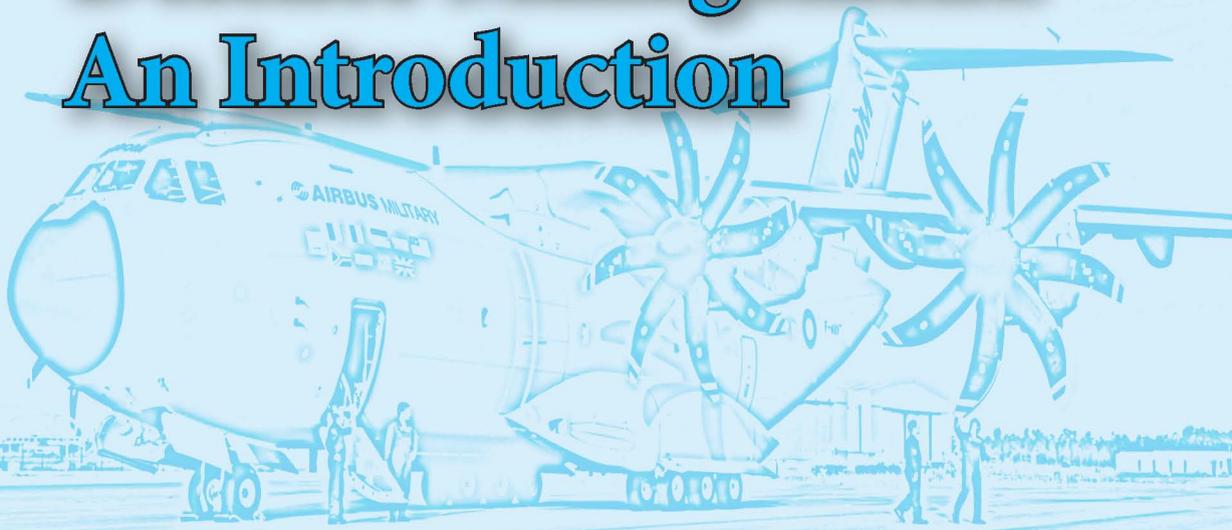


Defence Management: An Introduction



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CONTENTS

Preface	1
Philipp Fluri	
Introduction	3
Hari Bucur-Marcu	
Governance, Management, Command, Leadership: Setting the Context for Studies of Defence Management	15
Valeri Ratchev	
Defence Planning – A Core Process in Defence Management	45
Todor Tagarev	
Introduction to Program-based Force Development	75
Todor Tagarev	
Managing Finances	93
Gerd Frorath	
Manpower Management.....	125
Jack Treddenick	
Acquisition Management.....	155
Anthony Lawrence	
Transparency in Defence Management	185
Willem F. van Eekelen	
About the Authors.....	203

Chapter 3

Introduction to Programme-based Force Development

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Introduction

The long-term defence planning process, as described in Chapter 2, serves to define defence requirements expressed in capability terms, the level of capabilities that can be realistically achieved and the main parameters of the respective force structure. It serves also to elaborate a strategy of transition to the future force structure. This strategy delineates priorities and describes the general approach towards the achievement of future capabilities.

For a variety of reasons the decisions made in the long-term planning process cannot be directly translated into short-term resource allocation decisions such as decisions on defence budgets, annual recruitment targets, annual or bi-annual procurement plans, training and readiness levels, etc.

One of the main reasons is that the horizon in long-term planning is usually 10-15 years and, while the respective decisions are resource-informed,¹ they are not necessarily resource constrained, while short-term plans should be meticulously costed and constrained by the expected defence budgets. Another reason is that changes in the force development environment may occur in between the long-term defence planning and the work on the respective short-term plans. Among such

¹ That is, the future force structure is generally perceived as realistic and affordable.

changes might be differences between foreseen and actual operational engagements, delays in the procurement of a certain weapon system, variations between anticipated earlier and current projections of personnel costs, inflation rates, costs of fuel, procurement costs, etc. A third reason that deserves noting in this introductory text stems from the fact that force development decisions are made as a result of a number of distinct institutional processes and, sometimes, by different decision-making bodies. For example, the results of long-term defence planning may be approved by the Government once every three to five years, while the Parliament decides annually on the budget allocated to defence and may have to accommodate for previously unforeseen requirements.² In addition, while long-term defence planning is capability-oriented, separate short-term defence plans usually address the use of certain type of resources—money, materiel, facilities, etc.—and, respectively, the development of one or another component of the defence capabilities. Therefore, practically all defence establishments use some sort of ‘mechanism’ to coordinate the development of all capability components and to relate the utilisation of defence resources to defence policy objectives and long-term plans.

There are two distinct approaches towards the coordination of the short-term defence plans and their direction towards the achievement of defence policy objectives. In the first one, defence resource managers, often designated as budget holders, coordinate horizontally their planning, as well as key activities in the implementation of the plans with individuals in the defence administration with capability development responsibilities. In the U.K. defence establishment the latter are designated as ‘capability managers.’ Defence programmes and the programming process form the core of the second distinct approach. Defence programmes are used to relate short-term plans to policy objectives and, at the same time, to provide for coordinated development of all capability components.

This chapter examines key issues in the use of defence programmes and the programming process. For general programme management issues—performance architecture, alignment with higher level vision, goals and objectives, management of time and cost, leadership and accountability, etc.—the reader may refer to a number of published works and online resources.³ This chapter is focused on one specific aspect of programme-based force development, namely the programme structure – the key for providing capability orientation of the force development process.

² One example would be the need to finance the mitigation of the consequences of a natural disaster.

³ See for example James T. Brown, *The Handbook of Program Management* (McGraw-Hill, 2007) and the references at the websites of the *Project Management Institute*, www.pmi.org, in particular its 2006 *The Standard for Program Management*, and *Program Management Professional*, www.programmes.org.

The chapter examines principles and practices of programme-based force development which, as shown below, is equivalent to programme-based defence resource management. It outlines the reasons behind the use of programmes and programming, shows what a good programme decision is and how it depends on the design of a programme structure, and singles out key activities in a programme management process and the links among them. In the concluding part, the main challenges in the successful design and implementation of programme-based force development in transition countries is briefly examined.

Rationale

Nations spend money on their armed forces with the intent to guarantee their security, and the security of their allies and citizens, against a certain spectrum of risks and threats. What is important, however, are not the armed forces per se, but the capabilities they provide for the implementation of the country's security policy.

Therefore, in assessing force management systems and practices, an observer attempts to relate, for example, resource allocation decisions to policy decisions. A typical question is how resource allocation leads to the realisation of the country's security and defence policy objectives. A particular aspect is the 'output orientation' of resource management, i.e., how the use of defence resources leads to a 'product' required in order to implement the country's security and defence policy. As a result of defence planning developments in the last decade or so, today it is generally recognised that the main 'product' of a defence establishment are its capabilities.

In addition, in good defence planning and force management systems, the allocation of resources provides for a set of capabilities that is balanced across the spectrum of nationally-endorsed missions of the armed forces, capabilities are developed and sustained in a cost-effective manner, planning risks are rigorously assessed and risk estimates are smoothly incorporated in resource decision making. Three additional criteria for assessing defence resource management include transparency, accountability, and flexibility. These subjects are addressed in the second part of the chapter.

There is certainly more than one way to create a good defence resource management system. Many NATO members and partner countries, influenced by the U.S. experience since the early 1960s, implement resource management systems in which plans are linked to budgets through programmes.⁴

⁴ The website of the Comptroller of the US Office of the Secretary of Defense provides both historical context and information on current developments of the US Planning, Programming, Budgeting, and Execution System (PPBES), www.dod.mil/comptroller/icenter/budget/ppbsint.htm. The basic text for PPBES is Charles J. Hitch and Roland N. McKean, *The Economics of Defense in the Nuclear Age* (Cambridge, MA: Harvard University Press, 1960).

Thus, through programmes, defence establishments intend to link policy requirements and budgets. Secondly, programmes serve to translate plans or visions of future defence and force structures—usually longer term documents, looking 10, 15 or more years into the future—into short-term activities – budgeting, procurement, training, etc. Importantly, defence programmes make the links between policy and budgets, long-term vision and short-term plans transparent, i.e., clearly understood by decision-makers and all major stakeholders.

The defence programmes are important management tools. In addition to their key role in the planning process, they support rigorous implementation oversight – receiving up-to-date information on the status of the defence programmes, senior civilian and military leaders can assess realistically the status of defence reform and transformation efforts and, if necessary, implement corrective measures. In addition, defence programme information facilitates the oversight and audits performed by the legislature and its specialised organisations, e.g., the national audit office.

What is a Defence Programme?

Currently, the prevailing understanding is that a major product, or ‘output,’ of a defence establishment are the *capabilities* it possesses to implement, if and when necessary, assigned missions in support of the implementation of a country’s and alliance’s security policy.

The build-up of a capability requires closely coordinated development of doctrine, organisational structures, personnel, weapon systems, infrastructure, training, etc.

Secondly, the development of a defence capability, barring a few trivial cases, is a lengthy process. For example, if a country does not have advanced fighter or bomber aviation, but decides to develop capabilities for long-range precision air strikes, it may easily take a decade from the point a decision to develop such capability is made until the moment this capability can be effectively employed.⁵

Thirdly, the development of new capabilities may be quite expensive. The sustainment of capabilities that do not relate to current policy is also expensive.

Fourth, a defence establishment has various requirements, and the development of capabilities for future operations is just one of them. Generally, decisions on which capabilities to develop, at what level and in what timeframe are made in a more general framework to account also for:

- needs of current operations;

⁵ Even in case when someone is already producing an aircraft that suits the capability requirements.

- long-term investments, e.g., in science and technology, development of strategic partnerships, etc.; and
- necessity to deal with legacy issues.

For these reasons, the effective management of defence is based on programmes, including programme-based development of the capabilities of the armed forces. Before turning to the issue of programme-based force development, there is a need to clarify more formally what capability is.

Capability Models

'Capability' is a somewhat abstract concept. In ordinary usage, the term denotes the capacity to be or do or affect something. The planning community needs a common framework, or model, of capability that presents all capability components in a commonly understood manner.

Australian defence planners define capability as:

The power to achieve a desired operational effect in a nominated environment, within a specified time, and to sustain that effect for a designated period.⁶

In the United States, the Homeland Security community uses the following definition:

A capability provides a means to perform one or more critical task(s) under specified conditions and to specific performance standards.⁷

A capability may be delivered in a variety of ways. A number of countries have standardised models that describe the systems' aspect of capability:

- The Canadian construct of capability inputs is known as PRICIE,⁸ the acronym standing for:
 - Personnel
 - Research & Development/Operations Research
 - Infrastructure & Organisation

⁶ *Defence Capability Development Manual* (Canberra, Department of Defence, 2006), 5, www.defence.gov.au/publications/dcdm.pdf.

⁷ *National Preparedness Guidance*, Homeland Security Presidential Directive 8 (Department of Homeland Security, April 2005), 6-7.

⁸ Called also *functional components of capability*. For a detailed description, the reader may refer to *Capability Based Planning for the Department of National Defence and the Canadian Forces* (Canada: Department of National Defence, May 2002), 24-27, www.vcds.forces.gc.ca/dgsp/00native/rep-pub/j-cbpManualPdf_e.asp (20 January 2006).

- **C**oncepts, **D**octrine & **C**ollective Training
- **I**T Infrastructure
- **E**quipment, **S**upplies and **S**ervices
- Australian planners use a construct of eight groups called Fundamental Inputs to Capability, or FIC.⁹ These are:
 - Organisation
 - Personnel
 - Collective Training
 - Major Systems
 - Supplies
 - Facilities
 - Support
 - Command and Management
- The United States planners use the construct DOTMLP,¹⁰ which stands for:
 - **D**octrine
 - **O**rganization
 - Training and Education
 - **M**ateriel
 - **L**eadership
 - **P**eople

With the creation of the Allied Command for Transformation and its growing role in the NATO force planning process, it can be predicted that the ACT capability model, pos-

⁹ *Guide to Capability-Based Planning*, TR-JSA-TP3-2-2004 (The Technical Cooperation Program, Joint Systems and Analysis Group, Technical Panel 3, MORS Workshop, October 2004), 7, footnote 4, www.mors.org/meetings/cbp/read/TP-3_CBP.pdf.

¹⁰ *Ibid.*, 7, footnote 6. The construct is commonly used by US Army planners (see *How the Army Runs*, 10, 38-42), but lately Air Force and Navy, as well as joint organisations—adding ‘Facilities’ in DOTMPL-F—also find it useful, i.e., to analyse functional needs, gaps and to identify solutions using enterprise architectures. See for example Ted Warner, “DOD’s Ongoing Efforts to Implement Capabilities-Based Planning,” *Monterey Strategy Seminar on Capabilities-Based Defense Planning: Building a 21st Century Force* (Monterey, CA: Center for Contemporary Conflict and the Cebrowski Institute for Information Innovation and Superiority, September 2004).

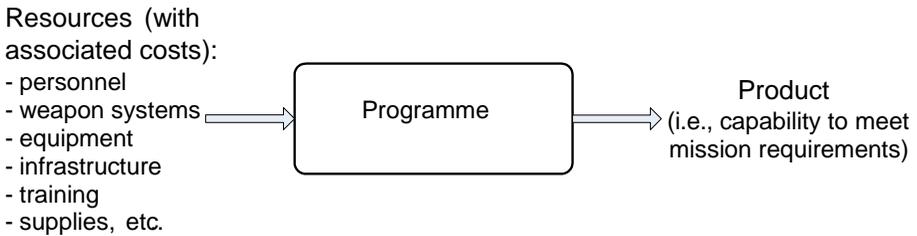


Figure 1: Designation of a Defence Programme.

sibly with minor modifications, will be introduced in the planning process of many countries. The NATO construct is known as DOTMLPFI,¹¹ which stands for:

- **D**octrine
- **O**rganisation
- **T**raining
- **M**ateriel
- **L**eadership
- **P**ersonnel
- **F**acilities
- **I**nteroperability

Even though the models used may differ, each one is intended to provide adequacy, consistency and balance of the capability components, or inputs, while the development of a capability requires coherent development of the human, the materiel component, doctrine, structure and training. Such development is provided by programmes.

Defence Programmes

The defence programme is intended to provide for the attainment of defence objectives within resource constraints. The defence programme is:

An integrated plan of intended use of available and expected resources (personnel, materiel, money, etc.) in order to achieve results, i.e. build and maintain capabilities.¹²

¹¹ See for example Admiral Sir Mark Stanhope, (then) Acting Supreme Allied Commander Transformation, Briefing to the Conference of National Armaments Directors /CNAD/ (26 October 2005), www.act.nato.int/multimedia/speeches/2005/051026asactcnad.html.

¹² Adapted from the official MoD document *Concept for Planning, Programming, and Budgeting in the Ministry of Defence and the Armed Forces* (Sofia: Military Publ. House, 2001), 14-15.

The primary function of a defence programme is to support resource decision making, linking resources to product (Figure 1) and providing for 'output-oriented' policy and plans. This is usually a mid-term plan that looks four to eight years into the future. Since NATO uses a six-year horizon in its defence planning and review process, i.e., for most force goals, in the reporting format of the Defence Planning Questionnaire, many NATO member countries and aspirants to join the Alliance also use programmes that look six year ahead. In addition to linking resources and intended results, the programme also serves to relate long-term plans to budget and other short-term plans.

Programme Structure

The defence programme has a hierarchical structure. It consists of programmes, sub-programmes and so on. Countries that intend to introduce programme-based defence resource management are advised to adhere to a few key principles in the design of a programme structure:

- Programmes should allow, as clearly as possible, to relate spending to 'product,' i.e., capabilities (see also Figure 1).
- It should be comprehensive:
 - Nothing can be done and no money may be spent outside the programmes;
 - It shall account for all money to be spent on defence (MoD budget, budgets of other ministries, bi-lateral programmes, NATO, trust funds, etc.);
 - Final decisions need to be made for all programmes at the same time, with objective analysis of trade-offs.
- It should provide for feasible distribution of responsibilities among programme managers (programme managers should have a stake in the good design and the successful implementation of the programme).
- It should be manageable (the programme structure and procedures should provide opportunities to objectively assess and search for trade-offs in resource allocation).¹³

¹³ Todor Tagarev, "Introduction to Program-based Defense Resource Management," *Connections: The Quarterly Journal*, 5, no. 1 (Spring-Summer 2006): 55-69. The article is published also in Russian and Ukrainian.

The force development programmes are only a part of such a comprehensive programme structure and the decisions on force development are made as part of the all-inclusive programming decisions.

In the implementation of the first of these requirements, Canada's Ministry of National Defence uses a programme structure in which the programmes are explicitly called 'capability programs.' Canadian planners work with five capability programmes that, in combination, "encompass all the fundamental aspects of the business of defence in Canada, and do so by aggregating all the elements of capability planning into a simple—but not simplistic—framework."¹⁴ The five capability programmes are:

1. Command & Control
2. Conduct Operations
3. Sustain Forces
4. Generate Forces
5. Corporate Policy & Strategy.

In the development of programme-based management of the armed forces, Ukrainian defence officials deliberate on a possible programme structure, consisting of the following fourteen programmes:

1. Capabilities for Peace Operations
2. Rapid Reaction
3. Defence of the territory of the country
4. Capabilities to increase the defence potential (Mobilisation and Reserves)
5. Command, Control and Communications (strategic & operational C3)
6. Central Logistics
7. Defence and Force Management (MoD, General Staff and supporting units)
8. Participation in operations (outside and inside the country)
9. Science, Research and Development
10. Education, training and recruitment
11. Medical support (includes rehabilitation and sanatoria recreation)
12. Housing
13. Social adaptation
14. Utilisation of surplus weapon systems, equipment, ammunitions and infrastructure.

¹⁴ *Capability Based Planning for the Department of National Defence and the Canadian Forces*, 4-5.

Both programme structures are similar in the way of dealing with (anticipated) 'current operations' (programme # 2 in the Canadian and programme # 8 in the Ukrainian programme structure), command and control capabilities (programmes # 2 and # 5, respectively), and centralised management functions (programmes # 5 and # 7, respectively).¹⁵ Unlike the Canadian programme structure, the Ukrainian draft programme structure explicitly lists the requirements of investments 'in the future' (programme # 9), of tackling legacy issues (programme # 14 and, partially, programme # 13), and 'quality of life' issues (programme # 12 and, to a great extent, programme # 11).

Both the Canadian and the draft Ukrainian programme structures are capability-oriented. Other countries use programme structures that, on the first level, reflect the organisational structure of the defence establishment to a significant extent.

For example, the U.S. 'Future Years Defense Program' (FYDP) is comprised of eleven major defence programmes as follows:

- Program 1. Strategic Forces
- Program 2. General Purpose Forces
- Program 3. Communications, Intelligence and Space
- Program 4. Mobility (Airlift and Sealift Forces)
- Program 5. Guard and Reserve Forces
- Program 6. Research and Development
- Program 7. Central Supply and Maintenance
- Program 8. Training, Health, and Other Personnel Activities
- Program 9. Administration and Associated Activities
- Program 10. Support of Other Nations
- Program 11. Special Operations Forces.¹⁶

Bulgaria's experience provides another example of organisationally oriented programme structure:

- Programme 1. Land Forces
- Programme 2. Air Force
- Programme 3. Navy

¹⁵ These similarities were established in hindsight. At the time the proposed Ukrainian program structure was designed, the experts did not use information on the Canadian construct.

¹⁶ *How The Army Runs: A Senior Leader Reference Handbook*, 25th edition 2005-2006 (Carlisle Barracks, PA: U.S. Army War College, 2005), 147, www.carlisle.army.mil/USAWC/dclm/html/figureshd.htm (24 April 2006).

- Programme 4. Central Command and Support
- Programme 5. Interoperability and Participation in Multinational Formations
- Programme 6. Education and Qualification
- Programme 7. Security: Military Police and Counterintelligence
- Programme 8. Security through Cooperation and Integration
- Programme 9. Quality of Life
- Programme 10. Science, Research and Development
- Programme 11. Administrative Management
- Programme 12. C4ISR Systems
- Programme 13. Military Information (Intelligence).¹⁷

A capability-oriented programme structure provides decision makers with better understanding of the policy implications of their resource decisions. However, when the first level of the programme structure has a prevailing organisational orientation, additional measures need to be incorporated in order to provide for output orientation of defence resource management using, for example, the experience of the United Kingdom with the institutionalisation of “capability managers.”

Programmes as a Language of Communication

All first level programmes combined constitute ‘The Defence Program.’¹⁸ Separate programmes—component parts of the Defence Programme—are a key part of the lexicon in the debate and communication at senior executive levels (in the Ministry of Defence, between the Ministries of Defence and Finance, in the Ministerial Council), between the executive and the legislature, and in parliament during deliberations on defence policy and the defence budget.

Experts design programmes and programme alternatives. It takes considerable experience and specific expertise to design an efficient programme for development of a capability, as well as to cost that programme, to design and to compare alternative programmes.

On the other hand, decision makers, both in government and parliament, use separate programmes and programme alternatives as building blocks in the design of a

¹⁷ *Concept for Planning, Programming, and Budgeting in Bulgaria’s Ministry of Defence and the Armed Forces* (Sofia: Ministry of Defence, 2001).

¹⁸ The best known designation is the U.S. FYDP – Future Years Defense Program.

defence policy. Just like everyone uses words to create sentences,¹⁹ decision makers use a set of potential, alternative programmes in order to find a construct that best fits the set of defence objectives.²⁰ In advanced defence planning systems, this task is known as creation of a capability portfolio.

For example, in 2003, during the deliberations on the proposed defence budget, the U.S. Congress decided not to finance a programme for development of an advanced concept for low-yield nuclear weapons, or 'mini-nukes.' Debating policy (and politics), representatives decided that this programme did not fit into the objectives and constraints set legislatively and, hence, cut the programme. The programme had a 'price label' of USD 6 million, thus the Pentagon did not receive these 6 million dollars.²¹

In comparison, a debate solely on resources, or the input side of Figure 1, cannot be a debate on defence policy. Respectively, a decision on the defence budget, formulated exclusively in the language of budget categories (titles, appropriations, paragraphs, etc.), cannot be a transparent resource allocation decision.²²

In the previous example, had the Congress decided on the budget only, the Pentagon would not had any problems to spend USD 6 million out of a budget of USD 401 billion to pursue the development of mini-nukes.²³

¹⁹ Another metaphor is to look at programmes and programme alternatives as building blocks of diverse shapes and size, out of which defence policy makers need to select in order to build a good house within an anticipated amount of money.

²⁰ The search for such a construct is also subject to a variety of constraints, projected budget levels being one of the key constraints.

²¹ More precisely, the 2004 Defense Authorization bill authorised *research* on small, low-yield nuclear weapons of less than 5 kilotons, but did not provide funding for *development* or *production* of such nuclear weapon systems. In addition, the 2004 Defense Authorization Act includes a proviso that requires President Bush to seek congressional authority before ordering full-scale development of the new generation of battlefield nuclear weapons. See Merle D. Kellerhals, "Congress Agrees to Let Pentagon Study Low-Yield Nuclear Weapons," *Washington File*, 23 May 2003, www.iwar.org.uk/news-archive/2003/05-23-2.htm. Additional information is provided by Justine Wang, "Congressional Bills Passed Support Bush Agenda for New Nuclear Weapons" (Nuclear Age Peace Foundation, 9 December 2003), www.wagingpeace.org/articles/2003/12/09__wang_congressional-bills.htm.

²² Transparent here means "clearly understood," i.e., that decision makers understand the consequences, both positive and negative, of their decisions.

²³ Just like the legislatures of many new NATO members and partner countries do.

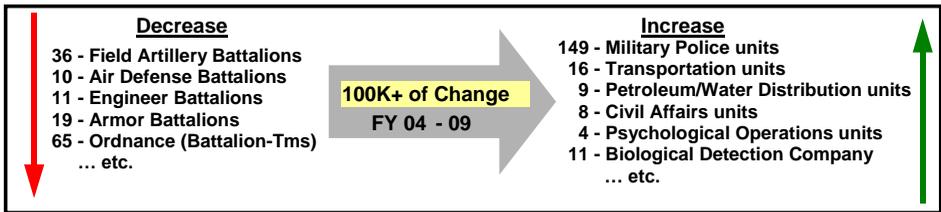


Figure 2: Restructuring of the U.S. Army in the 2004-09 Program.

Another example provides the decision of the U.S. legislature to increase the 2004 budget of the Army by almost USD 20 billion compared to 2003 and the personnel ceilings by approximately 30,000 soldiers. It is important to note that these decisions reflected the demands of ongoing operations, but were based on the 2004-2009 programme. The proposed programme envisaged the build-up of certain capabilities and, at the same time, the elimination of part of some more traditional capabilities associated with Cold War requirements. Figure 2 provides detail on this restructuring.²⁴ Thus, budget and personnel levels were defined as a consequence of decisions on capabilities, necessary to achieve security and defence objectives.

On the Force Development and Defence Resource Management Process

Resource decisions are made within a process that in itself needs to be transparent to decision makers, e.g., to allow the preservation of a clear audit trail from national security objectives, through defence objectives to taxpayers' money. Among the various requirements towards the resource management process, this introductory text briefly examines three essential aspects:

- How to create affordable resource constraint plans?
- How to deal with uncertainty?
- How to support the senior civilian leadership of a Ministry of Defence in the exercise of its authority and obligations as agents of democratic control of the armed forces?

²⁴ *Building Army Capabilities*, Draft Working Paper, prepared on behalf of President Bush (28 January 2004), www.comw.org/qdr/fulltext/0401armstructbrief.ppt.

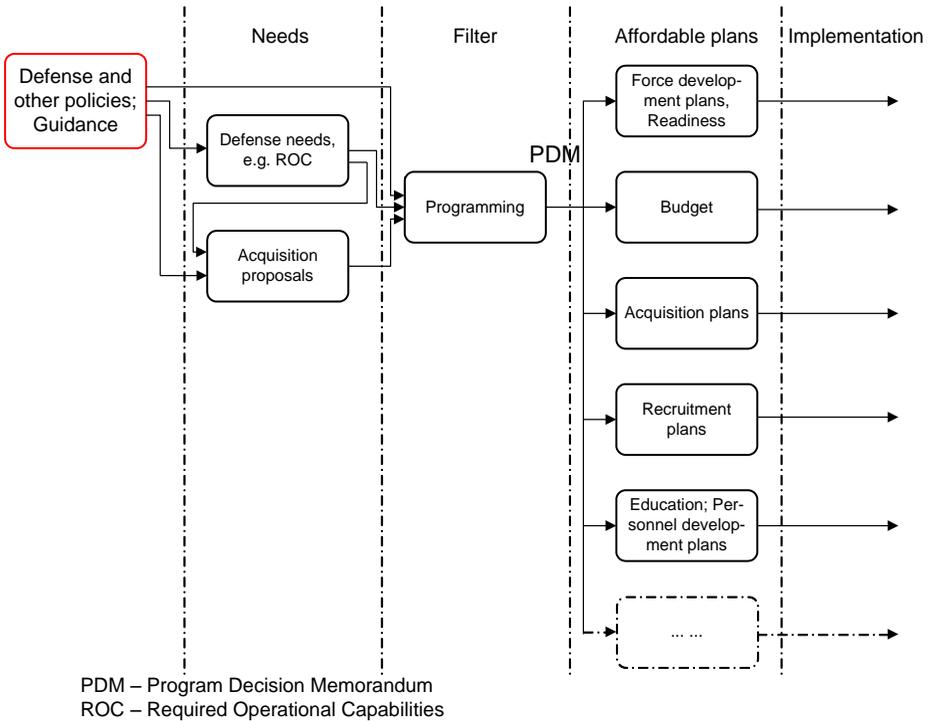


Figure 3: Defence Programming as a Filter of Competing Demands.

Programme Decision as a Milestone towards Budget, Procurement, and Other Short-term Plans

Often, decisions on required capabilities, or defence requirements in general, are resource informed, i.e., generally assessed as realistic, but not necessarily resource constrained, i.e., fitting within defence budget forecasts. When programme decisions are made, the cost of the defence programme for each future year does not exceed the defence budget forecast for the respective year.²⁵

The availability of a good defence programming mechanism is key for making the process transparent to decision makers. When that occurs, senior decision makers concentrate on programme decisions and an endorsed defence programme serves as the sole authoritative source, in substance, for all subsequent short-term plans, including the defence budget, procurement plans, etc.

²⁵ Often this requirement is strictly enforced only for the first two to three years of the defence programme.

Here it is important to remember the principles of programming, listed above. The defence programme shall be comprehensive – nothing can be done and no money may be spent outside the programmes, there are no parallel planning processes with resource implications and all programme decisions (on the highest programme level) are made at one point of the decision making process. Only in this way it might be guaranteed that the defence programme is affordable and the programming has served as a filter of all competing demands (this is illustrated in Figure 3). Thus, the strict implementation of this aspect of the resource management process guarantees that all short-term plans are (1) affordable and (2) consistent.

Dealing with Uncertainty

Defence programmes, and plans in general, are designed under certain assumptions and forecasts and are later implemented in a changing environment. As a result, rarely can a programme or a plan be implemented and achieve the results exactly as prescribed. Among the explanations might be a need to undertake or participate in an unforeseen operation, changes in the economic environment, e.g., inflation rates, exchange rates, etc., changes in income or social insurance policy, inability to meet recruitment targets and delays in procurement procedures, etc.

An efficient way to deal with the impact of such uncertainties is the use of roll-on programming, i.e., new programmes are designed bi-annually²⁶ or—in a higher level of uncertainty—annually.²⁷ A considerable number of NATO member countries use such roll-on planning mechanisms. A notable exception is France, where a fixed six-year programme is approved by law. Once implemented, it is followed by another legislatively approved six-year programme. Ukraine is currently attempting to implement a similar approach, albeit under considerably higher uncertainty levels.

On occasion, the uncertainty may be even higher, e.g., due to very high—and unpredictable—inflation rates, lack of planning experience and undisciplined implementation (e.g., procurement of weapon systems that are not included in the programmes), etc. In such cases it may be necessary to review and update programme decisions within the budget planning and implementation cycle. This mechanism is sometimes referred to as pre-programming. Within the budget year, and if allowed by law, this may lead to reallocation of the budget among defence programmes. Both mechanisms provide flexibility in defence resource management, while preserving transparency and accountability.

²⁶ For example, in the U.S. DoD *Planning, Programming, Budgeting, and Execution System* (PPBES).

²⁷ Bulgaria's *Integrated Defence Resource Management System* may serve as an example.

Other, qualitative changes in the environment for development of the armed forces—a new threat, creation of or accession to a defence alliance, impact of a disruptive technology, a new political party coming to power, etc.—cannot be accommodated through conventional defence resource management mechanisms. To account for such uncertainties, countries conduct comprehensive, in-depth analysis—sometimes referred to as Strategic Defence Review (SDR)²⁸—that facilitates decisions on new, future force structures.²⁹ This is a target force structure, 15 or so years into the future that guides the design of force development programmes.

Involvement of the Senior Civilian Leadership

As a minimum, a programme-based defence resource management system includes the following steps:

1. Preparation of a Programming Guidance
2. Design of programmes and programme alternatives
3. Programme review, culminating in a decision on the Defence Programme
4. Budget planning
5. Budget execution
6. Reporting
7. Auditing

The design of programmes—step 2—is an expert activity, based on considerable specialised knowledge and experience in the respective field. The preparation of the draft defence budget in step 4 should strictly reflect ministerial decisions made as a result of the programme review. Therefore, budget planning usually does not involve strategic ministerial decisions that are qualitatively different from the decisions made at step 3. The use of programmatic information can considerably enhance the output orientation in budget execution and creation of reports, as well as defence audits – steps 5, 6, and 7.

All these steps are important in order to have an effective defence resource management. However, the attention of the senior civilian leadership, including the Minister

²⁸ For an exemplary SDR see *The Strategic Defence Review – 1998 (CM3999)*, Presented to Parliament by the Secretary of State for Defence by Command of Her Majesty (London, Ministry of Defence, July 1998), www.mod.uk/NR/rdonlyres/65F3D7AC-4340-4119-93A2-20825848E50E/0/sdr1998_complete.pdf.

²⁹ Usually, only a few main parameters of the force structure are defined. French planners designate it as a *model*, while U.S. defence planners regularly use the term *vision*.

or Secretary of Defence, is focused on the programming guidance and the programme review, steps one and three respectively.

The programming guidance, usually issued by the Minister of Defence, sets explicit defence objectives, main requirements, priorities, the overall budget level and preliminary budget quotas for each main programme, provides information necessary to cost defence programmes, assigns responsibilities and sets the programming schedule. In step 3, experts assess the correctness of programme design and compliance with programming guidance, but senior leaders decide on the programmes and programme alternatives to be financed, like the capabilities that will be developed, maintained, or disposed of.³⁰ This decision is recorded in a document, often named 'Programme Decision Memorandum' which, after authorisation of the Minister of Defence, serves as an authoritative statement of both policy and budget decisions of the senior leaders of the defence establishment.

Thus, the programme-based defence resource management process facilitates accountability and transparency. Military and civilian experts design programmes in compliance with policy guidance and their proposals are transparent to decision makers. Once decisions are made, they are responsible for the efficiency of implementation. On the other hand, civilian leaders are bound by their own decisions formulated both in the programming guidance and the programme decision memorandum. All stakeholders understand what the decisions mean. Finally, regular reporting in programmatic format provides for effective implementation oversight.

Conclusion

In the implementation of the principles of programme-based force development and defence resource management both new NATO members and partner countries face a number of similar problems. Without attempting to be exhaustive, we will list a few key issues:

- Lack of related defence planning experience, particularly in business process management, design of defence programmes, costing of programmes, assessment of cost effectiveness and analysis of alternatives in general, assessment of planning risks and incorporation of risk management methodologies in the defence planning process.

³⁰ For details on civil-military interaction, based on the experience of Bulgaria's Ministry of Defence, refer to Todor Tagarev, *Control, Cooperation, Expertise: Civilians and the Military in Bulgarian Defence Planning Experience*, ISIS Research Reports # 14 (Sofia: Institute for Security and International Studies, 2003).

- Lack of a formal operational planning process that produces objective metrics that clearly identifies capability gaps in the existing force structure when measured against established operational objectives.
- Organisational resistance, often drawing on a culture of secrecy, particularly within the military establishment, but also among the budget planning and financial management community. In reality, organisational resistance is expected since the introduction of a new type of resource management inevitably leads to redistribution of 'power' or decision making authority.
- One very specific issue is the use of the term *programme*. If a defence establishment intends to introduce programme-based force development and defence resource management, it should use the term sparingly and in the meaning described in this article.

The final and the most important lesson is that implementation cannot be successful unless the senior resource manager—the Minister of Defence or a designated deputy minister—acts in concordance with the principles of programme-based resource management.

Programme-based defence resource management is a very efficient tool to manage defence transformation, providing for transparency of decision making, democratic control and accountability of elected officials. It is one of the few available tools to implement effectively capabilities-based planning and to assess implementation of plans, programmes and budgets.

In particular, the introduction of the programming phase is seen as crucial to relate defence policy to money allocations, assuring 'value for money' budgeting and, potentially, effective democratic oversight of armed forces. The implementation of programme-based defence resource management can be strongly facilitated if the Parliament requests submission of the draft defence budget accompanied by adequate programme description, as well as programme-based performance reports by the executive power.

Finally, programme-based force development and defence resource management promotes civilian participation in the development of defence policy and contributes substantially to the effective, transparent and economically viable management of defence spending.