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#### ᲐᲑᲡᲢᲠᲐᲥᲢᲘ

შეიარაღებული ძალების შენარჩუნება, რომელიც შეძლებს სამომავლო არაპროგნოზირებად გარემოში უპასუხოს უსაფრთხოების კუთხით არსებულ გამოწვევებს, საჭიროებს თავდაცვის შესაძლებლობების მუდმივ გაძლიერებას თანამედროვე ტექნოლოგიების შეძენის გზით, რაც მნიშვნელოვან გამოწვევებთან არის დაკავშირებული. აღნიშნული პროცესის ხელშეწყობისა და მხარდაჭერის მიზნით მნიშვნელოვანია შესაბამისი თავდაცვის დაგეგმვის მეთოდოლოგიის შერჩევა, რომლის საფუძველზეც ხორციელდება სტრატეგიული თავდაცვის შესყიდვები. ნაშრომი განიხილავს ანალიტიკური დაგეგმვის ოთხი მეთოდოლოგიის - შესაძლებლობებზე, საფრთხეებზე, რესურსებზე და სცენარებზე დაფუძნებული დაგეგმვის მიდგომების დადებით და უარყოფით მხარეებს. აღნიშნული მიდგომები გასული ათწლეულების მანძილზე აქტიურად გამოიყენებოდა სტრატეგიული თავდაცვის შესყიდვების დაგეგმვის პროცესში. მოცემული მიდგომების მიმოხილვის საფუძველზე აშკარაა, რომ ცალკე აღებული არც ერთი მათგანი არის ეფექტური და სტრატეგიული თავდაცვის შესყიდვების პროცესში წარმატების მიღწევა მხოლოდ მათი ინტეგრირებით არის შესაძლებელი.

#### ᲡᲐᲫᲕᲐᲜᲫᲝ ᲡᲘᲢᲧᲕᲔᲑᲘ:

თავდაცვის დაგეგმვა, სტრატეგიული თავდაცვის შესყიდვები, თავდაცვის დაგეგმვის მეთოდოლოგია

## ADVANTAGES AND DISADVANTAGES OF DEFENSE PLANNING METHODOLOGIES

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#### **ABSTRACT**

Maintaining military forces ready to address security challenges deriving from future uncertainty requires permanent improvement of defense capabilities through the acquisition of technologically advanced equipment, which is a challenging business. To facilitate and support the implementation of this process it is critical to employ a relevant planning methodology, based on which strategic defense acquisition is held. The article discusses the advantages and disadvantages of the four analytical planning methodologies which have been actively used for strategic defense acquisition planning over the recent decades: capability-, threat-, resource-and scenario-based planning. Based on the review of these planning approaches, the author argues that none of them is effective separately and only a combination of these perspectives may lead to a successful strategic defense acquisition process.

#### **KEYWORDS:**

defense planning, strategic defense acquisition, defense planning methodology

#### INTRODUCTION

Strategic defense acquisition can be defined as an affordable military procurement process aimed at acquiring special systems to improve current capabilities and support future needs. The acquisition is a broader term in difference from procurement of an item or service and involves many activities – infrastructure, personnel, training, maintenance and disposal of the weapons systems procured from a vendor.¹ Maintaining military forces ready to respond security challenges facing the countries requires a permanent acquisition of technologically advanced equipment, which is related to significant financial expenses. Effective acquisition of military systems is a challenging business, as procuring needed equipment for a reasonable price is elusive, related to frequent delays and cost overruns. The major problem during strategic defense acquisition is that it always involves the prediction of the future, which requires continuous analysis of potential adversaries' capabilities and their access to new military technologies.² Furthermore, defense acquisitions should address concrete military needs by improving current capability shortfalls. From the starting point to deployment, the systems should be procured based on the following analytical and planning process – identifying the required system, defining a budget, and acquiring the system.³ To facilitate successful implementation of this process it is critical to employ a relevant planning methodology, based on which strategic defense acquisition will be held.

A number of analytical methods have been used for defense planning in the past. Each of these methods originates from a specific perspective on the problem. The article will discuss the advantages and disadvantages of the four planning approaches: capability-, threat-, resource- and scenario-based planning methodologies, based on which the author will argue that none of them is effective separately and only through combination of these perspectives is possible to achieve the desired outcome.

#### THREAT-BASED PLANNING (TBP)

About two decades ago short-term vision on security and defense dominated the planning debate, an immediate perception of the threats and lack of financial resources for military purposes justified the argument - "there is no threat, so why spend?".<sup>4</sup>

Threat-based planning which is focused on concrete potential future adversaries and conflicts often provides a basis for the development of force structure and operational plans. This approach defines goals in terms of armed forces' ability to address specific security threats identified by national and agency level defense planning documents such as, National Security Concept, Threat Assessment Document and National Defense Strategy.<sup>5</sup> The threat-based methodology was mainly used during the Cold War when nuclear threats were defined as the largest potential security threat facing the nations.<sup>6</sup> TBP is driven by security realities, opponents' capabilities, and military capacity that is needed to address these capabilities.<sup>7</sup>

The positive side of the threat-based military acquisition is that it assesses overall military strength with regards to potential enemies and evaluates gaps in specific capability areas. Furthermore, it allows to spend available funds on military acquisitions which are vital for potential future wars and decreases the amount of resources associated with armed forces' total requirements. It supports decision-making process related to the design of the future force and resources to sustain it, based on the demands of countering real adversaries. Despite these advantages, threat-based planning encompasses several factors hampering the strategic defense acquisition process. TBP has certain boundaries deriving from future uncertainty during the development

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<sup>1</sup> Moshe Schwartz, Defense Acquisitions: How DoD Acquires Weapon Systems and Recent Efforts to Reform the Process, Congressional Research Service, p.1.

https://sgp.fas.org/crs/natsec/RL34026.pdf

<sup>2</sup> Managing Defense in a Democracy, Edited by Laura R. Cleary and Teri McConville, chapter 9, Strategic management, Avoiding analysis paralysis, published in 2006, p.p.202-203

<sup>3</sup> Moshe Schwartz, Defense Acquisitions: How DoD Acquires Weapon Systems and Recent Efforts to Reform the Process, Congressional Research Service, p.3,

https://sgp.fas.org/crs/natsec/RL34026.pdf

<sup>4</sup> Dejan Stojkovic and Bjørn Robert Dahl, Methodology for long term defense planning, p.11

<sup>5</sup> Strategic Defense Review 2021 -2025, MoD of Georgia, p.p. 55

Dejan Stojkovic and Bjørn Robert Dahl, Methodology for long term defense planning, p.11

<sup>7</sup> Michael J. Mazarr, Katharina Ley Best, Burgess Laird, Eric V. Larson, Michael E. Linick, Dan Madden, The U.S. Department of Defense's Planning Process Components and Challenges,

https://www.rand.org/pubs/research\_reports/RR2173z2.html

of armed forces' requirements – the specifics of which are hardly fully predictable. The identification of the future needs requires an understanding and detailed knowledge of long-term threats and adversaries' current/ future capabilities and intentions that is nearly impossible. Furthermore, this planning approach focuses on particular future conflicts and opponents' capabilities which might cause overestimation of a single threat concept or capability without its proper analysis within an existing operational concept and consequently, lead to irrelevant strategic defense acquisitions.<sup>8</sup>

#### CAPABILITY-BASED PLANNING (CBP)

Capability-based planning represents an alternative approach to threat-based planning. This method is considered as a modern perspective that ensures rational decision-making on future capabilities to be acquired and facilitates effective defense planning and management process to deal with future long-term security challenges. CPB concentrates on what should be done rather than what we have. It is more focused on development of total capability requirements rather than routine equipment needs. CBP is 'concept-led' and it recognizes the interdependence of different resource management systems including policy and planning, logistics, human resource management, procurement and financial areas. The CBP consists of the four major consistent building blocks. First, it is output-oriented, developed based on the strategic priorities reflected in the national and defense planning documents. Second, CPB is based on a military operational concept - analyzes future possible types of conflicts in which the force will have to fight. Third, CBP employs capability breakdown structure for effective management of strategic defense acquisition process and finally, it realizes the capabilities within affordable financial resources. Some planners argue that within TBP, all military services define a threat and to address it, concentrate on the development of their specific independent capabilities. The transition to capabilities-based planning has promoted the institutionalization of a more collaborative form of gap analysis in military forces instead of separate, specific activities developed by units. The transition is capabilities of the process and services developed by units.

CBP does not focus on specific future adversaries and their capabilities, nor define particular states as potential enemies which enables the concentration more on a broader set of strategic defense acquisition activities. Furthermore, CPB is considered as a concept oriented rather than reactive approach. It supports identification of capability gaps which are difficult to define when considering only existing threat-based scenarios.

The weakness of CBP during the strategic defense acquisition process is a challenge related to determining the type of required capabilities without implicitly counting potential threats. It partly incorporates detailed operational plans – military concepts, sustainment and timeline as, this approach to planning does not concentrate on particular future war scenarios. Moreover, threats generalization may result in miscalculation of potential adversaries' capability developments. Often CPB leads to military requirements growth and consequently, requires additional resources as they are not directly connected to potential conflict scenarios and provide an opportunity for different stakeholders to justify their needs for a broader set of desired capabilities. Despite the modern approach to planning, it can miss critical aspects, including political, economic and security effects. Finally, it can influence the decision-making process as organizations' leadership and other key players may see intangible challenges and hypothetical opponents as less credible to support proposed acquisition options.<sup>11</sup>

#### RESOURCE-BASED PLANNING (RBP)

Instead of developing total requirements and outlining desired outcomes, a resource-based planning method focuses on identifying the best possible capability acquisition options within available financial ceilings. RBP analysis existing reality and identifies the following available set of actions which eventually leads to the desirable future forces.

Financial constraints are the key factors to be taken into account during budget-driven planning process. This approach considers available resources as planning limitations, identifies affordable capability priorities

<sup>8</sup> Ibid

<sup>9</sup> Guide to Capability-Based Planning, The Technical Cooperation Program Joint Systems and Analysis Group Technical Panel 3

<sup>10</sup> Ibio

Michael J. Mazarr, Katharina Ley Best, Burgess Laird, Eric V. Larson, Michael E. Linick, Dan Madden, The U.S. Department of Defense's Planning Process Components and Challenges, https://www.rand.org/pubs/research\_reports/RR2173z2.html

that should be procured through trade-off analysis and substitution opportunities to implement the most critical demands of armed forces.

RBP represents an incremental method of defense planning. Based on the lessons learned, it focuses more on short – and mid-term development plans and less considers long-term capability acquisition programs. While resources are an important factor to be considered for any planning methodology, budget-driven planning mainly emphasizes the importance of fiscal constraints rather than the total requirements of armed forces.

The major advantage of RBP is its realistic view on current needs that supports creative solutions in terms of affordable resources. Furthermore, effectiveness of resource-based capability acquisition programs in terms of their execution is much higher than of those developed within the framework of other planning methodologies as, it involves deliberate, realistic, better-calculated activities.

Critics of budget-driven planning process argue that defense institutions can only be successful when the capability acquisition process is strategy-driven, primarily focus on strategic goals and align force structure and capabilities to those goals.

Given that strategic acquisitions are more oriented on future long-term development, it is difficult to incorporate it into this planning approach. Resource-focused methodology may fail to identify and adapt to future security challenges which may cause capability gaps in longer term perspective as, it focuses on immediate capability acquisition needs filling current minor gaps, while risking losing sight of more global future needs. Finally, mostly it addresses a portion of defense priorities, missing out the total capability requirements of the armed forces.<sup>12</sup>

#### SCENARIO-BASED PLANNING (SBP)

For decades, organizations have faced the difficulties of forecasting as, an inability to predict automatically led to an inability to plan. Overcoming these challenges paved away to plethora of tools out which 'scenario building' has become especially popular.<sup>13</sup> Strategists view scenarios as descriptions of possible archetypal futures, elaboration of which helps to explore and decrease the level of uncertainty, extend the thinking framework, reduce complexity and enable identification of future capabilities to be acquired.<sup>14</sup>

A scenario can be described as a tool within the planners' arsenal which relies on the assumption that by developing different options, they might have a better idea or even, guesses of the right one.<sup>15</sup>

The strength of the SBP is its focus on concrete acquisition plans which facilitate an effective decision-making process. They design the problem more 'real' and provide a clear picture of exact situations and security challenges against which specific strategic defense acquisition plans are developed. <sup>16</sup> This approach helps to make a prioritization process more effective, as better understanding of specific requirements ensures a determination of the most critical future needs.

SBP is an efficient method in terms of exploring future potential threats, even though it becomes ambiguous when it needs to be decided which scenarios organizations should follow. Overemphasizing the importance of concrete scenarios increases the risk related to miscalculation of future potential conflict types, adversaries and their capabilities that can be considered as another weakness of this approach. Therefore, disregarding other alternatives outside the defined set may lead to the development of ineffective capability acquisition plans.<sup>17</sup>

#### CONCLUSION

Maintaining strong armed forces ready to address security threats requires the permanent development

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<sup>17</sup> Ibid

of its capabilities through the acquisition of modern military weapon systems. Strategic defense acquisition should be conducted according to the capability priorities reflected in defense planning documents which are elaborated based on different planning methodologies. The selection of a relevant methodology is critical for effective defense acquisitions.

The planning approaches discussed above clearly showed that there is no unique methodology and each of them has a number of its own advantages and disadvantages. The main distinguishing feature of these methodologies is different planning target. Namely, the threat-based approach focuses on existing security challenges and urgent needs while capability-based methodology more considers the development of long-term strategic defense acquisition programs. To compare with approaches, resource-based planning technique is more budget driven than strategy guided and financial constraints are decisive in terms of strategic defense acquisition process. As for scenario-based technique, it examines 'real' scenarios that ensures the determination of the most-critical capability needs while ignoring other alternatives and additional requirements outside an assumed set.

The review of the four defense planning methodologies makes it clear that none of them is effective separately and for a successful strategic defense acquisition process, it is critical to identify and employ a combination of their advantages.<sup>18</sup>

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