

## Case Study

# ENHANCING THE EFFECTIVENESS OF DEFENCE PLANNING THROUGH THE IMPLEMENTATION OF CAPABILITY-BASED BUDGETING AND CIVILIAN CONTROL

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## ABSTRACT

**Background:** *The effectiveness of defence planning within Ukraine's defence and security sector is heavily contingent upon the meticulous formulation and execution of future defence budgets, as delineated in Ukraine's National Security Strategy. Furthermore, it is imperative to comprehensively examine international experiences in defence planning, specifically in developing and sustaining vital resources and capabilities for fulfilling defence missions under budgetary constraints. Consequently, there exists an inherent necessity for extensive dialogues among scholars and officials tasked with military-strategic decision-making.*

**Results and Conclusions:** *This research explores the paramount significance of defence planning for bolstering Ukraine's security and defence capabilities. The intrinsic link between the identified issue and pivotal scientific and practical objectives becomes evident when considering the prioritisation of robust financial planning and judicious resource allocation, with the aim of fashioning modernised defence forces adept at countering emergent security threats. In this regard, the study diligently examines international experiences to discern and adapt best practices of essential facets like equipment, command systems, intelligence capabilities, and personnel training, all of which play a pivotal role in fortifying defence readiness and mission efficacy. Acknowledging the constraints of limited financial resources necessitates judicious strategic decision-making to optimise defence expenditures within well-defined parameters is paramount.*

**Keywords:** *defence planning, capability-based budgeting, civilian control, defence expenditure, resource allocation, international experience, Ukraine, National Security Strategy.*

## 1 PROBLEM STATEMENT

The effectiveness of defence planning in Ukraine's defence and security sector is heavily dependent on the proper formulation and execution of future defence budgets, which is a key priority outlined in Ukraine's National Security Strategy. Additionally, studying international experience in defence planning, specifically related to creating and maintaining essential resources and capabilities for fulfilling defence missions across various scenarios while operating within a limited budget, is crucial. To address these challenges effectively, extensive discussions among scholars and officials responsible for military-strategic decision-making will be necessary.

## 2 THE CONNECTION BETWEEN THE PROBLEM AND IMPORTANT SCIENTIFIC AND PRACTICAL TASKS

The connection between the problem and important scientific and practical tasks is evident in the strategic importance of defence planning for ensuring the security and defence capability of the country. In Ukraine, the defence and security sector is currently undertaking efforts to develop new approaches to forward-looking planning based on capabilities aimed at strengthening defence capabilities and protecting national interests. The formulation and execution of defence budgets play a vital role in effective defence planning, establishing a critical link between budgetary opportunities and the imperative to provide mission capabilities across the full spectrum of possible defence system missions. The National Security Strategy of Ukraine prioritises the provision of robust financial planning and resource allocation to create modernised defence forces capable of addressing emerging security challenges. Studying international experience enables identifying and adapting best practices to the Ukrainian context. Establishing and maintaining essential assets and capabilities, including equipment, command systems, intelligence capabilities, and personnel training, are paramount in ensuring defence readiness and mission effectiveness. The challenge posed by limited financial resources necessitates strategic decision-making to optimise defence spending within the defined limits. Consequently, striking a balance between defence force modernisation, capacity building, and operational readiness demands meticulous analysis.

## 3 ANALYSIS OF RECENT RESEARCH AND PUBLICATIONS

The issue of defence planning based on capabilities for effective budgeting has garnered significant attention in the research conducted by foreign scholars. Notably, American researchers L. R. Jones and J. L. McCaffery analyse the nearly fifty-year history of implementing capability-based budgeting systems and highlight that decision-making in defence budgeting at the U.S. Department of Defence (DoD) level is among the most challenging tasks in overall public financial management.<sup>1</sup> Scholars note that implementing a capability-based budgeting system requires substantial effort and overcoming resistance within the organisation, particularly when transitioning control of planning and budgeting from the military to civilian authorities. The initial motivation behind transferring political control over the military is a critical objective in establishing civilian oversight, combating corruption, and rationalising resource planning. According to scholars, this process can take a minimum of five years.

Zrnić Bojan highlights that countries with transitional economies face budgetary resource constraints, necessitating that modern capability-based defence planning systems ensure the efficiency of this process by balancing available resources with the ability to achieve set goals.<sup>2</sup>

Publications by T.-D. Young, a Romanian scholar, provide interesting insights into the analysis of failures in implementing capability-based planning within the defence establishments of post-communist Central and Eastern European countries.<sup>3</sup> These failures are attributed to

- 1 LR Jones and Jerry L McCaffery, 'Reform of the Planning, Programming, Budgeting System, and Management Control in the US Department of Defence: Insights from Budget Theory' (2005) 25(3) *Public Budgeting & Finance* 1, doi: 10.1111/j.1540-5850.2005.00364.x.
- 2 Bojan Zrnić, 'The New Trends in Defence Planning and Their Impact on the Defence Planning Systems in Transitional Countries' (2008) 60(1) *Vojno delo* 25.
- 3 Thomas-Durell Young, 'Is the US's PPBS Applicable to European Post-Communist Defence Institutions?' (2016) 161(5) *RUSI Journal* 68, doi: 10.1080/03071847.2016.1253382; Thomas-Durell Young, 'The Failure of Defence Planning in European Post-Communist Defence Institutions: Ascertaining Causation and

the institutions' inability to develop viable defence plans based on objective data, primarily due to the lack of a defined political framework and decentralised financial decision-making. The hasty and ill-considered implementation of the Planning, Programming, and Budgeting System (PPBS) exacerbates the situation.<sup>4</sup>

It is worth noting that the work provides a general analysis of the planning and budgeting reforms conducted by the Ministry of Defence of Ukraine since 2000. The author emphasises that the Ukrainian defence establishment possesses an inadequate understanding of the role of money as a managerial instrument, leading to insufficient adaptation of expenditures to policy changes and priorities. Moreover, effective financial management is hindered by the presence of multiple software systems, such as Resurs, Parus, and Ruslo, which have never been fully integrated and, consequently, cannot support dynamic planning and management.<sup>5</sup>

Interestingly, Estonian researcher M. Sedysheva has proposed a conceptual approach to defining the optimal process of developing strategy and cost control for defence. This approach utilises the decision-making system adopted in the Republic of Estonia.<sup>6</sup>

In addition, Ukrainian researchers have also actively studied international experiences in capability-based defence planning for effective budgeting. However, most research is in its initial stages, focusing on the study of international experiences and developing methodological approaches for implementing this experience in practice based on NATO standards. Noteworthy articles include the work of I. S. Rusnak et al., which provides insights into the peculiarities of capability-based defence planning and its prospects for implementation in the country's defence force development process.<sup>7</sup> Additionally, Nalyvaiko et al. discuss the organisational peculiarities of capability-based defence planning and the need for personnel training.<sup>8</sup>

The absence of effective approaches to defence planning, particularly in terms of capability-based budgeting and civilian control, coupled with the necessity for the development and enhancement of methods and systems related to civilian control, poses a significant challenge in the comprehensive advancement of Ukraine's defence sector, encompassing the Armed Forces. Considering this, the present study focuses on exploring these pertinent issues, which are of utmost relevance and demand a thorough investigation, drawing upon the invaluable insights derived from the best practices adopted by NATO member states while duly considering the specific requirements of Ukraine's defence forces.

## 4 RESEARCH TASK

This research aims to investigate and propose strategies for enhancing the efficiency of defence planning in Ukraine's defence and security sector. Specifically, the research examines the implementation of capability-based budgeting to optimise resource allocation and prioritise

Determining Solutions' (2018) 41(7) *Journal of Strategic Studies* 1031, doi: 10.1080/01402390.2017.1307743.

4 Jones and McCaffery (n 1) 17-9.

5 Kateryna Yahelska and others, 'Comparative Analysis of Methods for Forecasting Budget Indicators' (2021) 39(3) *Estudios de Economía Aplicada* 4521, doi: 10.25115/eea.v39i3.4521.

6 Maritana Sedysheva, 'Strategic Management System and Methods of Controlling as Key Elements of Military Expenditure Policy-Making Process' (2012) 5(3) *Journal of Strategy and Management* 353, doi: 10.1108/17554251211247607.

7 IS Rusnak and others, 'Capability-Based Defence Planning: Peculiarities and Prospects for Implementation' (2017) 2 *Science and Defence* 3, doi: 10.33099/2618-1614-2017-0-2-3-10.

8 AD Nalyvaiko, IM Sivokha and AI Polyaev, 'Implementation of Capability-Based Defence Planning in the Components of the Defence Forces of Ukraine' (2018) 1(62) *Collection of the scientific papers of the Centre for Military and Strategic Studies of the National Defence University of Ukraine* 46.

defence expenditures. Additionally, the research explores mechanisms for ensuring effective civilian control over the defence planning process. By analysing international experiences and best practices, the research aims to develop recommendations that will improve the effectiveness and transparency of defence planning in Ukraine, ultimately strengthening the country's defence capabilities and safeguarding national interests.

## 5 METHODS

This research, underpinned by empirical methodologies encompassing crowdsourcing and specialist consultations, delves into the fiscal processes and strategic planning intrinsic to Ukraine's defence sector. Endeavouring to augment the efficiency of defence planning, the study advocates the adoption of capability-based budgeting, concurrently emphasising the indispensability of civilian oversight. The investigation derives insights from international paradigms, assimilates a range of perspectives, and presents recommendations to bolster defence competencies and enshrine national imperatives.

During the academic symposium titled "Current Challenges of the National Economy in the Interests of Defence and State Security and Ways to Address Them," which took place in Kyiv on May 31, 2023, we meticulously established a digital platform purposed to combine insights from a spectrum of stakeholders engaged in complexities of defence planning and budgeting strategies. This methodological framework resulted in a wealth of insights, sourced not merely from trained professionals in the field of defence but also the wider civil society. Such discernments encompass perspectives on specific defence imperatives, budgetary delineations, and potential bottlenecks manifesting in the strategic rollout.

After the rigorous analysis of the aggregated data, a hermeneutic approach was deployed to distil dominant trends, shed light on key challenges, and propose feasible rectifications. In our unwavering commitment to preserving academic rigour and ensuring methodological precision, we extensively consulted with renowned experts. These deliberative sessions, oriented towards enhancing and reconciling insights drawn from the digital milieu, significantly enriched the depth, clarity, and relevance of our academic research. These consultations involved in-depth discussions and comprehensive interviews with experts in defence planning, budgetary protocols, and national policy vectors. These epistemological channels thus rendered an enhanced understanding of the diverse intricacies and the broader challenges embedded in defence planning and its implementation, particularly within the architecture of Ukraine's Armed Forces.

## 6 RESULTS

The analysis of budget expenditures for 2022 highlights that it was not structured as a "war budget",<sup>9</sup> leading to insufficient allocations for essential provisions such as food, medical care, and arms and logistical support. Scholars have emphasised that the financing of the Ukrainian army lacked effective planning and was ad hoc, resulting in significant challenges that need to be addressed in future budget planning.<sup>10</sup>

9 Vladyslav Ijersalymov, 'Defence Budget: How War Altered Budget Expenditures' *Ekonomichna Pravda* (Kyiv, 8 July 2022) <<https://www.epravda.com.ua/columns/2022/07/8/689001/>> accessed 22 September 2023.

10 Robert H Chenhall, 'Management Control Systems Design Within its Organizational Context: Findings from Contingency-Based Research and Directions for the Future' (2003) 28(2-3) *Accounting, Organizations and Society* 127, doi: 10.1016/S0361-3682(01)00027-7; Igor Lyutyi, Yuliia Petlenko and Nataliia Drozd,

Considering the urgency and severity of the current security situation, according to R. H. Chenhall,<sup>11</sup> it is crucial to incorporate these concerns into future budget decisions. Allocating adequate funding is of utmost importance to ensure the readiness and capability of the Ukrainian army to counter potential threats effectively. Additionally, establishing a comprehensive budget framework is critical for effective resource planning and allocation. A meticulous assessment of the defence sector's needs, including immediate requirements and long-term perspectives, is necessary. A systematic and strategic approach to budget formulation should include financial forecasting and provision for defence resources, considering potential scenarios for utilising defence forces.

Since 1991, the manual formation of the military budget has been challenging due to political instability, considerable uncertainty, and limited funding.<sup>12</sup> Given the prospects of Ukraine's integration into NATO, a thorough review of budget provisions and resource allocation for the Ukrainian defence complex is essential. Before the war, the identified shortcomings in military expenditure budgeting emphasised the need to enhance budget planning and prioritise the defence sector's capabilities and goals.<sup>13</sup> The future budget must address the challenges of defence planning and align with the establishment and maintenance of military potential, particularly by adequately financing the essential needs of the Ukrainian army and considering long-term strategic perspectives.

NATO countries extensively utilise defence planning methods, such as scenario planning, tabletop exercises, structured planning, and risk-based planning (Tab. 1).<sup>14</sup> These methods enable the anticipation of emerging threats, identification of potential risks, and the development of strategic plans and policies for the optimal utilisation of defence resources during the forecasting phase.

The concept of capabilities stands as a pivotal element in defence planning. This approach is rooted in assessing the specific military capabilities required by the armed forces to accomplish established defence objectives. It empowers NATO countries to determine their needs for military resources, including weaponry, equipment, infrastructure, and personnel, and to allocate the necessary resources to attain strategic goals.

According to Elsawah et al., capability-based defence planning involves the systematic development of armed forces over the long term.<sup>15</sup> The purpose of such planning is to effectively prepare the country's armed forces for future challenges and threats by using available resources.

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'The Importance of Openness and Transparency in the Budget Process in the Defence and Security Sector of Ukraine' (2022) 6(47) *Financial and Credit Activity: Problems of Theory and Practice* 99, doi: 10.55643/fcaptop.6.47.2022.3900; Nalyvaiko, Sivokha and Polyayev (n 8); AH Petrenko, 'On the Implementation of Defence Management and Change Management in the Ministry of Defence of Ukraine' (2019) 2 *Science and Defence* 3, doi:10.33099/2618-1614-2019-7-2-03-08; Rusnak and others (n 7); IS Rusnak and others, 'Documents of Strategic (Defence) Planning of the Ministry of Defence of Ukraine, the Armed Forces of Ukraine, other Components of the Defence Forces, and the Procedure for their Implementation' (2021) 3 *Science and Defence* 13, doi: 10.33099/2618-1614-2021-16-3-13-21; FV Sahaniuk and VS Frolov, 'Systemic Approach to Implementing Defence Reform in Ukraine' (2018) 1(62) *Collection of the scientific papers of the Centre for Military and Strategic Studies of the National Defence University of Ukraine* 13.

11 Chenhall (n 10).

12 Rusnak and others (n 7).

13 Christopher Mark Davis, 'The Ukraine Conflict, Economic-Military Power Balances and Economic Sanctions' (2016) 28(2) *Post-Communist Economies* 167, doi: 10.1080/14631377.2016.1139301.

14 Brendan W McGarry, 'DOD Planning, Programming, Budgeting, and Execution (PPBE): Overview and Selected Issues for Congress' (*Library of Congress, Congressional Research SVC*, 11 July 2022) <[https://ppbereform.senate.gov/in\\_the\\_news/congressional-research-service-crs-report-dod-planning-programming-budgeting-and-execution-ppbe-overview-and-selected-issues-for-congress/](https://ppbereform.senate.gov/in_the_news/congressional-research-service-crs-report-dod-planning-programming-budgeting-and-execution-ppbe-overview-and-selected-issues-for-congress/)> accessed 22 September 2023.

15 Sondoss Elsawah and others, 'A Decision Support Methodology to Support Military Asset and Resource Planning' (2023) *Journal of Simulation* 1, doi: 10.1080/17477778.2023.2165460.

**Table 1.** *Defence planning methods used in NATO countries*

| <b>Approach</b>               | <b>Characteristic</b>  |
|-------------------------------|--|
| Top-down planning             | This approach involves the development of strategies based on a sequential process from the formulation of policies, interests and goals at the highest level, to the approval of plans at lower levels.   |
| Resource-constrained planning | The goal of this approach is to create viable prospects for achieving goals based on a sustainable approach with a clearly defined budget. This approach does not foresee the ability to increase costs to achieve goals without a corresponding increase in productivity.   |
| Incremental planning          | This is an approach in which decisions are made not in view of clearly defined goals, but on the realities of the present and the ability to solve them only in general form with the help of gradual steps, which, in turn, are based on the constant correction of strategic plans under the influence of internal and external. |
| Capacity-based planning       | This method involves planning, which involves the development of the capabilities of the defence forces in terms of countering threats and risks for the long term within the limits of available resources.   |
| Scenario-based planning       | This approach is based on establishing a sequence of states of the forecasting object under different forecasts of changes in the background on which the object is located.   |
| Threat-based planning         | This approach involves identifying potential adversaries and assessing their capabilities. Capability or system requirements are based on adversary dominance criteria. Quantitative and qualitative solutions are explored. This was a common approach to planning during the Cold War.   |

To anticipate and resolve these future conflicts, long-term planning is crucial.<sup>16</sup> This involves analysing the political, economic, social, and technological factors that could potentially affect the conflict environment and using that information to determine the direction of military development. Determining the strategic direction is extremely important because it enables the specification of the tasks necessary to create an effective defence force.

The planning continuum within defence structures has traditionally followed a sequential hierarchy, progressing from long-term expectations to medium-term strategies and ending with short-term operations.

The medium-term planning phase is of particular importance in this trajectory. According to M. Barzelay and C. Campbell,<sup>17</sup> mid-term planning comes after determining the main directions of long-term planning. This phase is characterised, as defined by G. A. Garrett and R. G. Rendon,<sup>18</sup> by focusing on detailed indicators crucial for orchestrating a smart composition of the armed forces. Such determinants and indicators are quintessential to ensure that defence structures can respond and adapt to new challenges and threats. Thus, P. Joyce defines the essence of medium-term planning as its ability to reconcile the broad visions of the long-term planning phase with concrete, actionable and measurable strategies that prepare the basis for the inevitable implementation phases.<sup>19</sup>

16 Jones and McCaffery (n 1).

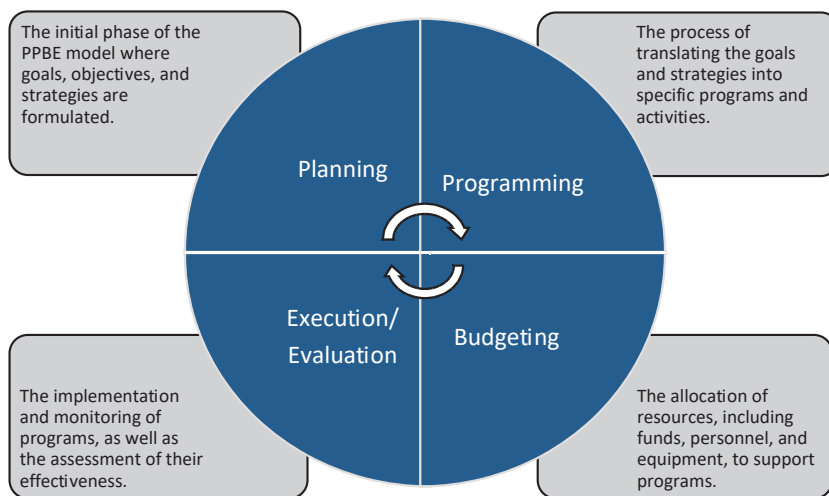
17 Michael Barzelay and Colin Campbell, *Preparing for the Future: Strategic Planning in the US Air Force* (Brookings Institution Press 2003).

18 Gregory A. Garrett and Rene G Rendon, *US Military Program Management: Lessons Learned and Best Practices* (Berrett-Koehler Pub 2006)

19 Paul Joyce, *Strategic Management and Governance: Strategy Execution Around the World* (Routledge 2022) doi: 10.4324/9781351045797.

Subsequently, as the defence system moves from planning to execution, J. L. McCaffery and L. R. Jones, the emphasis shifts to the short term.<sup>20</sup> At this stage, budget considerations become paramount. The intention of this phase is to actualise the plans set out in the medium term, ensuring that the construction of defence forces is not just theoretical but implemented. In this context, the budgeting process is not just a fiscal action. It becomes a strategic tool where resources are carefully allocated according to identified challenges and threats. This allocation ensures financial prudence and that the country's defence apparatus is flexible, resilient, and ready to face modern security challenges.

The interplay between medium-term planning and short-term budgeting plays a crucial role in bridging the gap between strategic foresight and effective defence efforts, ensuring that defence institutions are vision-driven and deliver results. Long-term strategic plans serve as the foundation for budget planning and other short-term activity plans in defence programs. Together, these stages form the Planning, Programming, Budgeting and Execution (PPBE) system (Fig. 1),<sup>21</sup> an integrated process that aims to achieve planning and management objectives while optimising budget expenditures.



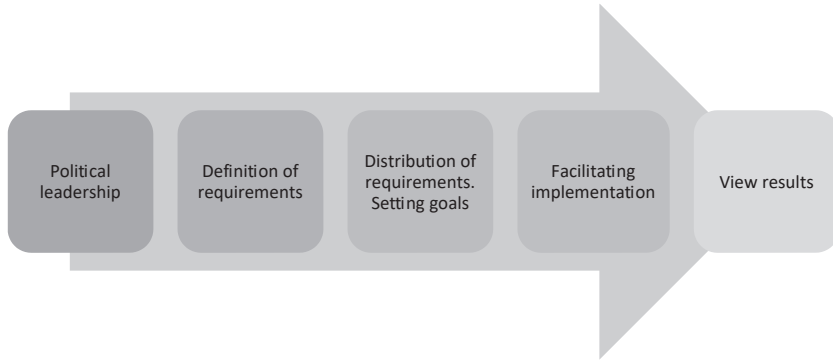
**Figure 1.** *Planning, Programming, Budgeting and Execution/Evaluation (PPBE) Model*

The PPBE system, within the framework of NATO and the world's leading countries, encompasses various key components. This includes strategic planning, which involves defining the directions of the defence sector and substantiating the qualitative and quantitative composition of weapons and equipment. Using software methods, priorities are established to address defence issues effectively. Subsequently, resources are allocated to comprehensive programs based on these priorities. Finally, the achieved results are evaluated, and adjustments are made to resource allocation if necessary.

The NATO capabilities process determines the desired future state, identifies gaps, distributes requirements, provides support, monitors progress, and relies on defence expenditures, which is challenging in the current economic environment. The Fig. 2 below provides a visual representation of the NDPP model.

20 Jerry L McCaffery and LR Jones, 'Reform of Program Budgeting in the Department of Defence' (2005) 6(2) *International Public Management Review* 141.

21 Jones and McCaffery (n 1).



**Figure 2.** NATO Defence Planning Process (NDPP)

Categories of capabilities, which encompass strategic guidelines of the government, defence policy priorities, scenarios, capability requirements, gap identification, options for gap closure, investment balance, capability development plan, capability assessment, existing and planned capabilities, operational concepts, future environment (threats, technologies), and resource constraints, form a hierarchical classification structure. This structure serves as a shared vocabulary for all participants involved in the defence planning process.

Through this framework, the contributions of various armed forces can be compared in terms of overall combat potential and the development of defence capabilities, facilitating informed decision-making.

The creation, enhancement, maintenance, and decommissioning of capabilities are carried out to effectively address specific tasks within defined situations outlined in planning scenarios. These scenarios provide the necessary planning context and align capability requirements with strategic objectives set by the government forces. Furthermore, a transition towards alternative capabilities that can be implemented within allocated resources has been initiated. To assess and develop capabilities in the defence planning process,<sup>22</sup> the Ministry of Defence of Ukraine and the Armed Forces of Ukraine employ key procedures, including security environment assessment, force planning, resource planning, risk assessment, formation of a perspective model (structure) of the Armed Forces, preparation of programmatic documents, and their subsequent development.<sup>23</sup>

The procedures mentioned above yield several outcomes, including the development of a prospective composition and organisational structure for the forces, ensuring their alignment with the tasks of the Armed Forces of Ukraine and a fair distribution of resources.<sup>24</sup> Moreover, long- and medium-term program documents are being created to guide strategic planning. To strengthen civilian public control, the Resolution of the Verkhovna Rada of Ukraine No. 2056-IX (16/09/2022)<sup>25</sup> emphasises democratic civilian oversight over the Armed Forces and

<sup>22</sup> Nalyvaiko, Sivokha and Polyayev (n 8).

<sup>23</sup> Order of the Ministry of Defence of Ukraine no 484 'On the Approval of the Procedure for the Organization and Implementation of Defence Planning in the Ministry of Defence of Ukraine, the Armed Forces of Ukraine, and Other Defence Forces of the Ministry of Defence of Ukraine' of 22 December 2020 [2021] Official Gazette of Ukraine 15/587.

<sup>24</sup> Rusnak and others (n 7).

<sup>25</sup> Resolution of the Verkhovna Rada of Ukraine no 2056-IX 'On the adoption as a basis of the draft Law of Ukraine on Amendments to Certain Legislative Acts of Ukraine on National Security and Defense Issues on Strengthening Democratic Civilian Control over the Armed Forces of Ukraine, Improving the



designates the Ministry of Defence as the responsible civilian entity for defence planning. Additionally, a 5-year waiting period for the appointment of the Minister of Defence and Deputy Ministers is proposed to eliminate subjective factors that have hindered the process in Ukraine.

The defence review investigates potential scenarios for utilising the Armed Forces of Ukraine in the medium- to long-term perspective. Based on these scenarios, the composition of Armed Forces resources required to fulfil the designated tasks is determined while considering the existing composition. In this context, the Strategic Defence Bulletin (SDB), approved by Presidential Decree No. 473/2021 (17/09/2021),<sup>26</sup> establishes the main directions, perspective model, and strategic goals of the Armed Forces of Ukraine until 2025. The prospective model and requirements for structure, capabilities, and indicators are based on the mission and vision of the 2030 model, considering the results of the defence review. The SDB is the foundation for developing and implementing state target programs and other documents to enhance the Defence Forces' capabilities. Considering the difference in capabilities and the constraints that arise during the task formulation, the task of rational allocation of defence resources to achieve the maximum possible effect of the Armed Forces of Ukraine application within the defined scenarios is addressed.<sup>27</sup>

At the conceptual level, one of these tasks is being addressed by the Ministry of Defence of Ukraine, which has initiated work on the Unified Information System for Defence Resource Management. The results of calculations within the developed Decision Support System,<sup>28</sup> particularly the plans for the rational development of the Armed Forces of Ukraine (defence forces), are proposed to be presented within the framework of the Unified Information System for Defence Resource Management for general use.

It should be noted that the implementation of the capability-based defence planning (CBP) system, widely recognised as a best practice in defence planning worldwide, is somewhat limited in Ukraine. One of the main concerns pertains to the cyclical and continuous nature of the analysis and evaluation procedures for major and target defence programs and the statistical nature of implementing changes to the State Development Programs. Additionally, the acceptance of subjective decisions that deviate from the State Development Programs and the execution of programs and plans not prescribed by the regulatory acts of the Ministry of Defence presents another challenge. A comprehensive and detailed financial calculation pertaining to the impact of their implementation on the overall defence budget is lacking.<sup>29</sup> The persistent inconsistency and frequent modifications to previously planned measures necessitate improvements in the procedures for adjusting the State Development Programs, major and target development programs, and key indicators of defence planning in the medium-term perspective, including the redistribution of financial indicators.

An analysis of the actual indicators of budget programs within Ukraine's Ministry of Defence<sup>30</sup> reveals that they do not consistently adhere to the requirements outlined in the Program Classification Manual (PCM), particularly in terms of measurability and the presence of

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Unified Leadership of the Defense Forces of the State, and Planning in the Fields of National Security and Defense' of 16 September 2022 [2022] Official Gazette of Ukraine 18/960.

26 Decree of the President of Ukraine no 473/2021 'On the decision of the National Security and Defense Council of Ukraine dated August 20, 2021 "On the Strategic Defense Bulletin of Ukraine"' of 17 September 2021 [2021] Official Gazette of Ukraine 76/4767.

27 Petrenko (n 10); Sahaniuk and Frolov (n 10).

28 Rusnak and others (n 7).

29 Vadym V Pakholtchuk, 'Transformation of the Financing Mechanism of the Armed Forces in the Context of Euro-Atlantic Integration' (DPhil thesis, Military Institute Kyiv National Taras Shevchenko University 2022).

30 *ibid.*

target values to assess progress towards the program's ultimate strategic goal. Furthermore, the effectiveness of budget utilisation is often compromised. The decision-making process related to the defence budget, formulated using insufficient budget language encompassing article names, economic and program classification codes, procedural terminology, and others, falls short of ensuring transparency in resource allocation.

## 7 CONCLUSION

Addressing the existing challenges in defence planning and implementation is of utmost importance, necessitating the establishment of a more effective mechanism that not only links capability-based planning to the allocated budget funds but also evaluates the impact of achieving the desired objectives. Furthermore, the development of a comprehensive methodological framework for managing targeted programs within Ukraine's Armed Forces, aligning it with the principles of planning, programming, budgeting, and execution (PPBE), is crucial. Additionally, emphasis should be placed on strengthening civilian control and supervision in the defence planning process. This measure is essential for optimising resource utilisation, ensuring the alignment of defence priorities with national security objectives, and guaranteeing the overall success of the planning and implementation efforts. Therefore, integrating PPBE principles into Ukraine's defence planning, alongside reinforcing civilian control, will contribute to a more efficient and transparent defence planning process, leading to optimised resource utilisation and alignment with strategic goals.

## REFERENCES

1. Barzelay M and Campbell C, *Preparing for the Future: Strategic Planning in the US Air Force* (Brookings Institution Press 2003)
2. Chenhall RH, 'Management Control Systems Design Within its Organizational Context: Findings from Contingency-Based Research and Directions for the Future' (2003) 28(2-3) *Accounting, Organizations and Society* 127, doi: 10.1016/S0361-3682(01)00027-7
3. Davis CM, 'The Ukraine Conflict, Economic-Military Power Balances and Economic Sanctions' (2016) 28(2) *Post-Communist Economies* 167, doi: 10.1080/14631377.2016.1139301
4. Elsayah S and others, 'A Decision Support Methodology to Support Military Asset and Resource Planning' (2023) *Journal of Simulation* 1, doi: 10.1080/17477778.2023.2165460
5. Garrett GA and Rendon RG, *US Military Program Management: Lessons Learned and Best Practices* (Berrett-Koehler Pub 2006)
6. Ijerusalymov V, 'Defence Budget: How War Altered Budget Expenditures' *Ekonomichna Pravda* (Kyiv, 8 July 2022) <<https://www.epravda.com.ua/columns/2022/07/8/689001/>> accessed 22 September 2023
7. Jones LR and McCaffery JL, 'Reform of the Planning, Programming, Budgeting System, and Management Control in the US Department of Defence: Insights from Budget Theory' (2005) 25(3) *Public Budgeting & Finance* 1, doi: 10.1111/j.1540-5850.2005.00364.x
8. Joyce P, *Strategic Management and Governance: Strategy Execution Around the World* (Routledge 2022) doi: 10.4324/9781351045797
9. Lyutiy I, Petlenko Y and Drozd N, 'The Importance of Openness and Transparency in the Budget Process in the Defence and Security Sector of Ukraine' (2022) 6(47) *Financial and Credit Activity: Problems of Theory and Practice* 99, doi: 10.55643/fcaptop.6.47.2022.3900
10. McCaffery JL and Jones LR, 'Reform of Program Budgeting in the Department of Defence' (2005) 6(2) *International Public Management Review* 141

11. McGarry BW, 'DOD Planning, Programming, Budgeting, and Execution (PPBE): Overview and Selected Issues for Congress' (*Library of Congress, Congressional Research SVC*, 11 July 2022) <[https://ppbereform.senate.gov/in\\_the\\_news/congressional-research-service-crs-report-dod-planning-programming-budgeting-and-execution-ppbe-overview-and-selected-issues-for-congress/](https://ppbereform.senate.gov/in_the_news/congressional-research-service-crs-report-dod-planning-programming-budgeting-and-execution-ppbe-overview-and-selected-issues-for-congress/)> accessed 22 September 2023
12. Nalyvaiko AD, Sivokha IM and Polyaev AI, 'Implementation of Capability-Based Defence Planning in the Components of the Defence Forces of Ukraine' (2018) 1(62) Collection of the scientific papers of the Centre for Military and Strategic Studies of the National Defence University of Ukraine 46
13. Pakholtchuk VV, 'Transformation of the Financing Mechanism of the Armed Forces in the Context of Euro-Atlantic Integration' (DPhil thesis, Military Institute Kyiv National Taras Shevchenko University 2022)
14. Petrenko AH, 'On the Implementation of Defence Management and Change Management in the Ministry of Defence of Ukraine' (2019) 2 Science and Defence 3, doi:10.33099/2618-1614-2019-7-2-03-08
15. Rusnak IS and others, 'Capability-Based Defence Planning: Peculiarities and Prospects for Implementation' (2017) 2 Science and Defence 3, doi: 10.33099/2618-1614-2017-0-2-3-10
16. Rusnak IS and others, 'Documents of Strategic (Defence) Planning of the Ministry of Defence of Ukraine, the Armed Forces of Ukraine, other Components of the Defence Forces, and the Procedure for their Implementation' (2021) 3 Science and Defence 13, doi: 10.33099/2618-1614-2021-16-3-13-21
17. Sahaniuk FV and Frolov VS, 'Systemic Approach to Implementing Defence Reform in Ukraine' (2018) 1(62) Collection of the scientific papers of the Centre for Military and Strategic Studies of the National Defence University of Ukraine 13
18. Sedysheva M, 'Strategic Management System and Methods of Controlling as Key Elements of Military Expenditure Policy-Making Process' (2012) 5(3) Journal of Strategy and Management 353, doi: 10.1108/17554251211247607
19. Yahelska K and others, 'Comparative Analysis of Methods for Forecasting Budget Indicators' (2021) 39(3) Estudios de Economia Aplicada 4521, doi: 10.25115/eea.v39i3.4521
20. Young TD, 'Is the US's PPBS Applicable to European Post-Communist Defence Institutions?' (2016) 161(5) RUSI Journal 68, doi: 10.1080/03071847.2016.1253382
21. Young TD, 'The Failure of Defence Planning in European Post-Communist Defence Institutions: Ascertaining Causation and Determining Solutions' (2018) 41(7) Journal of Strategic Studies 1031, doi: 10.1080/01402390.2017.1307743
22. Zrnić B, 'The New Trends in Defence Planning and Their Impact on the Defence Planning Systems in Transitional Countries' (2008) 60(1) Vojno delo 25

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