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CHAPTER 2

RECOMMENDATIONS ON THE IMPLEMENTATION OF PORTFOLIO MANAGEMENT IN THE DEFENSE MANAGEMENT SYSTEM OF THE MINISTRY OF DEFENSE OF UKRAINE, THE ARMED FORCES OF UKRAINE AND OTHER COMPONENTS OF THE DEFENSE FORCES OF UKRAINE

ABSTRACT

Portfolio management is an integral component of project activity and includes a set of interrelated organizational processes and methods that allow to manage projects, project programs and other activities (hereinafter referred to as portfolio components) aimed at realizing the goals of defense programs in the most effective way. Portfolio management provides a consistent approach to the management of portfolio components, which allows: aligning costs with the goals and performance indicators of defense programs; optimize the use of resources; maximize benefits from the resources involved; define and agree on the expectations of interested parties; ensure transparency of implementation of portfolio components and their status. Portfolio management is a continuous decision-making process whereby the list of portfolio components is subject to periodic review to align with defense program objectives. Portfolio components can be changed, accelerated, delayed or discontinued. The need to implement best practices in portfolio management in military management bodies is due to the need to reform the defense management system and bring it closer to Euro-Atlantic principles and standards.

For this purpose, taking into account the specifics of the defense sector, military strategy and public administration, the manuscript substantiates the application of a comprehensive portfolio management approach in the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces, which combines strategic, systemic, project and process-oriented approaches , as well as risk management and focus on results) and portfolio management implementation methods and tools (capacity analysis, project priority matrix, value-complexity matrix, scenario analysis, key performance indicators, benefit tracking, portfolio dashboard, balanced scorecard, "bubble chart", portfolio archive). In order to develop effective recommendations for the implementation of portfolio management in military administration, the factors that can complicate this process are outlined (systematic underfunding of the defense sector, shortage of qualified personnel, lack of modern information systems, corruption, post-Soviet corporate culture).

In addition, the PPBE model is proposed (development and use in the daily activities of the Ministry of Defense of Ukraine of project management architecture – PPBE; architecture of defense programs based on existing organizational structures and functional groups of capabilities; architecture of project management, programs through portfolios by their types and functions; architecture planning and development of projects through their creation, development and implementation, utilization; architecture of capabilities of types, branches of troops, commands). Recommendations were given on the implementation of portfolio management taking into account the proposed PPBE model (development of the regulatory framework, organizational and administrative documents on portfolio management; creation and reorganization of project portfolio management functions; improvement of staff qualifications; organization of providing the portfolio of projects, programs and individual projects with the necessary resources; development of leadership qualities of individual project, program and project portfolio managers; creation and modernization of infrastructure for project portfolio management).

KEYWORDS

Portfolio, project, program, portfolio management, defense management, risks.

Effective management of the defense sector is one of the most important tasks for any state, especially in the conditions of modern geopolitical challenges. The implementation of portfolio management in the defense sector of Ukraine is a strategic step that will optimize the use of resources, increase transparency and accountability, and ensure the achievement of national security goals.

This work is devoted to the study of the theoretical foundations and practical application of portfolio management in the defense sector of Ukraine. The manuscript offers both a theoretical foundation and specific recommendations for the effective implementation of portfolio management.

The aim of research is to develop a recommendation on the implementation of portfolio management in the defense management system of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine.

Tasks of the research:

– analyze the current state of portfolio management in the defense sector of Ukraine and identify the main problems;

– consider various scientific and theoretical approaches to portfolio management and their suitability for the defense sector;

– develop a model of portfolio management that would meet the needs of the defense sector of Ukraine;

– analyze possible risks and barriers to the implementation of portfolio management;

– develop recommendations for the implementation of portfolio management in the defense sector of Ukraine.

The relevance of research is due to the need to increase the efficiency of the use of defense resources in the conditions of a limited budget and growing threats in the country's defense sector. The implementation of portfolio management will allow to optimize costs, increase transparency and accountability, and ensure the achievement of strategic goals of the defense sector.

The scientific novelty of the research lies in the development of a comprehensive model of portfolio management, which takes into account the specifics of the defense sector of Ukraine.

The practical significance of the research results can be used as a basis for the development of practical tools for the implementation of portfolio management in the defense sector, in particular, the pilot implementation of a new model of air defense on the basis of a specific type, a separate type of troops (forces) of the Armed Forces of Ukraine.

2.1 THEORETICAL FOUNDATIONS AND PRACTICAL METHODS OF PORTFOLIO MANAGEMENT IN THE DEFENSE MANAGEMENT SYSTEM OF THE MINISTRY OF DEFENSE OF UKRAINE, THE ARMED FORCES OF UKRAINE AND OTHER COMPONENTS OF THE DEFENSE FORCES OF UKRAINE

2.1.1 JUSTIFICATION OF SCIENTIFIC AND THEORETICAL APPROACHES TO THE IMPLEMENTATION OF PORTFOLIO MANAGEMENT IN THE DEFENSE SECTOR

Portfolio management is an integral component of project activities and includes a set of interrelated organizational processes and methods that allow to manage projects, project programs, and other activities (hereinafter referred to as portfolio components) [1] aimed at the effective implementation of the goals of defense programs. The portfolio management itself provides a consistent approach to the management of portfolio components, which allows: aligning costs with the goals and performance indicators of defense programs; optimize the use of resources; maximize benefits from the resources involved; define and agree on the expectations of interested parties; to ensure transparency of implementation of portfolio components and their status [2–4]. Portfolio management is a continuous decision-making process whereby the list of portfolio components is subject to periodic review to align with defense program objectives. Therefore, portfolio components can be changed, accelerated, delayed or terminated.

According to the classical approach, the portfolio management process is carried out within two continuous cycles: the cycle of portfolio formation and the cycle of its implementation (**Fig. 2.1**).

In an organization that has a three-year strategic planning cycle, the portfolio formation cycle will begin and end within the same period (**Fig. 2.2**). This constraint can also be represented by the budget planning cycle. Portfolio tasks are determined during strategic planning or state budget planning. The purpose of the Government's portfolio is to organize the implementation of tasks and implement the Government's strategy, ensuring resource efficiency by coordinating projects and programs within a certain period of time.

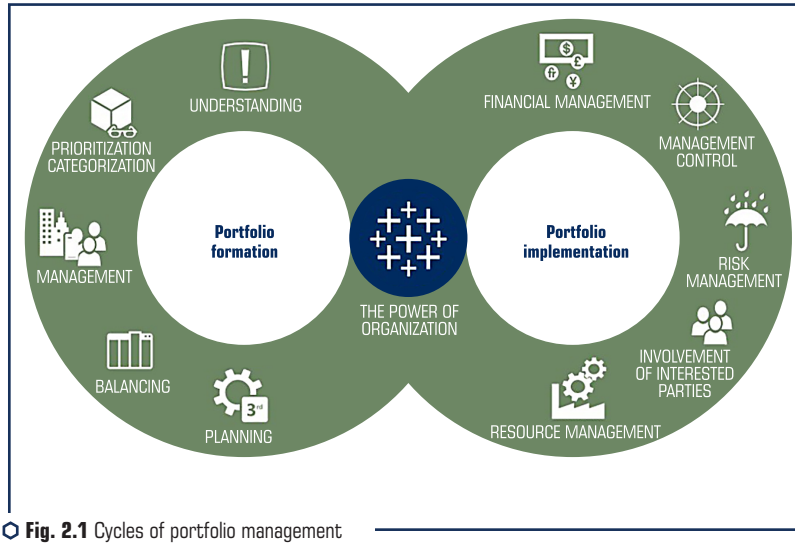

Fig. 2.1 Cycles of portfolio management

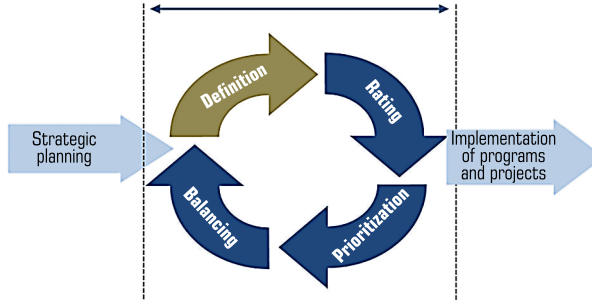

Fig. 2.2 The cycle of portfolio formation in the public sector

In the defense sector, projects are determined before the portfolio is formed. Three stages of the portfolio formation cycle are important for portfolio management: evaluation; prioritization; balancing.

All actions and activities at all stages of the portfolio life cycle, in particular the three mentioned above, should be aligned with the following portfolio management objectives:

– maximization of portfolio value;

– matching the portfolio with the corresponding strategy;

– portfolio balancing.

That is why portfolio management in the defense sector of Ukraine is a complex and multifaceted process that requires the application of scientific and theoretical approaches taking into account the specifics of this sector, military strategy and state administration. The choice of scientific and technical approaches in the field of defense should also be justified by goals and objectives, the nature and specificity of the situation, the availability of data and resources, urgency, security conditions, changes in the external environment, integrations with other management systems, etc. Below are the key scientific and theoretical approaches:

I. A strategic approach to portfolio management focuses on aligning projects and programs with the strategic goals of the defense sector. The integration of portfolio management into the strategic framework of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces is important to ensure the coherence of all initiatives with the national defense strategy. Such coordination is necessary to achieve the country's overall security goals at the strategic level of the theater of operations. Thus, according to the Strategic Defense Bulletin of Ukraine [5], the main strategic goals of the defense sector include such aspects as: effective defense management and a system of joint leadership of defense forces and military management in the Armed Forces, carried out on the basis of democratic civilian control and other principles and NATO standards; professional and motivated personnel, which ensures high combat readiness of the defense forces; modern and effective military equipment and weapons that meet the requirements of modern military conflicts; development of the military-industrial complex, in particular support of domestic manufacturers of military equipment and technologies; ensuring cyber security and information security, which is an important aspect in modern military conditions. Thus, the strategic goals defined at the state level are aimed at strengthening the defense potential of Ukraine and ensuring national security. The components of the portfolio are selected and prioritized based on their contribution to the implementation of strategic tasks and long-term goals of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine. This scientific and theoretical approach allows to optimize the use of resources by focusing on projects and programs that have the greatest impact on achieving strategic goals. This approach is important for effective management in the defense sphere, as it contributes to the rational distribution of resources and ensuring high combat readiness and national security of Ukraine.

II. The system approach is an important scientific and theoretical approach to the management of complex systems such as the defense sector. It provides consideration of the military command body as a complete system where structural elements interact with each other. This allows to effectively manage the entire system, taking into account the interrelationships between its components. The main features of the system approach include [6]: a clear definition of goals, where each structural element of the military management body has its own goals, but the main goal is to increase the efficiency of the entire specified body; establishing a hierarchy of goals helps to better direct efforts to achieve strategic goals; revealing the synergistic essence of the value of the portfolio, where its component affects others.

In our opinion, the application of the system approach can be justified by two key axioms: target orientation and functionality. *The axiom of goal orientation* outlines a system that has goals that determine its structure, functions, and behavior. In the context of portfolio management, this means defining strategic and tactical objectives, such as ensuring national security, increasing the combat capability of the armed forces and efficient use of resources. Defining goals allows to direct resources and efforts to achieve specific results. Prioritization of projects and programs involves determining priorities among the various components of the portfolio, which helps to allocate resources in such a way that the most important for achieving goals receive adequate funding and support, optimizing the use of resources and focusing attention on the most important areas. Analysis of the achievement of goals helps to evaluate the effectiveness of implemented projects and programs, including evaluation of results, impact on defense capability and national security, which allows for timely adjustment of strategies and decisions on continuation, modification or termination of individual initiatives. Taking into account changing conditions and new challenges allows to adjust goals and adapt the portfolio of projects and programs in accordance with new requirements. Flexibility in achieving goals allows the system to remain effective even in changing conditions. For example, if in the defense sector there is a task of modernizing military equipment and improving cyber security, portfolio management will be aimed at identifying and implementing projects that most contribute to the achievement of these goals, namely: the purchase of the latest weapons systems, the implementation of new cyber protection technologies, personnel training and other measures. The use of the axiom of target orientation helps to concentrate efforts on achieving strategic priorities and ensure the maximum efficiency of the use of resources in the defense sphere.

The axiom of functionality states that any system is created and exists to perform certain functions or achieve certain goals. A functional approach helps to understand the purpose of the system and its effectiveness. In the context of defense portfolio management, this means defining various functions, such as ensuring national security, territorial defense, maintaining stability and readiness of the armed forces. Determining the main functions helps to understand which projects and programs are necessary to fulfill them. Allocation of resources by function ensures efficiency and effectiveness of activities, as different functions (airspace protection, cyber security, logistics, etc.) may require different types of resources and technologies. Analyzing the performance of functions allows to identify weaknesses and improve the system, making informed decisions about the continuation, modification or termination of certain components of portfolio management. Adaptation to changing conditions ensures that the system quickly adapts to new conditions and challenges by changing functions or adding new ones. For example, if new threats appear, the system can adapt by implementing new features to neutralize them. In defense portfolio management, a functional approach can be used to identify key areas of development, such as weapon modernization, cyber defense development, and personnel training. Each of these areas performs certain functions important for ensuring defense capability, and the allocation of resources and management of portfolio components will be carried out taking into account these functions. In view of the above, the axiom of target orientation and the axiom of functionality are important for portfolio management

in the defense sphere. The choice between them depends on the specific context and emphasis. The axiom of target orientation emphasizes the achievement of specific strategic and tactical goals, the axiom of functionality – the performance of the necessary functions to ensure the effective operation of the system. In our view, both axioms are relevant to portfolio management in the defense sector, helping to define and ensure the necessary functions to achieve the overall objectives of the system. Thus, a systemic approach helps to take into account the complexity of the defense sector, including its technical, organizational and human aspects. Moreover, its application to the defense sector helps to ensure more efficient management, reduce risks and provide an integrated approach to portfolio management.

III. The project approach is a methodology aimed at effective project management. It is based on systematic planning, execution and control of each stage of the project in order to achieve the set goals [7]. The project approach can be applied to various aspects of portfolio management in the defense sector of Ukraine, in particular: selection of portfolio components that have the greatest impact on achieving strategic defense goals; prioritization of projects and programs taking into account their importance, resource limitations and risks; optimization of the use of resources, such as budget funds, human resources and material and technical support; assistance in monitoring and evaluating the progress of projects and programs, as well as in determining the necessary adjustments. Thus, thanks to the project approach, the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine can clearly define the goals, tasks and stages of their implementation, which contributes to a more structured and controlled management of resources, which is important in conditions of limited funding and other resources. A clear distribution of tasks and responsibilities in projects creates a basis for increasing the motivation of personnel, their involvement in the process of project implementation, and also contributes to the general increase in the level of responsibility and professionalism among both military personnel and civilian personnel. Also, the project approach ensures better coordination between different military administration bodies involved in the implementation of the same portfolio, which helps to avoid duplication of efforts and increases synergy between different structures. Within the framework of the project approach, each portfolio project or program has clearly defined goals, deadlines and responsible persons, which increases transparency and accountability in the process of implementation of defense portfolios, which is important for preventing corruption and misuse of funds. In the conditions of an intense war with Russia, the application of the methodology of the system approach allows to quickly adapt to changing conditions and new challenges and timely identify and eliminate problems, as well as adjust strategies to achieve the set goals. It promotes the implementation of the latest technologies and innovations in the defense sphere. Thanks to clear planning and project management, it is possible to implement modern technologies more efficiently, which increases the combat capability and technical level of the Armed Forces of Ukraine. Therefore, the application of the project approach in the defense sector contributes to: improvement of planning and coordination; increasing transparency and accountability; increasing staff motivation; optimizing the use of resources; quick adaptation to changes; implementation of innovations.

IV. In defense management, the application of a ***process-oriented approach*** is based on the understanding that the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine have a system of interconnected processes, each of which affects the achievement of goals. This approach includes the following aspects: *structural* (the military management body considers all its processes as interconnected at different levels of management, which indicates a connection with the system theory, where processes interact with each other and external factors); *functional* (management of processes in the context of such classical functions of defense management as planning, organization, leadership, control); *substantive* (the top management of the military management body, performing the role of decision-making, distributes resources, responsibility and appoints its owner for each process defined in this organization) [8]. The application of a process-oriented approach in the field of defense of Ukraine also has a number of important advantages that contribute to increasing the efficiency, coordination and stability of defense processes. Here are the main ones: it allows to standardize and systematize all actions and operations in the defense sphere, which makes it possible to form a unified approach to the performance of tasks at different levels; clear definition and description of processes helps management to better understand, control and manage activities thereby ensuring more effective planning, implementation and evaluation of the results of defense measures; optimization of processes allows to reduce costs by eliminating duplication of actions and reducing unnecessary time and resources; promotes better coordination between various units and structures in the defense sphere, ensuring more coordinated work and improving interaction between all participants in the process; a clear description of the processes ensures transparency and accountability at all levels of management, which makes it possible to monitor the execution of tasks and effectively evaluate the results in order to prevent corruption and misuse of resources; allows to quickly adapt to changes in the external environment and new challenges, especially during a full-scale war with Russia; contains mechanisms for constant analysis and improvement of processes, thereby promoting the implementation of innovations and new approaches that increase the effectiveness of defense operations; provides a clear definition of roles and responsibilities, which facilitates the training and training of personnel, thereby increasing the professional level of military personnel and civilian personnel involved in defense processes. In general, the application of the process approach in the defense sphere of Ukraine allows to ensure systematization, transparency and efficiency of management, which is critically important for ensuring the national security and defense capability of the country.

V. It is worth considering such a modern scientific and theoretical approach as ***risk management***, where projects and programs can have a high level of uncertainty and complexity. Given this complexity, risk management mechanisms become a set of tools and methods that help avoid or reduce the impact of possible risks on the activities of the defense sector [9]. The principles of risk management, such as identification, assessment, planning, monitoring, prevention and reduction of risks, allow to ensure a systematic approach to risk management and ensure effective control over them. These principles are the basis for the development of risk management strategies and plans, which are essential to ensure the safety and success of defense sector operations.

The application of this approach should become a crucial part of strategic planning and decision-making [10], as it helps to identify potential threats and risks to achieve the strategic goals and objectives of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine. Additionally, this iterative approach, which focuses on fewer deliverables in a shorter period of time, allows for stakeholder feedback between sprint planning sessions. It also encourages sprint retrospectives, which help teams learn from their successes and failures [11].

The application of the methodology of the scientific and theoretical approach to risk management has a number of advantages, especially in the context of portfolio management in the defense sector. Thus, this scientific and theoretical approach allows to identify in advance potential risks and undesirable events that may affect the activities of the defense sector. Therefore, military management bodies make it possible to take measures to prevent or reduce their impact and to focus resources on the most significant risks and use them effectively to reduce the likelihood of negative consequences. In addition, the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine can be more prepared for the occurrence of undesirable events or crisis situations, which allows for a faster and more effective response. Risk analysis helps clarify information and justify decisions based on objective data, which improves the quality of decisions made. This increases the trust of the public, partners and investors, as it shows that the organization takes a responsible approach to possible threats and knows how to manage them effectively. In general, due to the implementation of effective risk management, military authorities can adapt to changing conditions, optimize the use of resources, make informed decisions and be ready for emerging challenges. This, in turn, contributes to increasing the level of preparedness for crisis situations and strengthening confidence in the defense sector.

VI. The use of a ***results-based approach*** in portfolio management has a number of important advantages that contribute to increasing the efficiency, transparency and accountability of defense projects and programs, in particular: it focuses on the achievement of specific, measurable results, which allows to clearly define the goals of each component of the portfolio and ensure that all efforts are focused on achieving these goals; promotes better planning and prioritization of projects and programs for more efficient allocation of resources among portfolio components, focusing them on those that have the greatest impact on the country's defense capability; provides for regular monitoring and evaluation of achieved results; enhances the management of defense projects and programs through accountability and transparency, allowing all stakeholders to see how resources are being spent and what results are being achieved; contributes to the optimization of the use of financial, human and material resources through an orientation towards results, which allows timely identification of inefficient components of the portfolio and redistribution of resources to more priority directions; promotes better coordination between various divisions and departments involved in the implementation of defense projects and programs by increasing the level of cooperation and interaction through the specification of expected results and those responsible for their achievement; adapt to changes in the external environment and new challenges, which

ensures quick changes to projects and programs to achieve maximum efficiency; ensures the stability of the defense system due to a clear focus on achieving key goals and continuous improvement of management methods, thereby increasing readiness to respond to various threats and challenges. Therefore, the application of a results-based approach to portfolio management in defense management allows for more efficient use of resources, increased transparency and accountability, and the achievement of specific, measurable results that are critical to strengthening the country's defense capabilities.

The scientific and theoretical approaches proposed by us regarding portfolio management in the defense management system of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine are strategically important tools for the effective use of resources, the achievement of national security goals and the improvement of the country's defense capabilities. The selection and substantiation of scientific and theoretical approaches makes it possible to draw a conclusion regarding the proposal of an integrated approach that combines strategic, systemic, project and process-oriented approaches, as well as risk management and a focus on results, which is key to the successful implementation of portfolios in the defense sector. The key advantages of this approach are: the components of the portfolio are related to the strategic goals of the state; effective use of budget funds, human resources and material and technical support; increasing transparency and accountability; quick adaptation to changes, reduction of risks and improvement of the quality of decision-making; stimulating the implementation of new technologies and approaches. The defense sector of Ukraine needs to transform traditional approaches to portfolio management into more modern and effective ones, combining various scientific and theoretical approaches, which will provide a comprehensive analysis of problems and the development of effective solutions. This requires the training of highly qualified specialists in the field of portfolio management and the implementation of modern information systems, which will allow automating portfolio management and increasing its efficiency.

2.1.2 OUTLINE OF RESEARCH METHODS IN DEFENSE MANAGEMENT

In Ukraine, the implementation of effective portfolio management methods in the defense sector is an urgent task in the context of strengthening the national defense capability and ensuring the country's security. In connection with geopolitical realities and internal challenges – the war with the aggressor Russia, modern Ukraine is under increased pressure regarding the need to optimize defense costs, effective use of resources, and improvement of military and technical support. The implementation of a comprehensive approach to the management of portfolios of projects and programs in the field of defense aims to ensure the strategic goals of the state, reduce risks and increase the effectiveness of management decisions. In particular, this covers the selection of optimal investment projects, management of resources and costs, as well as increased transparency and accountability in management. It is the informed choice of portfolio management methods that

will help to effectively implement these tasks. International normative documents outline a number of methods and tools for carrying out portfolio management, which we consider appropriate to apply in the sphere of defense of Ukraine. In particular, this is ***a capacity analysis*** – a method aimed at analyzing the organization's ability to find sources of financing and implement selected projects. The essence of the method is to analyze the capabilities available in the organization to determine the gap between the required and available capabilities. Constraints related to internal resources can be satisfied through external resources, so the portfolio manager must compare the availability of external resources with the set of required capabilities within the portfolio. Human resources should be directed to projects or programs that bring the greatest benefit to the organization, since resource allocation is a portfolio constraint. Organization of such distribution should be carried out at the stage of portfolio formation. That is why the application of this method in the defense sphere of Ukraine is an important tool for effective resource management, planning and implementation of defense projects or programs. This method makes it possible to assess the current and future capabilities of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine, as well as the defense-industrial complex (hereinafter referred to as the defense industry) of the country, which is critically important for ensuring national security. Below are the main aspects of the application of this method:

1. Determination of key capabilities that are necessary for the implementation of strategic tasks in the field of defense (combat capabilities, logistical capabilities, technical support, cyber security, etc.).

2. The assessment of current capabilities includes an analysis of the current state of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine, as well as the country's defense industry (technical condition of equipment and weapons; qualification and training of personnel; logistical capabilities and support; infrastructure and technological base; operational capabilities and combat experience).

3. The analysis reveals gaps between current capabilities and those required to achieve strategic goals (insufficient technical equipment; problems with logistics and provision; insufficient training and qualification of personnel; deficiencies in infrastructure and technological capabilities).

4. Development of a strategy and portfolios for its implementation (portfolios of modernization of equipment and weapons, development of infrastructure, implementation of new technologies and innovations, etc.).

5. Helps prioritize portfolio components. Projects or programs that contribute most to filling critical gaps and enhancing key capabilities are given priority.

6. Regular monitoring and evaluation of the effectiveness of the implementation of portfolios, which allows to track progress in achieving the necessary capabilities and make adjustments to strategies and plans.

7. Facilitates prompt response to changes in the external environment and strategic conditions, which includes adaptation of plans and projects in accordance with new challenges and threats.

Application examples:

1. Modernization of military equipment: a capability analysis that identifies obsolete models of equipment in need of modernization or replacement will contribute to the development of an appropriate modernization portfolio taking into account the latest technologies.

2. Development of cyber capabilities: in the context of cyber threats, which are growing during the Russian-Ukrainian war, the analysis of capabilities may reveal an insufficient level of protection of information systems, which will lead to the launch of a portfolio to improve cyber security.

3. Logistics improvement: Identifying problems in logistics capabilities can trigger the portfolio to improve supply, transportation and inventory management systems.

In this way, the capability analysis method is an important tool in the portfolio management of the defense sphere of Ukraine. It helps to effectively assess current and required capabilities, identify gaps and develop strategies to fill them.

In addition, let's consider it expedient to use the method of ***cost-benefit analysis*** – assessing the strengths and weaknesses of programs/projects and determining which of them provide the best balance. This assessment leads to greater benefits/strengths and lower costs/weaknesses. In this analysis, costs and benefits are expressed in monetary terms over a period of time to provide a common basis for comparison. Especially in connection with the complex challenges and threats of the defense management system of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine, it is advisable to use this method to: determine whether it is worth investing in specific defense programs and portfolio projects, comparing the expected benefits with expenses; effective distribution of the defense budget of military administration bodies, determining priorities and allocating resources for the most effective measures; making strategic decisions in the field of defense, such as the acquisition of new technology or the conclusion of international agreements; predict the possible consequences of decisions in the field of defense, helping to avoid unforeseen problems in the future; promoting greater transparency in the management of defense resources, which is important for maintaining public trust and international cooperation.

Thus, the application of this method can help military administrations to use their defense resources more effectively, ensuring security and protecting national interests in the face of geopolitical challenges.

If there are projects or programs that require resources that cannot be made available at the same time, the portfolio manager can use a ***project priority matrix*** – a weighted multi-criteria assessment to determine the best possible implementation of these projects. Projects are evaluated on the basis of criteria that the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces of Ukraine consider relevant and consistent with the organizational strategy. In addition, these criteria are weighted based on their relative importance. Each criterion is evaluated for each project and then multiplied by the corresponding criterion weight to calculate the overall project score and rank the projects. Application of the Project Prioritization Matrix method in portfolio management in the field of defense of Ukraine is extremely important for several key reasons: it helps to effectively allocate available resources (financial, human, material)

between projects of greatest importance to national security and defense; allows to systematize the decision-making process, providing an objective assessment of each project based on defined criteria, such as strategic importance, urgency, cost, risks, etc., contributing to the transparency and validity of decisions; focuses on projects and programs that most correspond to the strategic goals and tasks of the defense sphere of Ukraine; allows identification and assessment of risks associated with each component of the portfolio, which is important for making informed decisions about their implementation, thereby reducing the likelihood of implementing projects or programs with high risks that may not justify the invested resources; allows to quickly respond to changes in external conditions and priorities; allows to single out portfolio components that are aimed at the implementation of new technologies and innovations in the field of defense, which is critically important for maintaining the competitiveness and efficiency of military management bodies. Therefore, the Project Priority Matrix method is an important portfolio management tool in the defense sector of Ukraine. It promotes efficient allocation of resources, supports strategic planning, minimizes risks and ensures adaptability to change, which ultimately strengthens the country's defense capability.

Moreover, it is worth emphasizing the importance of using such a method as ***a value-complexity ratio matrix*** – prioritization, which is used to rank a set of project or program needs in a portfolio for the most effective achievement of the final goal. A portfolio manager can identify a set of projects or tasks that need to be prioritized. Ratings for each project/task are assigned based on factors such as value to the customer, value to the military administration, etc. Weights are applied to each of these factors to calculate their value to these organizations. Similarly, implementation complexity can be calculated based on the effort required given the number of man-hours, schedule, and resource availability.

These two scores are then plotted for all projects or tasks on the Value and Complexity Matrix, as shown in **Fig. 2.3**.

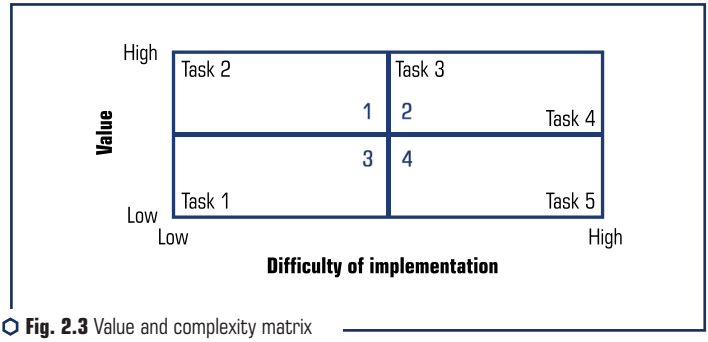

Fig. 2.3 Value and complexity matrix

Based on the obtained points, various projects or tasks fall into four squares of the "Value and Complexity" matrix (**Fig. 2.3**):

– Priority 1: High value, low complexity – quick win;
– Priority 2: High value, high complexity – should be started as soon as possible;
– Priority 3: Low value, low complexity – it is possible to focus on them later;
– Priority 4: Low cost, high complexity – should be done last.

The application of the matrix of the ratio of value and complexity in portfolio management in the field of defense of Ukraine can significantly increase the effectiveness of decision-making regarding the implementation of projects. This tool helps to evaluate and compare projects in terms of their value and complexity, which is of great importance in the context of limited resources and high requirements for defense products. Here are the main aspects of the effectiveness of the application of this matrix:

1. Allows to identify projects that bring the most value for the least cost and effort. This is especially important in the defense sector, where resources are often limited and the need for high-performance solutions is critical.

2. Helps establish priorities among various projects. Projects with high value and low complexity can be implemented as a priority, providing a quick and significant effect for the country's defense capability.

3. Contributes to strategic planning, allowing to better understand which projects are most in line with the strategic goals of the defense sphere of Ukraine. This provides a more balanced approach to investing in the development of defense capabilities.

4. Helps to identify projects and ensure their more thorough analysis and planning, or even abandoning them in favor of less complex but effective solutions.

5. Allows to maintain a balance between short-term and long-term projects, ensuring both quick wins and strategic initiatives that require more time and resources.

6. Promotes transparency and clarity in communications between different departments and management, which helps avoid misunderstandings and ensures a unified vision of priorities and strategies.

7. Helps to identify projects that, despite the high complexity, can bring significant innovative benefits by providing reasonable support for such projects, which is critical for maintaining the technological level of the defense industry.

The matrix of the ratio of value and complexity is an effective tool of portfolio management in the sphere of defense of Ukraine. It helps to optimize the allocation of resources, prioritize projects, improve strategic planning, minimize risks, effectively manage the project portfolio, improve communication and support innovation.

The purpose of ***analyzing "what if" scenarios*** is to construct several alternative solutions. Possible solutions are found by using a combination of current and potential projects and analyzing the impact of each solution on the performance and cost of the portfolio. What-if scenarios are based on a set of assumptions and conditions that must be carefully evaluated to be as realistic as possible: costs, schedules, dependencies, synergies, benefits, and consequences must be accurately estimated.

Key performance indicators (KPIs) are quantitative indicators that provide insight into key performance indicators. It is important to distinguish between two types of project-related KPIs.

The first type of KPI measures the effectiveness of the current project and is usually associated with value added management indicators. The second is used to measure progress toward project goals or objectives and is commonly known as Critical Success Criteria. Using both types of KPIs is a best practice in project communication and reporting and increases the likelihood of project support from sponsors and stakeholders. KPIs should be chosen based on the priority goals of the project. Different stakeholders should be identified to continuously review the performance and provide recommendations in case of any deviations. Portfolio managers should hold periodic meetings with program or project managers and other stakeholders to monitor KPIs and provide feedback.

Benefit tracking can be used to measure the extent to which a portfolio's intended benefits are being achieved. When a program or project is initiated, benefit tracking begins and continues throughout its life cycle, even after its completion. Benefits tracking involves creating a benefits plan matrix that documents lists of planned benefits and identifies critical success factors and key performance indicators. This matrix should be monitored throughout the entire period of implementation of programs and projects within the portfolio. Once the program or project is complete, identified benefits should continue to be reviewed and analyzed to identify areas for development and measure results using metrics.

The portfolio dashboard provides management with a quick overview of the portfolio. It summarizes the key performance indicators of portfolio components and becomes a means of communication within management to make decisions about continuing or terminating initiatives, assessing funding levels or resolving resource issues. A portfolio dashboard should be designed to address key performance indicators that are important to the organization. Program, project or operational reports become an important source of information for portfolio monitoring, control and decision making. The portfolio monitoring panel is also an input to the portfolio formation process if the portfolio needs to be re-evaluated or optimized due to performance issues with one or more portfolio components. Portfolio monitoring dashboards should be archived at appropriate regular intervals. Regular reporting is the result of the activity of the monitoring panel. Reports should be produced as standard practice and provided to portfolio stakeholders and relevant governing bodies. Consult the Stakeholder Matrix for additional guidance.

The basis of ***the balanced scorecard*** is the organization's strategies, which are implemented and controlled using the four components of the balanced scorecard. These four components consist of clearly defined business perspectives:

1. Financial part: measures the final results provided to the interested parties. Examples of financial metrics are budget, risk assessment, cost-benefit, funding, and utilization metrics.

2. Internal business processes: focuses on the key internal processes that drive business. Examples of internal business process measurements are process automation, process bottlenecks, duplication of activities between functions, number of activities per function, and process alignment.

3. Customer component: focuses on customer needs and satisfaction.

Examples of customer measurements are customer engagement, customer service effectiveness, customer market share, customer satisfaction, and quality metrics. The practical application of portfolio management can be extended by using a portfolio stakeholder matrix and a portfolio

communication plan. These artifacts can be developed further to focus on long-term portfolio effects in a commercial context.

4. Knowledge, learning and growth: Focuses on how to train employees, how to acquire and retain knowledge, and how to use it to maintain a competitive advantage in the markets. Examples of measuring knowledge, learning, and growth are satisfaction, training and development opportunities for employees, employee turnover, and the level of knowledge required to perform a job.

Because these four components are interdependent, they must be regularly measured, analyzed and improved together in order for the organization to thrive and grow.

Bubble charts are a type of chart that can be used to visualize data points that have three values. It displays a circle ("bubble") in a certain position relative to two orthogonal axes. Two values are used to define the position on each axis, while the third value defines the size of the "bubble". In a more advanced form, it is possible to specify even more values for each data point using bubble color, fill pattern, and more. Because such advanced visualization can make the chart more complex, it is recommended that it is possible to limit itself to three values for each data point.

The purpose of ***the portfolio archive*** is to create a central database for managing and maintaining programs, projects, resources and other information to support portfolio investment decisions. It can be hosted in a database and accessed through a web page or other type of application, allowing the portfolio management team to have secure access to the data. Such an archive should be updated frequently with key information on programs/projects submitted for consideration, as well as on the status of current investments. This tool should separate investments into different stages of portfolio management, such as candidate, active, closed and rejected programs and projects. This gives a clear idea of the necessary actions and allows to track the decisions that have already been made.

Thus, the use of the methods and tools proposed by us is an effective mechanism in the defense management system of the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces. They reflect the complex nature of the management of defense projects and programs, and ultimately help to achieve strategic goals with optimal use of resources.

2.2 THE PATH TO EFFECTIVE DEFENSE MANAGEMENT: CHALLENGES AND SOLUTIONS

2.2.1 MODEL OF THE PROCESS OF PLANNING, PROGRAMMING, BUDGETING AND IMPLEMENTATION IN THE DEFENSE MANAGEMENT SYSTEM OF THE MINISTRY OF DEFENSE OF UKRAINE, THE ARMED FORCES OF UKRAINE AND OTHER COMPONENTS OF THE DEFENSE FORCES OF UKRAINE

Modern challenges in the field of national security and defense require the Ministry of Defense of Ukraine to transition to a more efficient and transparent system of managing defense projects, programs and portfolios. Current practice is often characterized by fragmentation, insufficient

coordination, and the lack of a unified approach to project planning and implementation. In order to solve these problems, it is proposed to implement the PPBE, which will combine strategic goals, programs and budgets into a single comprehensive plan. This approach is based on the principle that budgets are formed from programs, programs from requirements, requirements from tasks, and tasks from national security goals. The purpose of implementing PPBE is to ensure consistency of actions of all participants in the portfolio management process; increase; cost optimization and achieving the maximum effect from investments; ensuring openness and control over the portfolio implementation process; quick response to changes in the external environment and internal needs. PPBE provides for:

1. Development and use in daily activities of the Ministry of Defense of Ukraine of project management architecture – PPBE, namely: Capability Program and determine its structure; The list of capabilities, the order of their evaluation; procedure for short, medium and long-term planning; development and approval based on the results of project planning, project programs, project portfolios; budgeting of projects, project programs and project portfolios; monitoring and control of the state of implementation of projects, project programs and project portfolios.

2. Build the Defense Program Architecture based on existing organizational structures and functional groups of capabilities, in particular:

– institutional capabilities – the capabilities of the Ministry of Defense of Ukraine and the capabilities of the General Staff of the Armed Forces of Ukraine;

– operational, combat and special capabilities – capabilities of the Ground Forces of the Armed Forces of Ukraine, the Air Forces of the Armed Forces of Ukraine, the Naval Forces of the Armed Forces of Ukraine, joint intelligence (the Main Intelligence Directorate of the Ministry of Defense of Ukraine), the Command of the Logistics Forces of the Armed Forces of Ukraine, the Command of the Medical Forces of the Armed Forces of Ukraine, the Main Directorate of Communications and Cyber Security of the General Staff of the Armed Forces of Ukraine, the Airborne Assault Forces of the Armed Forces of Ukraine, the Special Operations Forces of the Armed Forces of Ukraine, the Territorial Defense Forces of the Armed Forces of Ukraine, the Command of the Support Forces of the Armed Forces of Ukraine, the State Special transport services of the Ministry of Defense of Ukraine, the Military Law and Order Service of the Armed Forces of Ukraine and the Unmanned Systems Forces of the Armed Forces of Ukraine;

– functional groups: formation of state policy; planning the development of troops (forces); command and control; intelligence; application; software; communication and information systems; protection and survivability. Areas of expenditure – weapons and military equipment, personnel, infrastructure, operational costs;

– functional groups (based on domains, organizational structures, functional groups), namely:

– institutional capabilities – the capabilities of the Ministry of Defense of Ukraine and the capabilities of the General Staff of the Armed Forces of Ukraine;

– combat and special capabilities – command and control (Command of the United Forces of the Armed Forces of Ukraine), conducting operations on land (Command of the Ground Forces of

the Armed Forces of Ukraine), conducting operations in the air (Command of the Air Forces of the Armed Forces of Ukraine), conducting operations at sea (Command of the Naval Forces of the Armed Forces of Ukraine), special actions of the Special Operations Forces (Command of the Special Operations Forces of the Armed Forces of Ukraine);

– joint capabilities for operations (combat operations) – the capabilities of joint development (Main Development Directorate of the Ministry of Defense of Ukraine), logistics support, medical support (Command of the Medical Forces of the Armed Forces of Ukraine), communication and information systems (Main Directorate of Communications and Cyber Security of the General Staff of the Armed Forces of Ukraine), preservation of combat capability of troops (forces) and destruction of the effectiveness of enemy troops (forces) and weapons (Command of Support Forces of the Armed Forces of Ukraine), contribution to public safety (Military Law and Order Service of the Armed Forces).

3. The architecture of project and program management through portfolios provides for the following portfolio types and portfolio management functions. Types of portfolios: portfolios of projects, types of project programs (individual branches, commands, forces); portfolios of weapons and military equipment; infrastructure portfolios; ITC portfolios. Functions of portfolio management: provision, redistribution, balancing of resources between projects to achieve goals within the framework of priorities; analysis, monitoring, control, evaluation of the status of project implementation; compliance with the methodology; requirements for the system of training Managers of projects, programs, portfolios; integrity, timeliness, reliability of data, their processing in modern information systems; determining the effectiveness of resource management at all stages of project implementation, project programs and project portfolios; analysis, monitoring of the influence of interested parties.

4. The architecture of project planning and development involves their creation, development and execution, disposal. Planning using the methodology (DOTMLPFI) involves: work planning; resources; their value; performers; budget by category (personnel, weapons and military equipment, infrastructure, operation).

5. Architecture of capabilities of types, branches of troops, commands. Building programs based on the organizational structures of the Armed Forces of Ukraine, rather than domains (air, land, water) and functional groups.

Planning stage:

– a report on conducting a defense review;
– national security strategy of Ukraine;
– military security strategy of Ukraine;
– unified operational concept;
– strategy for the development of the Armed Forces of Ukraine;
– bilateral capacity development plan;
– strategy for the development of types, types of troops (forces).

Therefore, modern challenges in the field of national security and defense require the Ministry of Defense of Ukraine to transition to a system of managing defense projects, programs and

portfolios based on the principles of efficiency, transparency and coordination. The existing fragmentation and lack of a unified approach to project planning and implementation become an obstacle to achieving strategic goals. Implementation of the system of planning, programming, budgeting, implementation and evaluation will contribute to ensuring the coherence of actions, optimizing costs and achieving the maximum effect from investments. This approach will allow not only to increase the efficiency of project management, but also to ensure openness and control over the processes of implementation of defense programs. Summarizing, the PPBE implementation in the Ministry of Defense of Ukraine will be a key step in strengthening the country's defense power and ensuring national security in the face of modern challenges and threats.

2.2.2 IDENTIFICATION OF THREATS AND DEVELOPMENT OF RECOMMENDATIONS FOR THE IMPLEMENTATION OF PORTFOLIO MANAGEMENT IN MILITARY ADMINISTRATION

The current state of the defense sector of Ukraine is characterized by significant challenges that require a complex and systematic approach to solving them. The defense sector of Ukraine, like many other spheres, inherited certain features of management from the Soviet system. However, modern realities require flexibility, innovation and transparency from the military administration. Let's analyze in more detail the key problems that hold back the development of the defense sector.

One of the most acute problems is the systematic underfunding of the defense sector. This leads to outdated weapons, the lack of modern technologies and the inability to respond to changes in the security situation in a timely manner. Initiatives for early response are not funded on time and in full, current changes are made to the Development Management Plan or the Indicative Development Management Plan, which make it impossible to carry out consistent continuous work on projects or programs, lack of implemented processes of economic analysis of the effectiveness of spending funds and decisions made in time. In addition, the insufficient financial support of military personnel led to a shortage of qualified personnel in the defense sector. During the time of independence, the Ministry of Defense of Ukraine, the Armed Forces of Ukraine and other components of the defense forces did not prioritize the development of institutional capabilities, namely the development of the management system and the human capital (resources) management system. Due to the lack of clear career planning and an insufficiently developed motivation system, military administrations face the problem of losing qualified specialists. There are no calculations of the cost of training and maintenance of a specialist, the cost of its loss and/or inappropriate recruitment. As a result, low efficiency of project and program management, difficulties in adapting to new technologies, and high staff turnover.

It is worth defining such a problem as the lack of modern information systems. In recent years, the Ministry of Defense of Ukraine and the General Staff of the Armed Forces of Ukraine have been implementing a system of monitoring and control over project activities based on Microsoft Project Server. The implementation is slow as a result of the lack of a single protected branched ITC,

the difficulty of accessing the already created protected circuit of project activity participants, the lack of appropriate computerized workplaces and the compliance of the system with strict requirements for access to consolidated information according to the requirements of the List of Information of the Ministry of Defense of Ukraine, which contain official information [12] and the Compendium of State Secret Information [13].

Corruption is a serious problem in the defense sector. It manifests itself in various forms, such as kickbacks, bribes, promotion of non-competitive contracts and misuse of budget funds [14]. According to Transparency International, the global amount of corruption fraud in the defense industry is about 20 billion dollars per year [15]. Non-transparency and inefficiency of procurement: Corruption schemes lead to the fact that contracts are awarded not to companies that offer the best terms, but to those that are willing to pay higher "kickbacks". As a result, the purchase of low-quality equipment, inflated prices and delays in deliveries. Moreover, the political aspect of corruption can influence the choice of portfolio components, contractors and the allocation of budget funds, which will lead to the implementation of ineffective projects or programs that do not meet the real needs of the Armed Forces of Ukraine. In addition, there is often a conflict of interest when officials who make decisions about procurement and projects have a personal interest, which inevitably leads to corruption. Corruption schemes often lead to delays in approval and contracting procedures, which delays the implementation of projects or programs and reduces their relevance. Corruption scandals undermine citizens' trust in state institutions, which makes it difficult to carry out reforms and modernize the country's defense sector. Corruption demotivates honest employees and encourages corrupt behavior, which leads to an outflow of qualified personnel and a decrease in overall work efficiency.

We consider it necessary to outline such a threat to the implementation of portfolio management as a post-Soviet corporate culture. Corporate culture is an important aspect of enterprise management, which determines values, norms of behavior and common approaches within the organization. Let's consider some key aspects of post-Soviet corporate culture [16]:

– decision-making based on data, not on the basis of reliable relationships/trust;

– the attitude towards mistakes is not punishment, but work on the gained experience and aiming at improvement;

– measuring the effectiveness of spending budget funds as taxes paid by citizens of the country;

– openness and transparency of reporting and corresponding communication with society.

For the successful development of the defense sector of Ukraine, it is necessary to carry out complex reforms aimed at overcoming existing problems. This requires joint efforts by the state, civil society and international partners. Significant results in strengthening the country's defense capabilities can only be achieved under the condition of effective fight against corruption, modernization of the management system and provision of sufficient funding. Implementation of portfolio management in the defense sector of Ukraine is a complex and multifaceted process that requires significant resources and overcoming a number of obstacles. Let's offer the following recommendations for its successful implementation:

1. Development of the regulatory framework, organizational and administrative documents on portfolio management:

– issuance of an order of the Ministry of Defense on the implementation of portfolio management;

– development of the procedure for the formation of project portfolios, planning and management of financial resources;

– determination of success indicators, procedures for evaluating the effectiveness of the project portfolio, the procedure for monitoring and controlling the implementation of project programs and programs;

– creating a system of forecasting, studying and overcoming risks in portfolio management, documenting and implementing the acquired experience;

– development of documentation templates for portfolio management and making changes to the methodology and templates of program and project management;

– determination of the order of interaction with external and internal interested parties;

– development and approval of the Methodology after the "pilot" implementation of the military standard for project portfolio management.

2. Creation and reorganization of project portfolio management functions by:

– determination of the main requirements for the prospective organizational structure of project portfolio management within the framework of defense programs;

– analysis of the organizational structure of project management, project programs and portfolios;

– development and implementation of a list of typical positions, military accounting specialties, states, staff lists of portfolio management units in the Ministry of Defense of Ukraine, the General Staff of the Armed Forces of Ukraine and other military management bodies in the system of the Ministry of Defense of the country;

– development of criteria for selecting candidates for positions in portfolio and program and project management;

– development of a phased plan for the implementation of a new project portfolio management structure;

– carrying out an assessment of the portfolio management activity of structural subdivisions based on established KPIs.

3. Improving the qualifications of personnel by:

– assessment of the competences of the personnel of the structural divisions involved in the management of project portfolios in order to identify gaps in knowledge, skills and abilities;

– professional development of teachers in program and project and portfolio management;

– inclusion in the training programs of masters of military administration, L3, L4 and L5 courses of the project portfolio management section;

– development of course training programs and inclusion of courses for training specialists in project portfolio management in the Catalog of advanced training courses (retraining, retraining) in higher military educational institutions, military educational units of higher education institutions and institutions of professional pre-higher military education;

– conducting trainings and seminars with qualified specialists and experts in the field of project portfolio management;

– ensuring staff access to online resources, educational platforms, electronic libraries, webinars and other forms of self-education.

4. Organization of providing the portfolio of projects, programs and individual projects with the necessary resources by:

– determination of the types of resources necessary for the implementation of projects and project programs (human, financial, material, informational);

– creation of a register of priority portfolio projects to provide them with resources, including supply and distribution schedules;

– implementation of methods for optimizing the use of resources, such as joint use, redistribution and cost minimization;

– development of a control system for the use of financial resources to prevent overspending and inefficient use;

– development of effective personnel management systems, including motivation, division of duties and evaluation of work efficiency;

– implementation of information systems and software for project management and monitoring the use of resources;

– assessment of the effectiveness of resource use after completion of programs, projects and individual projects, analysis of experience gained and improvement of management processes.

5. Development of leadership qualities in managers of individual projects, programs and project portfolios by:

– determination of directions for the development of leadership skills in the short-term and long-term perspective;

– conducting trainings, seminars, webinars on the main aspects of leadership, such as strategic thinking, change management, socio-psychological management skills, effective communication and team motivation;

– conducting activities to improve interaction and team spirit among managers and their teams;

– conducting regular assessments of progress in the development of leadership skills with the help of surveys, tests and feedback;

– facilitating the participation of portfolio and project managers in professional conferences and seminars for the exchange of experience and knowledge.

6. Attracting and retaining qualified personnel by:

– formation of requirements for personnel, programs and courses for the training of specialists by positions in the planning, programming, budgeting, implementation (hereinafter – PPBE) in educational institutions of the Ministry of Defense abroad (in military educational institutions of the partner countries of the North Atlantic Alliance);

– creation of a motivational package for further service for those who received education abroad in the management of PPBE processes;

– implementation of rotation of portfolio management specialists;

– implementation of international internship practice;

– creation of a database of project portfolio management specialists.

7. Creation and modernization of infrastructure for portfolio management by:

– implementation of specialized software products, such as Microsoft Project, Microsoft Project Server and for effective management of projects and project portfolios;

– organization of trainings for personnel in order to improve their knowledge and skills in using specialized software products;

– provision of constant technical support and consultations for users of new information systems and tools;

– creation of a single database for storing information about projects and portfolios with the possibility of quick access and updating;

– use of analytical tools for data processing and analysis, which allows making informed management decisions.

8. Establishing interoperability within the framework of project portfolio management by:

– use of a single IT platform for project portfolio management;

– implementation of uniform standards and methodologies for managing a portfolio of projects and projects to ensure a unified approach to their management;

– development and use of unified templates for planning, reporting and documentation of projects and project portfolios, which contributes to consistency and comprehensibility of processes;

– organization of meetings of managers and members of project teams to exchange experience and information.

Thus, the result of the implementation of portfolio management will be the establishment of a system of coordinated management of project activities at the level of portfolio management within the framework of defense programs of the Ministry of Defense of Ukraine, the General Staff of the Armed Forces of Ukraine, the commands of the Armed Forces of Ukraine, the Main Directorate of Intelligence of the Ministry of Defense of Ukraine, the State Service of Special Transport of the Ministry of Defense of Ukraine and in the future other components of the defense forces of Ukraine.

Let's consider it expedient that the indicators of such implementation will be:

– regulatory framework (orders, doctrines, regulations, methods, military standards) for portfolio management;

– portfolio management system with detailing of functions at operational and strategic levels in the system of the Ministry of Defense of Ukraine;

– the organizational structure of managing and coordinating the management of portfolios of projects and programs;

– entry into the list of military accounting specialties of officers of the military accounting specialty;

– passports of portfolio management positions;

– a system of professional and course training for portfolio management of projects and programs;

– changes to educational programs and training courses for personnel to manage portfolios of projects and programs;

– personnel policy with recruitment, retention, conditions of vertical and horizontal rotation of involved qualified personnel;

– informational support of processes and communication for the implementation of projects and programs for portfolio management.

Therefore, the implementation of portfolio management in the defense sphere of Ukraine is strategically important and necessary for increasing the efficiency and transparency of management. The results of the implementation will be reflected in the creation of a legal framework, improvement of organizational structures, improvement of staff qualifications, provision of necessary resources and implementation of modern IT tools. This will contribute to the strengthening of defense readiness and ensure the achievement of the strategic goals of Ukraine's national security in the face of modern global challenges.

CONCLUSIONS

The implementation of portfolio management in the defense sector of Ukraine is a strategically important step for increasing the efficiency of resource use, achieving national security goals, and strengthening the country's defense capabilities. For the successful implementation of portfolio management, it is necessary to apply a comprehensive approach that combines various scientific and theoretical approaches, such as strategic, system, project, process-oriented, risk management and focus on results. Each of these approaches has its advantages and complements each other. The strategic approach ensures the consistency of the portfolio with national goals, the systemic approach allows to consider the portfolio as a single system, the project approach focuses on the implementation of individual projects, the process-oriented approach ensures the effectiveness of processes, risk management minimizes negative consequences, and the focus on results guarantees the achievement of set goals. In addition, it is proposed the use of such methods as capability analysis, cost-benefit analysis, project priority matrix, value-complexity ratio matrix, what-if scenario analysis, and others. These methods allow to make informed decisions about portfolio formation, project prioritization, resource allocation, and results monitoring.

The implementation of portfolio management in the defense sector of Ukraine is a complex and multifaceted process, the result of which will be the creation of an effective management system that will optimize the use of resources, increase transparency and accountability, as well as ensure the achievement of strategic national security goals. That is why it is proposed the implementation of a model of planning, programming, budgeting, implementation and evaluation in the defense sector of Ukraine as a strategically important step to increase the efficiency of defense project and program management. This model will overcome the existing problems of fragmentation, lack of coordination, and lack of a unified approach to project planning and implementation, which are

characteristic of the modern defense management system. PPBE will ensure consistency of actions of all participants in the portfolio management process, optimization of costs and achievement of the maximum effect from investments. The implementation of this system will contribute to increasing transparency and control over the processes of implementation of defense programs, and will also ensure a quick response to changes in the external environment and internal needs. Moreover, the recommendations outlined by us for the implementation of portfolio management into the defense management system will contribute to: increasing the efficiency of the use of resources for the performance of tasks for the development of capabilities defined by defense planning documents through their rational distribution and optimization to achieve the maximum effectiveness of projects; manageability and effectiveness of the implementation by the structural divisions of the Ministry of Defense of Ukraine, the General Staff of the Armed Forces of Ukraine and other military administration bodies, the State Special Transport Service of the Ministry of Defense of Ukraine, tasks and measures of defense program projects and portfolios of projects on the development of personnel, weapons and military equipment, provision of material and technical means, infrastructure, ensuring the conduct of hostilities; economic substantiation of the results of achieving the benefits of programs and portfolio projects, risk control; transparency and openness in decision-making by improving communication with interested parties and ensuring their trust in portfolio management; effectiveness, transparency and manageability of capacity development management.

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