risk assessment working group is established to identify and assess risks. The risk assessment working group is a group of officials of the internal control subject with the highest level of competence in the relevant area that is able to identify the risks and assess the likelihood of their occurrence and the impact on the achievement of the set objectives. According to the Law "On Higher Education" (as amended) (Law of Ukraine No. 1556-VII, 2014), competence is a dynamic combination of knowledge, expertise and practical skills, ways of thinking, professional, world-view and civic qualities, moral and ethical values, which determines the ability of a person to successfully carry out professional and further training activity and is the result of studying at a certain level of higher education. For the purpose of scientific substantiation and identification of the most important competencies to be held by the members of the working group for risk assessment and the practical implementation of internal control and risk management in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine, there is an urgent need for the study of this issue and the development of recommendations for an optimal set of competencies of members of the risk assessment working group in the process of organization and functioning of internal control.

2. Methods

The range of problems of internal control and risk management in defense planning processes is not sufficiently investigated, including the issue of the formation of working groups for risk assessment by subjects of internal control. This is explained by the fact that the organization of internal control in the defense department is at the stage of formation. The application of new approaches to the organization of internal control is envisaged from January 1, 2019. One should also mention the recent separation of internal control and internal audit in the defense department in accordance with Resolution of the Cabinet of Ministers of Ukraine No. 1062 (2018). At the same time, the problems of internal control in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine are explored and studied in works of Kustrich and Loishyn (2018), Loishyn et al. (2018) and others.

3. Result and Discussion

As of today, a new internal control system is being implemented by the Ministry of Defense in accordance with the decisions of the senior management of the state (Decree of the President of Ukraine No. 240/2016, 2016; Decree of the President of Ukraine No. 555/2015, 2015) the Ministry of Defense of Ukraine (2016a), Ministry of Defense of Ukraine (2016b) and the Armed Forces of Ukraine, which is focused on risk management and preventive response to threats. From January 1, 2019, to supplement the norms set forth in Order of the General Staff of the Armed Forces of Ukraine No. 340 (2016), the Interim Procedure for the Organization of Internal Control and Risk Management in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine enters into force, which will regulate the issue of organizing internal control at the level of the defense department. As of today, a preparatory stage is being implemented, that is the development of the necessary organizational documents.

The Interim Procedure determines a circle of participants in the internal control process, including: the heads of the subjects of internal control and structural units of the structural division within the subject of internal control, the coordinators of the relevant bodies of military management, managers, risk assessment working groups and other officials. Thus, in accordance with the Interim Procedure, it is determined that the risk assessment working group is a group of officials of the subject of internal control with the

highest level of competence in the relevant field that are able to identify the risks and assess the probability of their occurrence, and influence on the achievement of the set goals. At the same time, the list and specification of the necessary competencies of the members of the working group are not determined.

Competence (from the Latin competentia) means a range of issues in which a person has a profound knowledge and experience. The competence of the employee is the degree of his/her qualification, which allows him/her to successfully solve the tasks assigned to him/her. Thus, there is a need to substantiate the optimum level of qualification of an official, which will enable him/her to efficiently carry out his/her activities in the risk assessment working group taking into account national peculiarities of the Ukrainian mentality.

The functioning of internal control involves identifying risks and organizing preventive work to prevent them. The working group on risk assessment consists of officials of the subject of internal control appointed by the relevant order of the entity on the organization of internal control and risk management of the subject of internal control. It is clear that a representative of a certain direction of one of the structural subdivisions of the risk assessment group may not fully objectively carry out a risk analysis because of being a participant in the process under analysis. Therefore, it is proposed to include in this group, if possible, specialists in this direction, but at the same time, from different structural units, which ensure the functioning of different processes. For the clarity of the foregoing, one can give a relevant example. Thus, during the formation of a risk assessment working group in a higher educational institution for the analysis and identification of risks in processes related to the financial and economic activity, a representative of the unit directly involved in this process and a representative of the corresponding department of the educational institution was engaged. Thus, we involve in this process both specialists in the theory and specialists who are the practical carriers of the functions performed in the process under analysis. A feature of this is the combination of a theoretical and practical view of risk identification. However, it should be understood that the representative of the relevant department in previous periods of his activities, as a rule, is the bearer of practical knowledge and fulfilled tasks in the financial and economic area. When selecting and identifying candidates for a risk assessment group, the relevant characteristics such as the ability to think creatively, personal relationships, charisma, firmness in decision making must be taken into account. It should be added that in business processes, not only managers give characteristics to managers, but managers - to the overall system of senior management (Bock, 2017).

When forming a risk assessment working group, heads of the subject of internal control may face the above problem - that is, determination of the competencies of the working group members. Taking into account the above, we are invited to investigate the issues of scientific substantiation of approaches to the formation of the necessary competencies of the risk assessment working group. In connection with the lack of statistical information on the organization of the work of the risk assessment working groups in the defense department and for the scientific substantiation of the above, it is suggested to determine the optimal set of competencies using the expert estimation method. A determined set of necessary competencies of an official who may be included in the risk assessment working group will allow the group to perform efficiently. Therefore, to determine the list of necessary competencies, an appropriate questionnaire was compiled with the grouping of factors by the following blocks: [a] General skills and abilities (self-criticism, skills of observation, ability to systematize information, trace the relationship between elements, etc.); [b] Ability to think (ability to withstand difficulties, be able to give an independent assessment, ability to simulate a situation, etc.); [c] Ability to cooperate (psychological tact, communication skills, ability to resolve discrepancies and conflicts, etc.); [d] Ability to adapt (display resistance to difficulties, dramatically change the vector of work, etc.); [e] Determining the level of the required military rank; [f] Determining the level of the required academic rank; [g] Determining the level of the required level of education; [h] Detailing of

practical experience in the relevant field; [i] Level of position held; [j] Block of social and emotional level (level of satisfaction with life, respect for others, life values, etc.); [k] Determining the importance of each of the blocks presented in the questionnaire.

Each block contains a list of relevant competencies (from 5 to 20 factors), it is proposed to assess a total of 90 competencies. It should be noted that the list of competences proposed to experts is determined on the basis of the analysis of the management documents (Resolution of the Cabinet of Ministers of Ukraine No. 246, 2016) of both departmental level and national level, foreign experience of application of standards of internal control, functional responsibilities, etc. In our opinion, determination of the high priority of the factors set out in the block of social and emotional level may help to identify a person with an inclination to corrupt acts, and as a consequence – prevention of distortion of objective information about the identified risks to the subject of internal control, and as a result - prevention of financial and other violations in the process of managing state property and resources. Next, it is suggested, with the help of experts, to determine the optimal composition of competencies of the members of the risk assessment working group with the help of appropriate questionnaires with subsequent mathematical modeling of the result. According to the views of Permiakov (2005) and other scholars, the expert group usually consists of 12 to 20 specialists. Thus, if the number of experts is very large, their opinions may not be consistent, whereas, if a small number of experts are involved, there may be some difficulties with the accuracy of the generalized assessments.

This is primarily due to the fact that the number of experts should be sufficient to take into account the essential features of the problem to be solved and to ensure the accuracy of the forecast. Taking into account the above-mentioned range of problems concerning organization, functioning of internal control and further evaluation of its functioning, the category of experts who were involved in the expert evaluation was determined. First, the representatives of the Chief Inspectorate of the Ministry of Defense of Ukraine were included in the group of experts, namely the representatives of the structural unit headed by the Chief Inspector of Internal Control of the Ministry of Defense of Ukraine and the Armed Forces of Ukraine. The Main Inspectorate, in co-operation with the Internal Audit Department of the Ministry of Defense of Ukraine, directly implemented internal control, which is based on risk management. Secondly, in accordance with the Interim Procedure for the Organization of Internal Control in the Ministry of Defense of Ukraine and the Armed Forces, the assessment of the state of internal control within the system of the Ministry of Defense of Ukraine and the Armed Forces of Ukraine is entrusted to the Department of Internal Audit of the Ministry of Defense of Ukraine and its territorial units. In view of the above, the inclusion of experts from among the representatives of the audit service is mandatory. Thirdly, representatives of the financial and economic units of the Armed Forces of Ukraine, who are directly deal with the financial and economic processes of the subject of internal control, are invited to conduct the expert evaluation. By obtaining the main (key) factors that influence the formation of competency in the field of risk assessment and identification, we will be able to formulate requirements for the members of the risk assessment group.

One of the methods of questioning was used to determine the key and most important factors that would make the necessary set of competencies required for this group, namely: the method of mean scores, that is, the hierarchical placement of elements depending on the significance of the process being investigated by assigning a certain score, in our case - from 1 to 10 scores.

During the study, the following algorithm of the method of mean scores was applied: [a] Calculation of the finite sum for each factor (Sij= Σbij); [b] Calculation of the arithmetic mean rank (rj = Sij/n); [c] Building a new factor ranking; [d] Choosing the most significant factors in accordance with the principle - the lower the mean rank, the more significant factor.

After determining method of mean scores of key competencies for the relevant block, the median method was used to verify and confirm the results obtained. A group assessment can be considered objective and reliable only if the opinions of experts are coherent. Because of this, the statistical processing of information received from experts should include an assessment of the degree of consistency of experts' opinions and the causes of their heterogeneity. The consistency of expert's opinions is estimated using the coefficient of concordance W, that is, the total coefficient of rank correlation for the group consisting of m experts. The coefficient of concordance (Belov & Chumakov, 2007; Belov & Chumakov, 2011; Kendall and Stuart, 1958; Zastelo, 2015) can vary from 0 to 1 $W \in [0,1]$, taking into account the above, its equality to one means that all experts gave the same estimates of the determined factors, and in the case that the result equals zero - that there is no connection between the scores received in the process of questioning of experts (Traskovetska et al., 2013).

Taking into account the above, experts have determined that the main blocks of competencies are: [a] Ability to think; [b] Practical experience in the relevant field; [c] General skills and abilities.

According to experts, who at the same time are representatives of the Defense Department, a military rank and position is not a sufficiently weighty argument to carry out effective prediction of risks and negative events that may affect the functioning of the subject of internal control.

It should be recalled that the experts also evaluated the sub-competencies in the identified blocks. Thus, when assessing the ability to think, the main sub-competencies were determined to be the following: [a] Organize the interconnection of past and present events; [b] Be able to give an independent assessment; [c] Have the ability to analyze; [d] Have the ability to simulate the situation.

The necessary practical experience in the relevant field was scored by experts in the range of 10 to 20 years. General skills and abilities were presented in the block of 20 competencies, but the highest marks scores were for: [a] The ability to be responsible for the decision; [b] Ability to systematize information; [c] Knowledge of the requirements of the guidance documents (awareness of recent legislative changes in the relevant area).

4. Conclusion

Taking into account the results of the research, a set of key competencies which will allow members of the risk assessment group to effectively carry out their activities in identifying financial and other risks in the management of property and resources were scientifically grounded. Taking into consideration the conducted research, it can be concluded that even if the research is conducted within the Ministry of Defense, the military rank for performing the said functions is not critical, but the emphasis is placed on the ability to model, analyze and predict, the relevant experience, regardless of the position held. That is, in the process of Ukraine's integration into the European community, specialists orient themselves primarily on professionalism, and not on the traditions laid in Soviet times.

It should be added that, as of today, science provides a sufficient variety of tests and tasks that can reveal certain abilities.

Prospects for further research are seen in the practical testing of the results obtained by examining the issue of identifying ways of determining the said competencies.

It is also proposed to create a risk assessment working group from among the carriers of these abilities in the system of the Defense Department, namely in one of the subjects of internal control; and on the basis of annual monitoring and analysis of reporting provided

for by the Interim Procedure for the Organization of Internal Control and Risk Management in the Ministry of Defense of Ukraine and the Armed Forces of Ukraine to compare the economic effect of its activities with the risk assessment working group of another similar subject of internal control for the number of identified risks and developed solutions for their prevention and neutralization.

Author Contribution

All author contributed fully to the writing of this article.

Funding

This research did not use external funding.

Ethical Review Board Statement

Not applicable.

Informed Consent Statement

Not applicable.

Data Availability Statement

Not applicable.

Conflicts of Interest

The author declare no conflict of interest.

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