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**THE ADVANTAGES AND DISADVANTAGES OF THE
PLANNING, PROGRAMMING, BUDGETING END
EXECUTION SYSTEM**

Octavian Ionuț PĂTRAȘCU

Logistical Naval Base ‘PONTICA’ / Constanta/ Romania

Abstract:

The Planning, Programming, Budgeting and Execution (PPBES) system is a process used to allocate and use defense resources. Starting from the question of whether PPBES is an efficient and effective way of planning and spending resources for the Ministry of Defense, this paper identifies the advantages and disadvantages of implementing PPBES in this respect.

Key words: Planning-Programming-Budgeting and Execution System, *PPBES*

1. Introduction

Starting from the abstract, deciding how much money to designate for defense is one of the most challenging decisions a government must to confront. Thus, the decision makers must use the budget as a instrument reflecting their view on the allocation of limited resources among the Government’s major individual programs, projects and activities.

In recent years, defense budgets in the states have had a growing tendency leading to a great responsibility from the leaders in setting priorities, planning and spending public funds(US military budget increased from 580,3 in 2016 to 582,7 bilion USD in 2017, ROU military budget from 4 in 2017 to 4,5 bilion USD in 2018)

Implementation of Planning, Programming, Budgeting and Execution System (PPBES) took place as a result of traditional budgeting system wich has been inappropriate and ineffective in the effective utilization of limited governmental resources as well as in the context of planning. There are some shortcomings of the traditional budgeting system as follows:

- rely on the objectives of control and accountability rather than allocation of limited resources on programmes and projects;
- gives information on the objects of expenditures, not the objectives of expenditure;

- does not help in analyzing and assessment of the impact of budget on the economy;
- emphasize on the gradual approach without due consideration of the necessity;
- emphasize on the financial performance rather than the physical;

The Planning, Programing, Budget and Execution (PPBE) process is one of three (3) processes (Acquisition, Requirements and Funding) that support the Defense Acquisition System. The PPBE process is focused on the Financial Management and resource allocation for current and future Ministry of National Defense (MoD) acquisition programs.

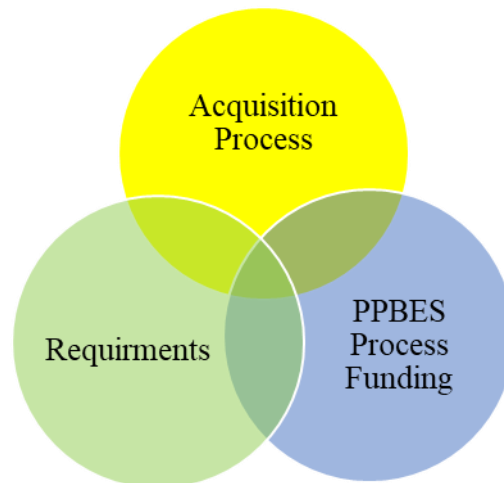


Fig.1 (Defence Acquisition System)

2. Overview of PPBES.

2.1 Short history

PPBES was first introduced in the Defense Department in the USA in 1961 by Robert McNamara, and in all departments in 1965 until 1975. This system of budgeting is in practice in the form of Programme Budget in most of the countries mainly in case of development budget.

Great Britain introduced it in the Ministry of Defence in the late 1960s and then began to extend it to other departments, particularly in education and science. In France the government decided to apply the system in 1969, first in the Ministry of Defense and then in relation to energy, [town planning](#), and such departments as posts and telegraph. By the early 1970s PPBS had become an [integral](#) tool of national economic planning.

In Romania implementation of the Planning, Programming, Budgeting and Execution System in the MoD began in 1999 with the support of US experts at the Institute for Defense Studies and was implemented lasted until 2002, when the system became operational. The replacement of the classic budget with PPBES implied the appropriate

adaptation of the legislation in the field and the linking of the strategic planning documents of the army with the major programs and their programming through the budget.

2.2 Definition and goal of PPBES.

In contrast to traditional budget, PPBES is in effect an integration of a number of techniques in a planning and [budgeting](#) process for identifying, costing and assigning a complexity of resources for establishing priorities and strategies in a major program and for forecasting costs, expenditure and achievements within the immediate financial year or over a longer period.

The goal of PPBES is to obtain the most effective allocation of resources to accomplish our national defense objectives. Thus, the ultimate objective of PPBES is to provide the best support reachable within fiscal constraints. In this way, defense resource leaders focus on choosing a predictable and effective solution from planning and allocating public funds to spending them as efficiently as possible to achieve the planned military capabilities.



Fig.2 (Future Years Defense Program)

PPBE process is depicted as building blocks. Three of the blocks are labeled as FYDP, MP(Major Programs) and PE(Program Elements) since these are the major building blocks of PPBES. It was created to set defense long-range objectives derived from national security strategy and to develop alternatives for satisfying them. It is also a tool for translating programs into budget and legislative proposals and for providing a structure for decision.

In Romania, the planning documents for preparation of PPBES are: the White Paper on Defense; Military Strategy; Defense Planning Guidance; Major Programs and

Operational Forces Plans. The core element of the system, Defense Planning Guidance(DPG), sets out MoD's Programmes and structure, the dynamics of the forces, training and readiness objectives, as well as the specific policies and resources to be allocated to each Programme in order to accomplish their objectives over a period of 6 years.

In accordance with the Romanian public finances law, ministries prepare budget projects on the basis of programs to finance specific objectives. From this perspective, the advantage of program budgeting to budget traditionally is planning and monitoring public expenditure in terms of objectives and results under a proper prioritization of programs. Thus, program managers moving from care to spend all the money by the end of the budget year (a common phenomenon for traditional budget) a permanent monitoring and careful analysis of budget implementation. In the planning of programs, the responsible structures are attracted by tracking the progress and realization of the respective programs for the benefit and efficiency indicators, and not the utilization of the credits. The indicators are important pointers to the functioning of the system and taking them into considerations is one aspect of quality control.

The benefits of the performance indicators are the following:

- measure performance by setting targets;
- accountability is results oriented;
- improve program performance.
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2.3 Phases of PPBES

PPBES is a cyclical process consisting of four distinct and interdependent phases: planning, programming, budgeting an execution which correspond to activities carried out by all structures involved in continuous and interactive relationships.

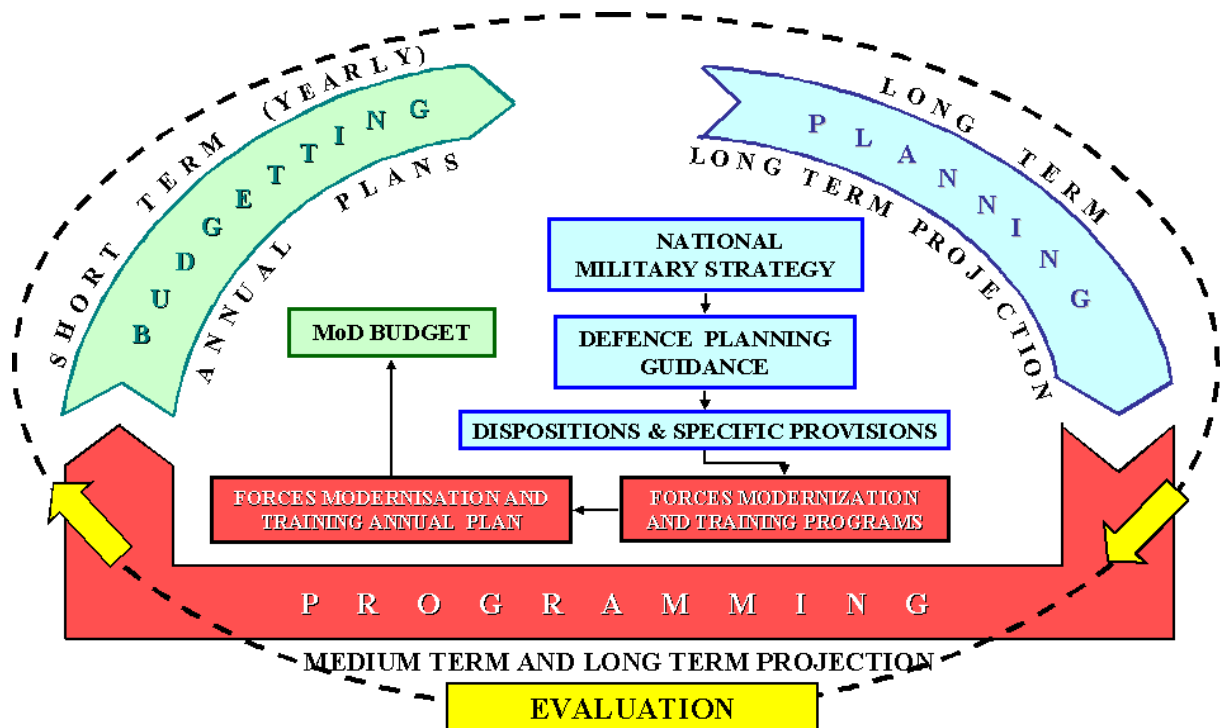


Fig.3 (PPBES Cycle)

PPBES features:

- Centralized *top-down* planning process – DPG sets the priorities, specific goals for program managers, and financial limits by programs.
- De-centralized *bottom-up* programming, budgeting and execution – the program manager decides the main activities required to accomplish the DPG goals.
- Integrated capacity of assessment;
- Flexibility;
- Avoidance of effort duplication.

✓ **Planning Phase.**



Fig.4 ()

In this phase national and military strategies and MoD interests are described.

Is the process for determining what capabilities are needed for the future from strategic guidance, the examination of alternative strategies, the analysis of changing conditions and trends, threat, technology, and economic assessments.

At this stage, the number of troops, equipment, services to support operations is forecast.

The output of this phase are long-term strategies and plans, i.e. National Defence Strategy, Defence White Paper, Military Strategy and Defence Planning Guidance

✓ **Programming Phase**

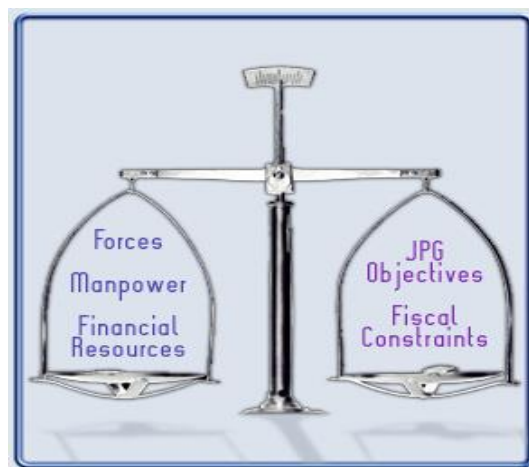


Fig.5 ()

The programming phase is the bridge between the planning phase and the budgeting phase and provides a picture of how funds are spent. It has as objective the elaboration of the major programs of MoD, within the set financial limits, in order to achieve the objectives of the MoD. The main documents elaborated in this phase are: major programs and annual plans. During the programming phase, alternatives are developed and selected to achieve DPA capabilities, within the set financial limits. Also, the major program allows decision-makers to choose the optimal alternative for achieving goals and is the basis for budgeting.

The output of this phase are the defence programs which specifies the actions and necessary resources to fulfill long-term goals and objectives.

At this stage, we point one of the advantages of PPBES, taking into account the clear responsibilities of major program managers:

- constitutes, develops and maintains capabilities in his responsibility;
- participates in preparing departmental level defence planning documents;
- takes part in documents preparing within NATO's defence planning process;
- prepares and executes the major program and the annual plan;

- executes the major program budget, as secundar credit holder;
- prepares reports on major program and annual plan execution stage;
- organizes his planning structure;
- trains the specialists in his planning structure.

✓ **Budgeting Phase**



Fig.6 ()

The primary purpose of the Budgeting phase is to examine the first one or two years of the component programs to ensure efficient use of resources.

Two distinct tracks proceed concurrently: the Program Review (Programming Phase) and the Budget Review (Budgeting Phase).

In the review process the follows specific aspects of the budget request are considered:

- using the appropriate funding policy for the credit category involved;
- the realistic estimation of prices in order to know the effort on the funds;
- proper phasing of work efforts - especially for procurement programs;
- the effectiveness of budget implementation in the current year and the expected execution of the funds requested in the budget year.

The main document elaborated: budget approved by Parliament on programs, sources, chapters, subchapters and budget articles.

✓ **Execution/Evaluation Phase**

There are two separate issues related to budget implementation. One aspect is to assess the degree of employment available at present (measuring the proportion of funds allocated and spent in relation to the objectives). The second aspect is at least equal, but perhaps even more important is the comparison between what we intended to achieve with its credits and what it actually achieved (the results). For Romania we have a different phase of the system called Evaluation.

The main documents specific to this phase are the reports on the major programs of MoD.

The results are evaluated against planned performance and will be adjusted as appropriate. If the program does not reach the set goals, then reviewing the execution can lead to recommendations to adjust the budget or program to achieve these goals.

3. Evaluation of PPBES

Analyzing the structure and phases of PPBES as well as the multitude of materials and studies from the implementation of PPBES, we can identify strengths and weaknesses in terms of program efficiency as follows:

3.1 Advantages

- makes the correlation between the national security objectives and the available resources, ensuring the control of the civil society on the military body;
- formalises the rights and duties of state political leadership in national security issues and interoperability with defense planning systems in NATO member countries;
- provides the conditions for a rational, transparent, objective and precise allocation of resources;
- delegated responsibility to programme managers for defining programmes, producing realistic costs and executing programmes within allocated financial limits;
- provides mechanisms for creating and implementing fiscal decisions in support of the national security strategy and national defense strategy;
- provides a full understanding of the costs to meet military strategy objectives and the evaluation of military equipment supply;
- it is an instrument at the hands of the leaders. These could determine how much was spent on health, education, defense, etc. in total in all departments and this can determine over time if was enough, too much or too little;
- flexibility: allows (allocation, financing) on programs that can be upgraded periodically and in accordance with the needs (unforeseen) that need to be covered in the period preceding the budget rectifications;
- ensures predictability (future) and continuity in achieving goals. Planning, programming, budgeting and evaluation of human, material and financial resources is achieved over the long term, in an integrated concept, program – based;
- ensures easy control of the fulfillment stage - objectives (periodic reports). Ensures review of the implementation of previous decisions and actions. Reviews will evaluate the actual execution performance based on strategic goals and objectives. The recommendations of these reviews are related to decisions on future resource allocation;
- work interdependently between phases: Planning - Programming - Budgeting – Evaluation; Each phase establishes the basis for the next phase of the system (DPG represents the bases for programming, the program is the starting point for budgeting, the evaluation is made based on DPG provisions and program implementation stage);
- it helps to plan the procurement procedures that will be carried out for the award of the contracts that lead to the achievement of the planned objectives. Success

award of a contract depends largely on planning timely procurement procedure by preparing technical specifications, specific documentation on qualification of bidders, initiation and execution of the award procedure, so the program can be run transparently and finished to meet the target;

- planning major programs over a one-year period ensures planning expenditure commitments to award and run multi-annual contracts for the implementation of these programs. Multi year budgeting increase the efficiency of public resources allocation and provides stability and continuity to the budgetary process;
- creates a database to support resource allocation decisions and provides a basis for choosing the available and feasible alternatives;
- it covers the whole range of budget types based on historical data as well as the direct calculation of all activities.

3.2. Disadvantages

- scarcity of financial resources due to annual rectification and revision of the budget MoD funding top limits can lead to programs not financed or financed at levels lower than desired. In addition, programs may lose funding when MoD tries to balance priorities (eg training and upgrading);
- failing to provide detailed justification for the funding request can lead decision makers to not appreciate the importance of a program and reduce or eliminate the funds;
- excessive risk. When projects involves a high technological risk may be scaled in the short term to allow technology to reach its level. Programs that take place prior to identifying clear requirements or clear capabilities requirements are also likely to be eliminated or reduced;
- estimating funding requirements. Estimating the acquisition program should be as close to reality as it is done six or seven years before the funds are needed for execution;
- is perceived as an excessively bureaucratic system that slows down acquisition system;
- human resources in program management. The personnel has to possess the expertise and experience to run the mechanisms of program budgeting and very careful to manage the funds under different stages of PPBE .The lack of capable personnel to manage the data systems required producing accurate work and costing reporting;
- requires too much time for preparation and analysis, being too slow and sometimes does not provide the expected results in a timely manner.

Much of the strengths and weaknesses of the PPBES mentioned above have emerged after the implementation of the PPBES in the 1970s, when in time various studies have been carried out, from which emerged the circumstances and factors that promoted the successful implementation of the PPBES/multiannual programming practices as well as those that contributed to the failure of putting in application. A study done in this regard was carried out in USA by Institute for Defense Analyses (IDA). The work supports a Department of Defense (DoD) program entitled Defense Resource Management Studies

(DRMS) in order to USA give the necessary support to American security partners increase their military capabilities through improved management of defense resources.

4. Conclusions

Given the details detailed above, we can conclude that PPBES, like any other management tool, has both advantages and disadvantages. Continuous economic, military and political changes generate the need for a modern and adaptable management system, as PPBES can offer this if we try to eliminate its shortcomings and capitalize on its advantages.

Considering its principles and characteristics, for the national defense system, PPBES is a suitable tool, at least strategically, to use the resources available in a more efficient and transparent way.

The constantly changing security environment, the emergence and the development of asymmetric conflicts have imposed and continue to impose the process of NATO transformation and permanent adaptation of military capabilities to the new requirements in order to limit or annihilate these conflicts.

As a result, PPBES must continue to evolve and adapt in line with revised capability requirements.

References:

- [1] https://en.wikipedia.org/wiki/Output_budgeting
- [2] *The Economics of Defense in the nuclear age* –Charles J.Hitch and Roland N. McKean
- [3] *A comparison of planning, programming, and budgeting system and zero based budgeting* - lieutenant colonel John R. Thompson - United States Army
- [4] *Planning, Programming, and Budgeting System (PPBS)/Multi-year Programming Reading Guide* – Institute for Defence Analyses
- [5] *Metode de dimensionare a indicatorilor bugetari* - lect.univ Elena Floristeanu
- [6] *Planning, Programming, Budgeting, Evaluation System – Benefits and challenges* - Univ. Lect. Phd. Maria Constantinescu- National Defense University „Carol I” Publishing House
- [7] <http://cbafaculty.org/Acquisition/Planning,Programme,Budgeting&Execution>