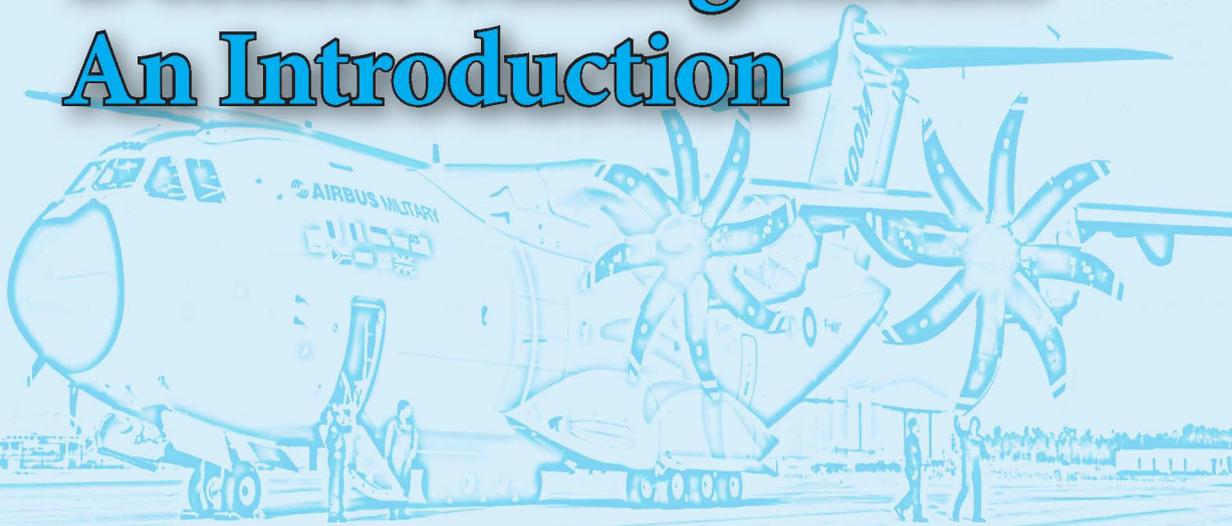


Defence Management: An Introduction



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Chapter 2

Defence Planning – A Core Process in Defence Management

Todor Tagarev

Introduction

Many parliaments and defence establishments in Partner countries, as well as in a number of new NATO members, still struggle with the concept of defence policy, the relationship between policy and planning, the concept of capability, the linkage between plans and budgets, the relationship between force development and technological modernisation, and other high-visibility and costly issues. That is hardly surprising because—unlike in NATO—defence policy-making and planning in the Warsaw Pact was fully centralised. The capitals of Warsaw Pact countries, with the exception of Moscow, had either no or very limited knowledge and experience in defence policy and planning.

In addition, in the 1990s the defence establishments in the former Warsaw Pact countries and ex-Soviet republics were only a small part of what were immature and generally weak democratic institutions. Even under the impact of declining economies and the lack of an obvious enemy, senior political and military leaders felt safer implementing superficial changes while adhering to inherited force structures and force development models. One result is that, at the time of their accession, very few of the

new NATO members had any sizeable contribution to make to the capabilities of the Alliance.¹

Therefore, this chapter looks at the notion of defence policy and the importance of the transparency of long-term planning and force development plans for the democratic governance of defence. It then examines various planning horizons and the interactions among the respective processes, thus explaining why and how defence planning constitutes a core defence management process. Thirdly, the chapter briefly introduces the reader to the possible alternative approaches to defence planning. The fourth part presents a framework model of linking policy objectives to force structure and explains the role of planning risks. The concluding part briefly touches on contexts for the national defence planning process and once again emphasises the importance of transparency of decision-making for the democratic accountability, effectiveness, and efficiency of a defence establishment.

The issues addressed in this chapter are not unique to NATO aspirants and partner countries. Our belief is that civilian and military experts from any country on the thorny path to democratic governance of defence would benefit from a better understanding of the linkages between security challenges and policy objectives to defence planning, on one hand, and defence planning to resource management mechanisms, on the other. Because, for example, it does not matter whether a Ministry of Defence implements a 'perfect' accounting system and transparent financial procedures if they support the development of a force structure that is not adequate to the security environment, the policy objectives and the strategy of the country.

Defence Planning as Integral Component of Defence Policy Making

Both NATO's *Glossary of Terms and Definitions*² and the U.S. DoD *Dictionary of Military and Associated Terms*³ do not propose a definition of the term 'defence policy.' The DoD Dictionary defines national policy as a "broad course of action or statements of guidance adopted by the government at the national level in pursuit of national objectives."

¹ See, for example, Jeffrey Simon, "The New NATO Members: Will They Contribute?" *Strategic Forum* 160 (Washington, D.C.: National Defense University, April 1999), <http://handle.dtic.mil/100.2/ADA394521>.

² *NATO Glossary of Terms and Definitions*, NATO Standardization Agreement AAP-6 (approved up to April 2008), www.nato.int/docu/stanag/aap006/aap-6-2008.pdf.

³ *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, D.C.: Department of Defense, 12 April 2001, as amended through 30 May 2008), www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf.

Among the authoritative definitions of ‘policy,’ the following two, provided in the Webster’s dictionary, are appropriate for our discourse:

1. A definite *course or method of action* selected from among alternatives and in light of given conditions to guide and determine present and future decisions.
2. A high level overall *plan* embracing the general goals and acceptable procedures esp. of a governmental body.⁴

A good starting point in the discussion on defence policy is to clarify that the term covers comprehensively ends (what needs to be achieved), ways (how we intend to act) and means (with what we intend to achieve the ends).

Regarding defence and military matters, two distinct tasks are determining:

1. how to use available means to reach desired ends, e.g., in the event of military aggression against the country; and
2. the means that would allow militaries to deal effectively with likely future threats and challenges.

The first task comprises strategic and operational, both deliberate and contingency planning, as well as direction of troops in combat. It is often referred to as ‘force employment.’ The second task is a primary defence policy task and the focus of this chapter.

Although obvious to many readers, the premise that defence policy encompasses the definition of both ends and means is not easily understood and readily accepted everywhere, in particular in countries of the post-Soviet space. One reason is language.⁵ In a number of languages, there is only one word—*politica*—that is used to translate both ‘policy’ and ‘politics’ and has strong connotations to everything ‘political.’⁶ Therefore, a quite common perception is that defence policy is in the realm of the politicians, but the term is understood narrowly as decisions on the ends, i.e., setting the objectives the armed forces must be able to attain.

On the other hand, and given the quite common lack of knowledge on military matters among politicians and their civilian staff in post-totalitarian countries, it is often taken for granted that only the military has the knowledge and the authority to define

⁴ *Webster’s Ninth New Collegiate Dictionary* (Springfield, Mass.: Merriam Webster Inc., 1991). Emphasis added.

⁵ Certainly, not the most important one. Lack of civilian expertise, prevalent patterns of civil-military relations and a culture of secrecy, among others, also contribute to opaqueness and inefficiency of defence policies, planning, and plans. See Daniel Nelson, “Beyond Defense Planning,” in *Transparency in Defence Policy, Military Budgeting and Procurement*, ed. Todor Tagarev (Sofia: Geneva Centre for DCAF and George C. Marshall-Bulgaria, 2002).

⁶ In the Slavic and Romance languages for example.



Figure 1: Main Defence Planning Disciplines.

what forces are needed in order to meet the objectives (understood also as ‘to implement the policy’ as decided by politicians). According to Soviet terminology, for example, this is ‘build-up’ (*stroitel'stvo*) of the armed forces. In the post-Soviet times this understanding is often disguised as ‘military policy.’

The purpose of defence planning, particularly long-term defence planning, is to define the means, including the future force structure (FS), that would allow defence institutions to deal effectively with likely future challenges. Thus, long-term defence planning is and should be examined as an integral component of defence policymaking.

The armed forces and their unique capabilities can play an important role in achieving defence policy objectives. In addition, defence planning encompasses the planning of armaments, logistics, command, control and communications (C3), resource planning, civil-military emergency planning and, in some cases, nuclear planning.⁷ Several of these ‘planning disciplines’ deal with specific components of force

⁷ These planning disciplines are traditional for NATO. There are a number of other related disciplines, which are closely linked to the defence planning process – air defence planning, standardisation, intelligence, operational planning and force generation. See “The Defence

capabilities. Therefore, force planning is considered a central process in defence planning that synchronises all other planning disciplines (Figure 1).⁸

The next part of this chapter explains why defence planning is the core defence management process and how it serves to steer all other defence management activities.

Defence Planning Horizons

In most mature defence management systems it is possible to distinguish three planning horizons and their respective processes:

- Long-term planning
- Mid-term planning, often designated as programming
- Short-term planning.

In long-term defence planning, planners analyse trends in the evolution of the security environment, including threats and challenges, the role of alliances and their policies, and security and defence strategies. By analyzing these trends, planners try to foresee defence requirements. They assess technology trends and the role of emerging technologies in novel ways of using the armed forces.⁹ On that basis, they define a future force structure, described by its main parameters (e.g., the number of manoeuvre brigades and battalions, air and naval squadrons). This force structure is sometimes designated as a 'vision,' while France, for example, uses the term 'model' of the armed forces in some future year.

As a rule, planners also have to define the main steps in the transition from the current to the future force structure. Both the future force structure and the transition to it need to be realistic, i.e., decision makers and planners need to be fairly confident that the force and the transition will be sustainable under anticipated financial, technological, demographic and other important constraints.

Planning Process: What Does It Mean in Practice?" (updated 15 June 2007), www.nato.int/issues/dpp/practice.html.

⁸ NATO Consultation, Command and Control Agency – Overview, Presentation (October 2004).

⁹ Known also as "concepts of operations." For example, the interest of scientists and practitioners is currently focused on two novel concepts known as effects-based approach to operations" and "network-enabled operations." For details, the reader may refer to Edward A. Smith, *Complexity, Networking, and Effects-Based Approaches to Operations* (Washington, D.C.: Center for Advanced Concepts and Technology, 2006), www.dodccrp.org/files/Smith_Complexity.pdf, and the references therein.

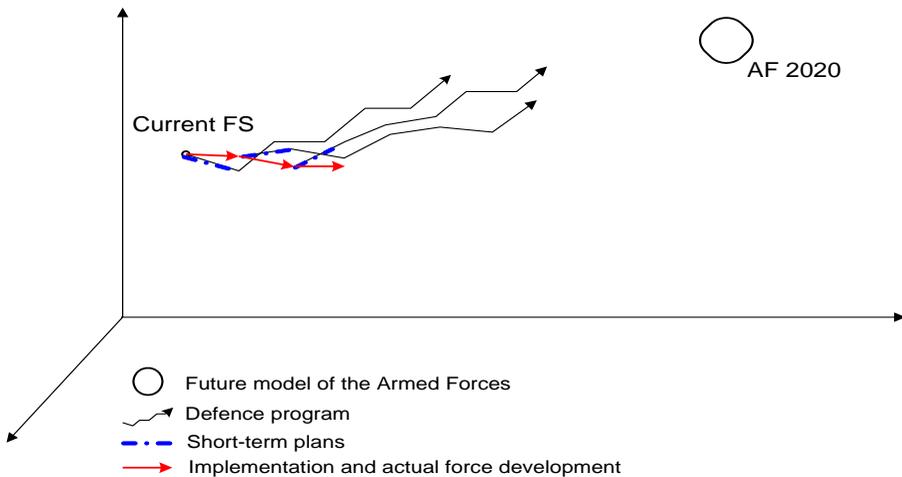


Figure 2: Linkages among Planning Horizons, Plans, and Implementation.

Long-term in this case means that the planning horizon exceeds the time necessary to develop the capabilities of the future force structure. Usually, this is a horizon of ten to fifteen years, particularly when a country relies on the procurement of 'off-the shelf' weapon systems, i.e., weapon systems developed by someone else and accessible on the market.¹⁰

A number of countries try to look further into the future and use even longer planning horizons. Typically, longer horizons are used:

- a) when policy makers and planners examine foreign policy and security strategies, e.g., in attempts to analyse the way the world would look like in 2050, and to shape alliances, relations with neighbours and other countries, etc.; and/or
- b) when a country has high technological ambitions and is willing to lead the development of new technologies that would eventually turn into new weapon systems 25 or 30 years in the future.¹¹

For the purposes of visualisation, it is possible to present a force structure by a point in a space of its parameters, or phase space. Among the potential parameters

¹⁰ It is not necessary that these weapon systems are fielded in the armed forces of some country by the time long-term planning takes place, assuming that the weapon system is at an advanced phase in the development cycle and will be available by the time a country decides to procure it.

¹¹ As a rule, paralleled by high defence industrial ambitions.

are capability levels, the numbers of units of particular types, numbers of personnel, major weapon systems, training levels, stocks of ammunition, spare parts and POL, etc. In this way, the development of the armed forces can be presented as a trajectory.

The future model of the armed forces, designated as AF 2020 in the example shown in Figure 2, defines an area of the parameter space and serves to guide force development over the years.

In particular, it guides the mid-term planning process. The main purpose of mid-term planning is to guarantee that the actual defence management activities, e.g., re-organisation, recruitment, procurement, training, spending money, etc., serve to achieve defence policy objectives and to build the respective future force. The horizon of mid-term planning is usually four to eight years. Such a horizon provides for the development—or at least for a qualitative change—of force capabilities.

The respective plan is often designated as ‘programme,’ and the mid-term planning process as programming. For decision making and other management purposes, the programme has a well developed hierarchical structure, including main defence programmes, sub-programmes, etc.¹² Many NATO countries use a six-year planning horizon for their defence programmes.

While in long-term defence planning it is recommended to explore options that, theoretically, may have nothing in common with the current force structure, during mid-term planning planners have to show very clearly how they provide for transition from the current force structure (FS) towards the future model of the armed forces (see Figure 2). Also, resource constraints become much more important – the mid-term plan, especially in its first years, is designed strictly within the expected resources and the defence budget forecast in particular. Short-term planning serves to detail the first one or two years of the mid-term plan, often in capability component plans—plans for recruitment, education, training, procurement, construction, etc.—and the respective budget.¹³ Thus, they are designed strictly within the limits of the budget forecast.

When defence plans are designed in such a manner and meticulously implemented, all defence management activities are coordinated and lead towards the achievement of security and defence policy objectives. But even when this is the case,

¹² For details, the reader may refer to Todor Tagarev, “Introduction to Program-based Defense Resource Management,” *Connections: The Quarterly Journal* 5, no. 1 (Spring-Summer 2006): 55-69, <https://consortium.pims.org/introduction-to-program-based-defense-resource-management-0>.

¹³ Countries with well established defence planning and budget management systems often use two-year plans. This approach also corresponds to a two-year cycle of defence programming, such as in the United States. Recently, The United Kingdom introduced a four-year budget cycle with specific procedures for incorporating unforeseen requirements within this long budgeting cycle.

unforeseen events and changes in the environment cause deviations from the short-term plans. As a result, the actual force development trajectory strays from the one designated by the mid-term plan.

Many defence planning systems deal with this type of uncertainty through a roll-on mechanism of mid-term planning. New mid-term plans (or programmes) are designed annually or every other year, with the consequent short-term planning and implementation, thus allowing to steer force development towards the future model of the armed forces (see Figure 2).

A qualitative change in the force development environment—emergence of a new threat, joining an alliance, impact of disruptive technologies, transition to a fully contract-based force, considerable shift in governmental priorities, etc.—may render the future model of the armed forces either inadequate to the strategic circumstances, unaffordable, or both. In such cases, countries with mature defence planning mechanisms launch a new long-term planning process without delay, often as a part of a ‘strategic defence review.’ This new long-term planning cycle produces a new future model of the armed force, e.g., ‘AF 2025,’ that is used to guide mid-term planning and all other defence management processes (see Figure 3).

The design of the future force structure may be approached from different perspectives, depending on the main driving factors. The following section briefly presents the main alternative approaches to defence planning.

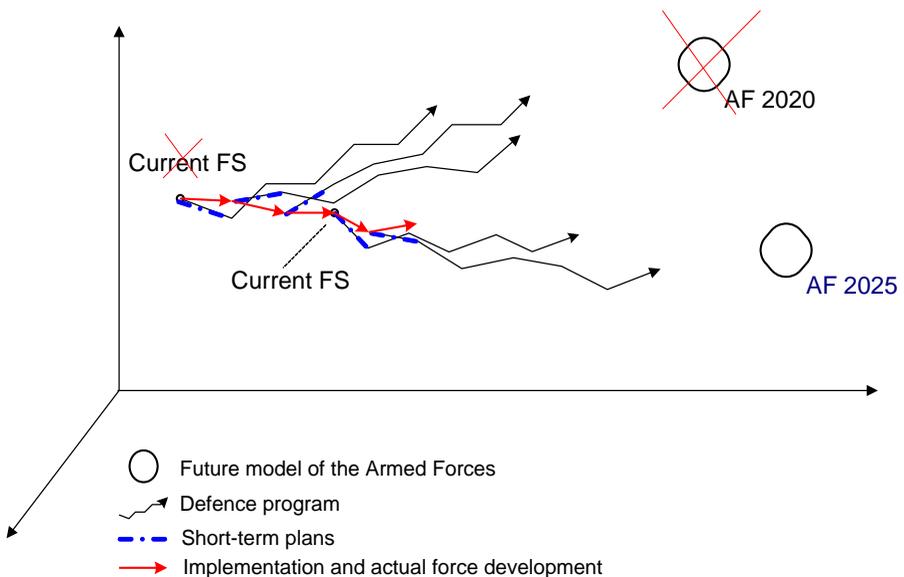


Figure 3: Changing the 'Future Force Structure' as Force Development Target.

Alternative Approaches to Long-term Defence Planning

Two of the most authoritative sources on defence planning present similar categorisations of defence planning approaches. In the 2004 edition of *Strategy and Force Planning*, Bartlett, Holman, and Somes outline nine alternative approaches.¹⁴

In the *top-down* approach, interests, objectives and strategy drive the decisions on force structure.

In the *bottom-up* approach, the focus is on improvement of existing defence capabilities and related weapon systems – improvement aimed above all at meeting the requirements of current operations and operational plans.

In the *scenario* approach, planners elaborate a representative set of situations, each describing the conditions for employment of the armed forces. Scenarios are then used to derive tasks to be performed in meeting mission objectives and the respective capability requirements.

In two closely interrelated and complementary approaches, based respectively on *threats and vulnerabilities* assessment, planners seek the means to deal with the problem when both a threat and vulnerability against this threat are identified. Capability requirements are then defined in comparison to the capabilities of the prospective opponent.

One of the approaches—*core competencies and missions*—has a functional basis. In this approach the capability requirements for own and friendly forces are defined irrespective of scenarios, threats, or perceived vulnerabilities. Instead, they are defined as core competencies, e.g., to achieve air superiority in any plausible situation. Then these core competencies are cascaded down to mission capabilities requirements and subsets of requirements in peace, contingency, and war.

The *capability-based* approach also involves functional analysis. Functions and tasks to be performed in expected future operations are translated into capability requirements. Then planners seek force units that would provide these capabilities effectively and efficiently.

Through *hedging*, planners seek to minimise risk preparing the military forces for any conceivable tasking in the current situation as well as thirty or more years into the future. The derived requirements provide for balance and flexibility across a broad spectrum of challenges but, not surprisingly, the associated cost is extremely high. The closest historical example is the policy of the Soviet Union in the 1970s and 1980s that contributed to its collapse.

¹⁴ Henry C. Bartlett, G. Paul Holman, Jr., and Timothy E. Somes, “The Art of Strategy and Force Planning,” in *Strategy and Force Planning*, 4th ed. (Newport, R.I.: Naval War College Press, 2004), 17-33.

In the next approach, planners seek to obtain operational and strategic superiority through *technology*. The approach is grounded in the belief that knowledge, creativity and innovation will provide superior systems and, respectively, significant military leverage.

Finally, in the *fiscal* approach to defence planning budget constraints drive the decisions on force structure.

The second authoritative source—the *Handbook on Long Term Defence Planning*, published by the NATO Research and Technology Organisation—presents a somewhat different list of possible approaches to defence planning in a threefold structure according to the focus of analysis.

When the focus is on the planning process, analysts distinguish between top-down and resource-constrained planning.

Depending on the degree of technology optimism or, on the contrary, preferences to adhere to historically proven facts, experienced planners outline four possible approaches:

- Technology optimism
- Risk avoidance
- Incremental planning
- Historical extension.

The last three of these approaches build on proven concepts, existing force structures and capabilities and seek incremental increases of effectiveness and efficiency. Under certain conditions they may be interpreted as variations of the bottom-up approach listed above.

Three additional approaches are distinguished when the focus is on functions or concrete scenarios as the driver for measuring potential performance of future forces. These approaches are capability-based planning, scenario-based planning and threat-based planning. Each of these approaches has advantages and associated pitfalls and is rarely applied in a pure form. In practice, a defence planning approach may combine features of two or more of the main alternatives.

According to the *Handbook on Long-term Defence Planning*, two approaches currently prevail throughout mature defence planning communities. They are resource consciousness (a milder form of resource-constrained planning) and scenario-based planning.¹⁵ The main efforts since the publication of the Handbook in 2003 aim at enhancing the capability orientation of defence planning and incorporating novel opera-

¹⁵ *Handbook on Long Term Defence Planning*, RTO Technical Report 69 (Paris: NATO Research and Technology Organization, April 2003), 4, www.rta.nato.int/pubs/rdp.asp?RDP=RTO-TR-069.

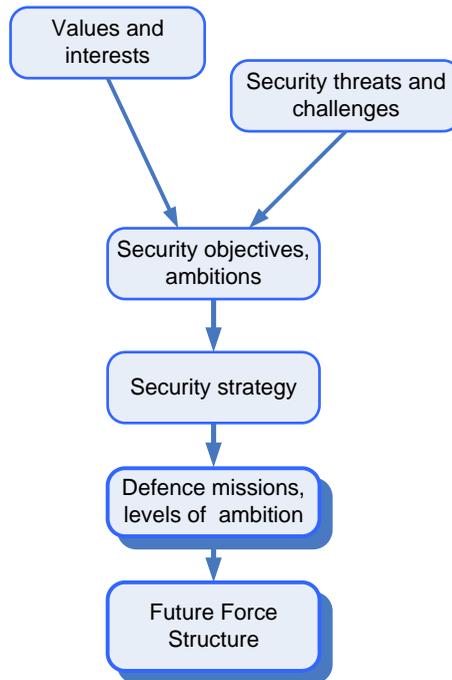


Figure 4: Definition of Defence Objectives.

tional concepts, in particular the effects-based approach to operations. It also aims to increase the flexibility and the responsiveness of strategy making and planning mechanisms to changes in the security environment.

Linking Policy Objectives to Force Structure

In top-down approaches, the elaboration of defence policy flows from the desire to uphold and promote the values and interests of a nation or an alliance, the underlying security strategy and the role of the military among the instruments of national power, all of which impact the definition of defence objectives (as shown in Figure 4). Defence objectives, in turn, are often expressed as defence missions, or possible roles of the armed forces and levels of ambition in defence.

Analysis of the Security Environment

Security objectives, strategies and defence objectives stem from values, interests, security challenges, risks and threats, identified through thorough analysis of the security environment. Current analysis emphasises threats posed by:

- international terrorism
- the proliferation of weapons of mass destruction and means for their delivery
- failed or failing states
- organised crime,

as well as variety of combinations among them.

Other risks originate from ethnic tensions and failure to respect differing ethnic, religious and cultural values, intolerance and xenophobia, demographic pressures, and environmental degradation.

Countries in transition see the lack of accountability of armed forces (and other security sector organisations) to civil society, inefficiency of defence, the preservation of large ineffective force structures and lack of management ability to deal with a variety of legacy issues as particularly challenging. For example, the countries from South Eastern Europe (SEE) in a ‘common assessment paper’ identified as a particular challenge the “failure of [defence] reform and disruptions in [Euroatlantic] integration processes [that] could result in negative consequences on regional and international security.”¹⁶

Particularly important—as a result of the analysis of the security environment—is to state explicitly and clearly the absence of risks and threats, especially such that have had a strong impact on defence policies until recently. In the example of the South Eastern European assessment, the countries agreed that “there is no perceived risk of military aggression between states in SEE in the current and foreseeable political environment.”¹⁷

Security Objectives

The objectives of the security policy of a country address current and foreseeable security challenges, risks and threats and reflect the values and interests of the nation, as well as its ambitions in the international security arena.

For example, the aim of the 2002 National Security Strategy of the United States is “to help make the world not just safer but better.” To that effect, it sets forth the following goals or ‘security objectives’:

- Political and economic freedom
- Peaceful relations with other states

¹⁶ *South East Europe Common Assessment Paper on Regional Security Challenges and Opportunities – SEECAP* (Budapest, May 2001), para 16 g, <http://www.forost.ungarisches-institut.de/pdf/20010530-1.pdf>.

¹⁷ *Ibid.*, para 15.

- Respect for human dignity.¹⁸

In addition, the National Defence Strategy of the U.S. provides the following definitions of four ‘strategic objectives’ in terms of security and defence, all in line with the U.S. National Security Strategy:

- Secure the United States from direct attack
- Secure strategic access and retain global freedom of action
- Strengthen alliances and partnerships
- Establish favourable security conditions.¹⁹

Security Strategy

A good security strategy provides a clear, realistic and effective concept of the use of diplomatic, economic, military and other instruments of power in order to achieve security objectives. Depending on assessments of security risks and threats, traditional strengths, assessment of own and opponents’ vulnerabilities and identified opportunities, the security strategy may envision various roles of the armed forces among the instruments of power. These roles are often referred to as ‘missions’ of the armed forces.

Defence Missions and Goals

Bulgaria’s 2002 White Paper on Defence defines the following missions of the armed forces:

- Contribution to the national security in peace
- Contribution to the peace and security in the world
- Participation in the defence of the country.²⁰

The U.K. defines its ‘defence aims’ in the following manner:

Deliver security for the people of the United Kingdom and the Overseas Territories by defending them, including against terrorism; and to act as a force for good by strengthening international peace and stability.²¹

¹⁸ *The National Security Strategy of the United States of America* (Washington, D.C.: The White House, September 2002), 1, <http://merln.ndu.edu/whitepapers/USnss2002.pdf>.

¹⁹ *The National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, March 2005), iv, details on pp. 6-7, www.globalsecurity.org/military/library/policy/dod/nds-usa_mar2005.htm.

²⁰ *White Paper on Defence* (Sofia: Ministry of Defence, 2002), 27, <http://merln.ndu.edu/whitepapers/BulgariaEnglish.pdf>. This document was adopted prior to NATO’s invitation to Bulgaria to join the Alliance at the Prague 2002 Summit.

²¹ www.hm-treasury.gov.uk/d/sr04_psa_ch9.pdf

In the U.S. example used earlier, the military is tasked to contribute to the accomplishment of the security objectives in four main ways (the title of the respective section of the U.S. national defense strategy underlines the role of defence as an instrument in the implementation of security policy; these may be interpreted as 'defence objectives'):

- Assure allies and friends
- Dissuade potential adversaries
- Deter aggression and counter coercion
- Defeat adversaries.²²

Defence Ambitions

Through defence ambitions, policy makers and planners make the defence objectives more tangible and measurable. The ambitions provide a realistic and specific formulation of the expectations of the government regarding the roles of the armed forces, the operations they should be able to conduct on their own, with other militaries or with other security sector organisations, the quality of personnel, the technological level of the armed forces and the role of defence industry, etc.²³

In regard to operations, for example, the 'level of ambition' establishes in military terms the number, scale and nature of operations that a country or an alliance should be able to conduct.²⁴ A related term is 'operational tempo.' It refers to the number and size of missions undertaken by a military force relative to its strength and takes into account the complexity and the length of these operations. A high operational tempo indicates a significant number of sizeable, ongoing deployments to multiple theatres.²⁵

NATO's stated level of ambition for instance was to be able to conduct three simultaneous major joint operations out of the territory of the alliance.²⁶ In the 2006 Ministerial Guidance, NATO set a new level of ambition – to be "able to conduct a

²² *The National Defense Strategy of the United States of America*, iv, details on pp.7-9.

²³ For an elaborate open source example the reader may refer to Todor Tagarev and Valeri Ratchev, *Bulgarian Defence Policy and Force Development 2018* (Sofia: Military Publishing House, 2008).

²⁴ *The Defence Planning Process* [of NATO], www.nato.int/issues/dpp/index.html.

²⁵ *A Role of Pride and Influence in the World: Defence*, Canada's International Policy Statement (Minister of National Defence, 2005), 7.

²⁶ See for example Michèle A. Flournoy, CSIS, "Defense Integration in Europe: Enhancing Europe's Defense Capabilities for New Missions" (paper presented to the Clingendael Security and Conflict Programme workshop "Enhancing European Military Capabilities within the EU and NATO," The Hague, December 14-15, 2005), notes to slide #17, www.clingendael.nl/cscp/events/20051214/Flournoy.ppt.

greater number of smaller-scale operations ... than in the past” while retaining “its ability to carry out larger operations.”²⁷

By 2010, the member states of the European Union (EU) have committed to be able “to respond with rapid and decisive action applying a fully coherent approach to the *whole spectrum of crisis management operations* covered by the Treaty on European Union. This includes *humanitarian and rescue tasks, peace-keeping tasks, tasks of combat forces in crisis management, including peacemaking*. As indicated by the European Security Strategy this might also include *joint disarmament operations*, the support for third countries in *combating terrorism* and security sector reform.”²⁸

Likewise, the ‘level of ambition’ of a country is defined in military terms as the number, scale and nature of operations that it should be able to conduct on its own or as part of coalition or alliance.

The U.K., in its current Defence White Paper, defines the following ambition levels:

- Support three concurrent operations, one of which is an enduring peace support operation
- Conduct limited national operations
- Be the lead, or framework nation for coalition operations, at Small to Medium scale
- Retain the capacity to undertake Large Scale operations at longer notice in Europe, the Mediterranean and the Gulf Region.²⁹

The second and the third of these ambitions lead to the requirement to maintain a broad spectrum of maritime, land, air, logistics, C4ISR and special forces capability elements.

France, in its Programme Law 2003-2008, also very clearly defines its defence ambitions, stating that the country:

- must protect autonomy of decision and action ..., including the ability to act alone should it be necessary (e.g., to ensure defence of sovereign territories and ... to meet her defence agreements in Africa and the Middle East);

²⁷ “NATO Sets New Level of Ambition for Operations,” *NATO Update* (8 June 2008), www.nato.int/docu/update/2006/06-june/e0608b.htm.

²⁸ *Headline Goal 2010*, approved by General Affairs and External Relations Council on 17 May 2004, endorsed by the European Council of 17 and 18 June 2004, <http://ue.eu.int/uedocs/cmsUpload/2010%20Headline%20Goal.pdf>, emphasis added.

²⁹ *Delivering Security in a Changing World*, Defence White Paper, volume I (London: Presented to Parliament by the Secretary of State for Defence, December 2004), www.mod.uk/NR/rdonlyres/147C7A19-8554-4DAE-9F88-6FBAD2D973F9/0/cm6269_future_capabilities.pdf.

- have the capability of a lead nation in a European operation and sufficient military capabilities to contribute to a spectrum of military actions, especially in high intensity operations; and
- must maintain the “necessary technological know-how to ensure, through time, the credibility of nuclear deterrence, to develop the resources of protection against new threats, and to preserve an industrial base ...” to manufacture major defence systems.³⁰

The French Programme Law also states that in order to meet this level of ambition France will increase personnel levels and defence spending. The Programme provides considerable detail on the structure of the budget and the objectives that will be achieved in attracting active and reserve personnel, the status of the military and force modernisation.

Canada recognises that, internationally, its forces will conduct operations in the whole spectrum of conflict but will normally be part of a coalition or alliance. The Canadian Forces lack the capability to achieve international goals by themselves; hence, they could not conduct or even take the lead role in operations on the scale of the Kosovo campaign in 1999. Canada’s ambition is to provide “tactically self-sufficient units” (TSSU), capable of integrating into Combined Force packages. The minimum requirement of TSSUs is to be able to conduct at least “medium intensity operations.”³¹

The ambition of Sweden, internationally, is to be able “to lead and participate in two large-scale international missions, each requiring the deployment of an entire battalion, and three smaller operations. It shall be possible to undertake some operations with little prior warning and to sustain other operations over a longer period of time. The Swedish Armed Forces shall be able to successfully tackle any crisis management task given to them, from confidence-building, conflict prevention, humanitarian and peace-keeping tasks to peace-enforcement measures.”³²

In its 1999 Military Doctrine, Bulgaria clearly stated the defence ambition of the country. At that time Bulgaria had announced its intentions and plans to seek NATO integration but membership was not near. In the absence of NATO’s Article 5 guarantees and the nearby Kosovo crisis still in its hottest phase, policy makers admitted the

³⁰ *2003-2008 Military Programme, Bill of Law*, France, Unofficial translation (2002), 4-5, www.info-france-usa.org/atoz/mindefa.pdf.

³¹ *Capability Based Planning for the Department of National Defence and the Canadian Forces* (Canada: Department of National Defence, May 2002), 14-15, www.vcds.forces.gc.ca/dgsp/00native/rep-pub/j-cbpManualPdf_e.asp.

³² *Our Future Defence: The Focus of Swedish Defence Policy 2005–2007*, Swedish Government Bill 2004/05:5, 14, emphasis added, www.sweden.gov.se/content/1/c6/03/21/19/224a4b3c.pdf.

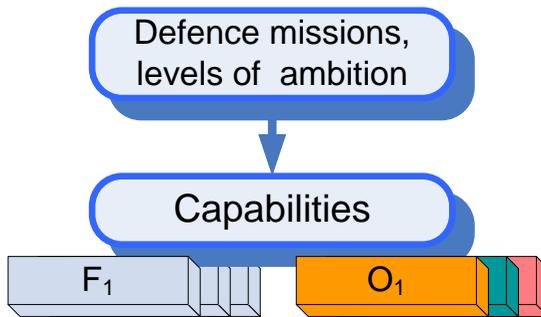


Figure 5: Capabilities as ‘Means’ in Defence Policy.

possibility for aggression against the country. The stated ambition was to be able to defend the territory and the population on its own. Importantly, the Military Doctrine—a public document approved by the Parliament—announced the parameters of the plausible aggression in one theatre of operations, given significant warning times and without full mobilisation of the aggressor.³³

From Defence Objectives to Capabilities

In the end, it is not the forces as such that are important but the capabilities they have, or will have, in relation to defence objectives (see Figure 5). Furthermore, although most of the capabilities are provided by formations of the armed forces (marked in Figure 5 with ‘F’), there are cases when requisite capabilities are provided by other organisations, e.g., non-military intelligence services, police, shipping companies, civilian air transport, etc.

Capability here is defined as:

Capacity, provided by a set of resources and abilities, to achieve a measurable result in performing a task under specified conditions and to specific performance standards.³⁴

Therefore, the link between objectives and capabilities is not straightforward. The definition of capabilities necessary to achieve the objectives depends on the situations, or scenarios, in which the armed forces might be used, and accounts for the way in which they will be used (see Figure 6).

³³ *Military Doctrine of the Republic of Bulgaria*, Approved by the National Assembly in 1999, amended in 2002, www.mod.bg/en/doc_konc.html#.

³⁴ For alternative definitions see *Defence Capability Development Manual* (Canberra: Defence Publishing Service, Department of Defence, 2006), 4, www.defence.gov.au/publications/dcdm.pdf.

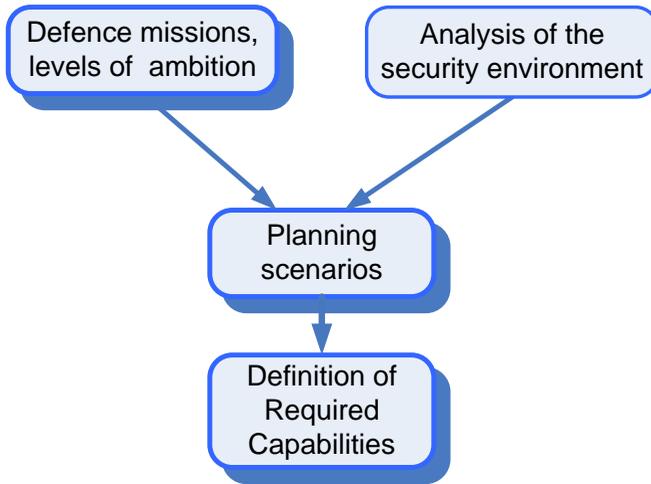


Figure 6: Linking Objectives and Capability Requirements through Planning Scenarios.

Planning Scenarios

In defence policy making and planning, scenarios are used as planning situations, specified in terms of environmental and operational parameters. Planning scenarios are not intended to predict future situations and outcomes; rather, they are used in a process of specifying force structure and defence plans. They serve several purposes:

First, scenarios broadly describe potential missions, based on challenges or threats faced in a 10-20 year time frame, comparable with the time necessary to reshape force structures, develop and field corresponding weapon systems. Secondly, scenarios lay out assumptions, related to the scope of aims and ambitions vis-à-vis challenges and threats. Third, they are used by planners as a tool to define capabilities to conduct operations and serve as a testbed for assessing proposed operational concepts, capability or system requirements against formulated mission objectives.³⁵

Policy makers and planners need to consider multiple scenarios in order to address the complex nature of military missions and to select a set of scenarios. The set should be representative of the security challenges outlined in the defence policy. The selected scenarios, in combination, need to capture the full spectrum of missions, opera-

³⁵ For details see *European Defence: A Proposal for a White Paper*, Report of an independent Task Force (Paris: EU Institute for Security Studies, May 2004), 67-70, www.iss.europa.eu/uploads/media/wp2004.pdf, and *Handbook on Long Term Defence Planning*.

tions, and the range of objectives and interests. Finally, all selected scenarios must be credible so that the resulting analysis and plans would be acceptable.³⁶

In its defence policy and planning process, NATO develops some 30 generic defence planning scenarios, ranging from an operation for non-combatant evacuation to forcible entry to major war, which are then used to inventory required capabilities.³⁷

In the proposal for a White Paper on European defence, an independent Task Force proposes the following five strategic scenarios:

1. A large-scale peace support operation
2. A high-intensity humanitarian operation
3. Regional warfare in the defence of strategic European interests
4. Prevention of an attack involving weapons of mass destruction (WMD)
5. Homeland defence.³⁸

To take a national example, Canada has used the following set of generic scenarios:

1. Search and rescue in Canada
2. Disaster relief in Canada
3. International humanitarian assistance
4. Surveillance/control of Canadian territory and approaches
5. Evacuation of Canadians overseas
6. Peace support operations (Peacekeeping)
7. Aid of the civil power/assistance to law enforcement agencies
 7. a. Chemical weapon variant
8. National sovereignty/interests enforcement
9. Peace support operations (peace enforcement)
 9. a. Failed state variant
10. Defence of North America
 10. a. Radiological weapon variant
 10. b. Cyber attack variant

³⁶ Scenario selection is a critical activity. The need for detail and broad spectrum of planning scenarios inevitably comes into strains with limited analytical ability of policy makers and planners.

³⁷ Flournoy, "Defense Integration in Europe: Enhancing Europe's Defense Capabilities for New Missions."

³⁸ *European Defence: A Proposal for a White Paper*, 71-98.

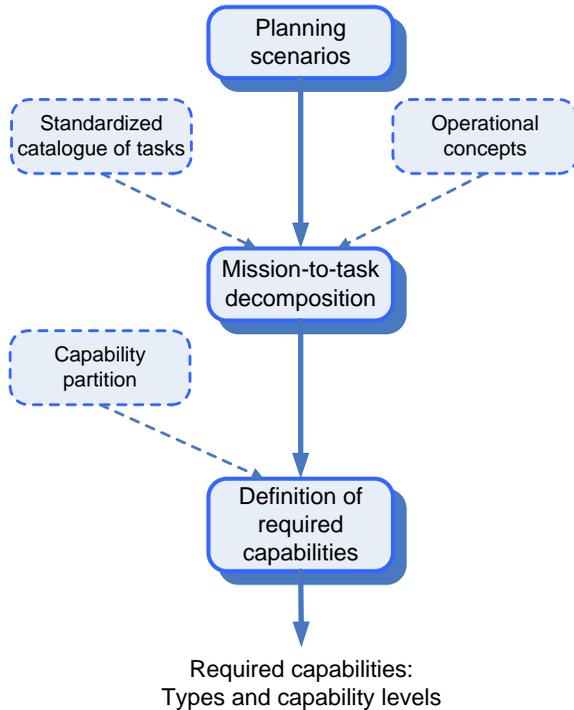


Figure 7: Mapping Capabilities to Tasks.

11. Collective defence.³⁹

In summary, scenarios are used to describe operational considerations and to rationalise capability requirements.

Recently, in attempts to deal more effectively and efficiently with uncertainty and an unpredictable security and technological environment, defence planning communities turned to more elaborate planning schemes using two levels of scenarios – one, describing the situations in which the armed forces would be used (scenarios of the types listed above) and another, that describes possible contexts for shaping defence policies, or ‘alternative futures.’⁴⁰

³⁹ *Descriptions – Departmental Force Planning Scenarios* (Canada: Department of National Defence, May 2005), www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/scen/intro_e.asp.

⁴⁰ For online examples see Brian Nichiporuk, *Alternative Futures and Army Force Planning* (Santa Monica, CA: RAND Arroyo Center, 2005), http://www.rand.org/pubs/monographs/2005/RAND_MG219.pdf; and Valeri Ratchev, “Context Scenarios in Long-term Defense

Missions to Tasks to Required Capabilities

Capability is broadly defined as the ability to perform a particular task. Therefore, planning scenarios are used to derive the set of tasks to be performed in operations. In order to be uniformly understood, each task to be performed in a scenario is defined by the respective term in a generic task list, or catalogue of tasks (which is visualised in Figure 7).

For example, Canadian defence policy makers and planners use, among other documents, the “Canadian Joint Task List” as a “common lexicon ... for capability planning.”⁴¹ On the example of the U.S. force planning system, the set of tasks that results from analysing the scenario set for each mission is referred to as “Mission Essential Task List.”

Actually, the tasks could not be defined outside of an explicit concept for employment of the armed forces, or ‘Operational Concept.’ Considerable importance in current transformation initiatives is attributed to the ‘Effects-Based Approach to Operations’ as a driving operational concept. In this approach, capabilities are mapped to desired effects and to operational objectives.

Mission essential task lists define the types of capabilities needed to accomplish the tasks (or to achieve desired effects). Another methodological instrument, referred to as ‘capability partition,’ provides a common thesaurus for all defence planners and is used in addition in a number of defence management activities (see Figure 7). Finally, planners define capability levels needed to accomplish the tasks (or ‘capability goals’).

Structuring the Force

For each scenario, planners design several alternative force proposals that would provide capabilities to apply the operational concept and to achieve mission objectives, and assess the cost efficiency of each alternative.

In mature planning systems, planners maintain a library of generic units, or modules, and a common set of cost factors (Figure 8). The use of such methodological tools enhances considerably the efficiency of the planning process. Key for the generation of force proposals is the integrating concept. Among the examples of integrating concepts are the European Union *Battle Group*, the Canadian *Tactically Self-Sufficient Unit, Brigade or Battalion tactical group, Mission Capabilities Package*, etc. The

Planning,” *Information & Security: An International Journal* 23, no. 1 (2008): 62-72, <http://infosec.procon.bg/v23/Ratchev.pdf>.

⁴¹ *Capability Based Planning for the Department of National Defence and the Canadian Forces*, 19.

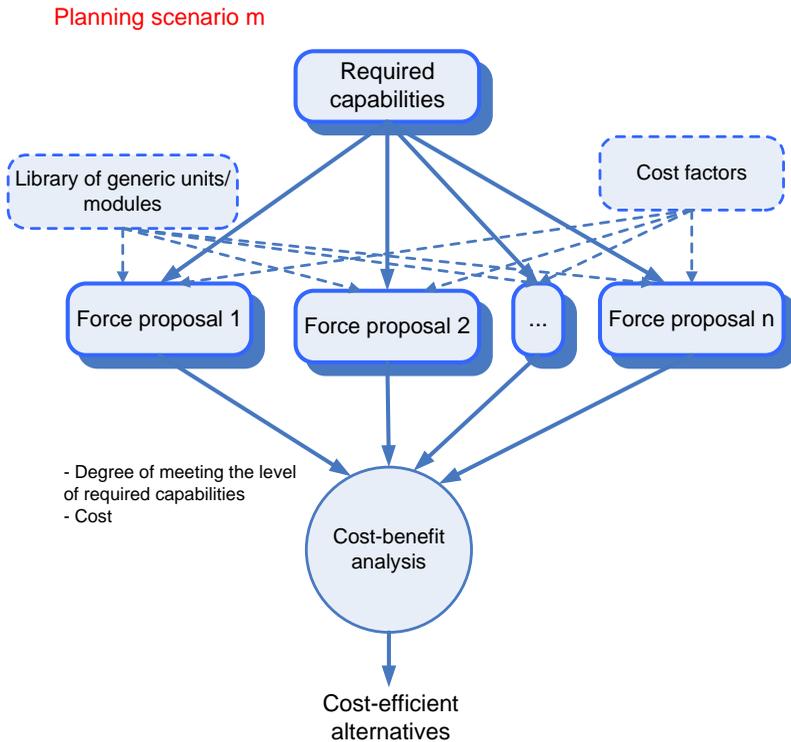


Figure 8: Generation and Assessment of Alternative Force Proposals.

type of integrating concept defence planners of a country or alliance use depends on the respective level of defence ambitions.

Accounting for the hypotheses of simultaneous or near simultaneous realisation of two or more planning scenarios and for the need to provide rotation of the units in operations, planners then aggregate cost-efficient force packages, designed for individual scenarios, into one force structure.

In advanced planning systems, planners rigorously assess and account for the multi-functionality of some of the units and the synergistic effects among various capabilities. Thus, planners do not attempt to optimise the set of capabilities (capability levels or related force packages) for a particular scenario; rather, the capability set should be robust against the set of plausible scenarios.

Reconciling Objectives, Force Structure and Financial Constraints

The rule in defence policy making and planning is that demands always exceed resource availability. Therefore, policy makers and planners work hard to balance goals, strategy and means, with risk being the balancing factor.

In a rational model of strategic development, planners are expected to treat security and defence objectives, strategy, means and planning risk as variables until a good balance is found.⁴² Obviously, the search for a balanced policy is sought in the current and anticipated security environment and within resource constraints (Figure 9).

Hence, a realistic defence policy is based on the recognition that it is not possible to guarantee the security against all possible threats. Instead, it is based on a risk management approach. Policy makers and planners distinguish four related types of risks:

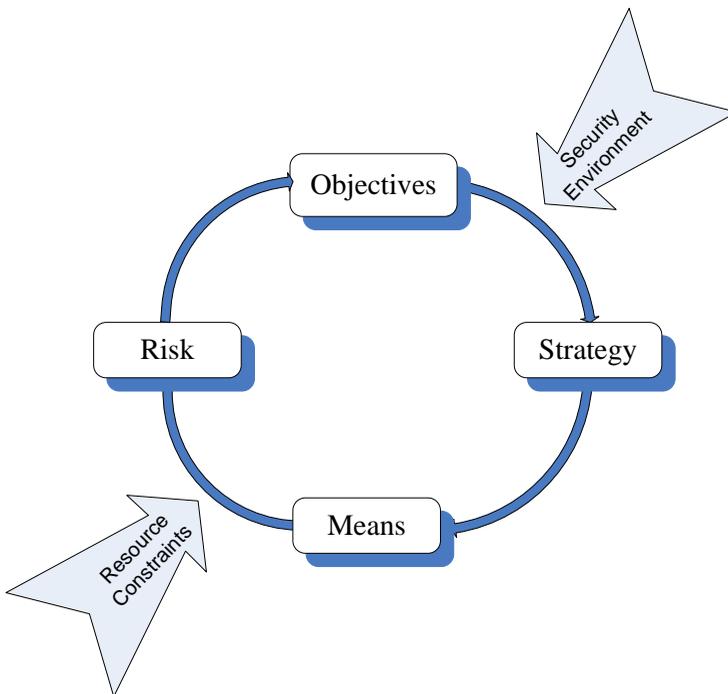


Figure 9: Bartlett Model of Strategic Development.

⁴² Known as Bartlett model and described in Bartlett, Holman, and Some, "The Art of Strategy and Force Planning," 18-23.

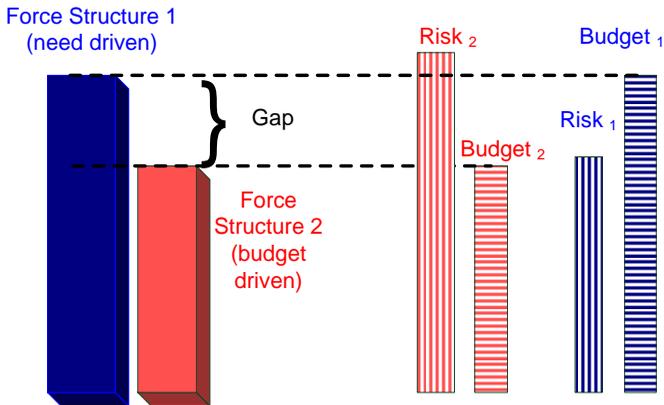


Figure 10: Force Structures, Risk and Budget Levels.

Operational risks: associated with the current force structure that, if tasked, will execute the strategy successfully within acceptable human, material, financial, and strategic costs.

- Defence planning, or future challenges risks: associated with future capacity to execute missions successfully against a spectrum of prospective future challenges.
- Implementation, or force management risks: associated with the successful implementation of force structure decisions and force development plans. The primary concern here is recruiting, training and retaining military and civilian personnel, equipping the force and sustaining an adequate level of readiness.
- Institutional risks: associated with the capacity of new command, management and business practices.⁴³

The second category of risk is of primary importance in making long-term defence planning decisions. Defence planning risk is measured through the impact, or consequence, of an unfavourable outcome, given some military event or other event of organised violence and force structure. Thus, the measure of risk is probabilistic. It is defined by the likelihood of an event occurring and the estimated consequences in case the event has occurred and we have a given force structure, or capabilities, in place.

⁴³ *The National Defense Strategy of the United States of America*, 11. The US defence strategy defines (1) operational, (2) future challenges, (3) force management and (4) institutional risks.

Each force structure is associated with a certain level of risks. Figure 10 presents visually the difference between two force structures under examination. Force Structure $_1$ is associated with Risk $_1$ and could be built and sustained if Budget $_1$ is made available. When Force Structure $_1$ is defined as ‘needed,’ defence planners, often implicitly, assume that the associated Risk $_1$ is acceptable. When planners have to find a force structure that is ‘realistic,’ i.e., that could be built and sustained within expected budgets (Budget $_2$ level in Figure 10), they create plans for a force structure associated with Risk $_2$.

In practice, the mismatch between needs, i.e., required defence capabilities and resource constraints, is inevitable. It creates a gap of unfunded capabilities. What can be done regarding that gap? Dr. Jack Treddenick, Professor at the College of International Security Studies at the George C. Marshall Center in Germany, lists a number of possibilities:

- Pretend the gap does not exist
- Revisit national security and/or military strategy
- Revisit required force structure
- Reconsider the allocation of resources to defence
- Seek improvements in efficiency
- Transform the armed forces.⁴⁴

Thus, one option is to seek a better force structure within Budget $_2$ —different set of capabilities, more efficient use of resources—so as to lower the associated Risk $_2$. That is not always possible. Another option is to reconsider the ways in which armed forces operate. A third option is to reassess security strategies – seek entry into an alliance, enhance security cooperation, apply confidence building measures with neighbours, etc. A fourth option is to provide more money on defence, which would make it possible to increase the size and/or the readiness of the armed forces. Fifth, we may decide to reconsider security objectives and ambition levels. Finally, if all other opportunities are exhausted, we may have to accept the level of risk associated with the planned force structure.

A proposal for a force structure may be accepted if it is affordable and the associated planning risk is acceptable, i.e., the likelihood of occurrence of an event is determined to be low or the likely consequences, given such an occurrence, are judged to be minor.

⁴⁴ Jack Treddenick, “Transparency and Efficiency in Defence Planning and Spending” (paper presented at the PfP Consortium Security Sector Reform Conference, Garmisch-Partenkirchen, George C. Marshall Center, 13 December 2005).

Estimated negative impact	Significant	Considerable management required	Must manage and monitor risks	Extensive management essential
	Moderate	Risk may be worth accepting with monitoring	Management effort worthwhile	Management effort required
	Minor	Accept risks	Accept, but monitor risks	Manage and monitor risks
		Low	Medium	High
		Likelihood		

Figure 11: A Basic Risk Management Model.

Analysis of experience, simulations and expert judgement are used to assess risk. Whatever the approach, at the end acceptance (or non-acceptance) of a planning risk strongly depends on the personality of the decision maker. Some people are risk averse, while others are more willing to accept risk (or are 'risk prone'). Thus, even in a rational decision-making framework any risk management strategy is inherently subjective.

On the whole, risk assessment should be integrated in the decision-making process and the setting of priorities among competing demands. A self-explanatory risk management model is presented in Figure 11.⁴⁵ Risk assessments, among other things, may be used to assign risk management responsibilities along organisational hierarchies.

Defining the Main Transition Steps

Once planners define a future force structure that is adequate to future strategic circumstances, acceptable and affordable, they compare current and future capabilities, identify gaps and surpluses and define milestones in the transition to the future force structure. Among such milestones might be:

- termination of the conscript service;
- the formation or closing down of a unit;

⁴⁵ Adapted from *Integrated Strategic Risk Management (ISRM) in Defence* (Canada: Department of National Defence, 2003), www.vcds.forces.gc.ca/dgsp/pubs/rep-pub/dda/cosstrat/isrm/intro_e.asp.

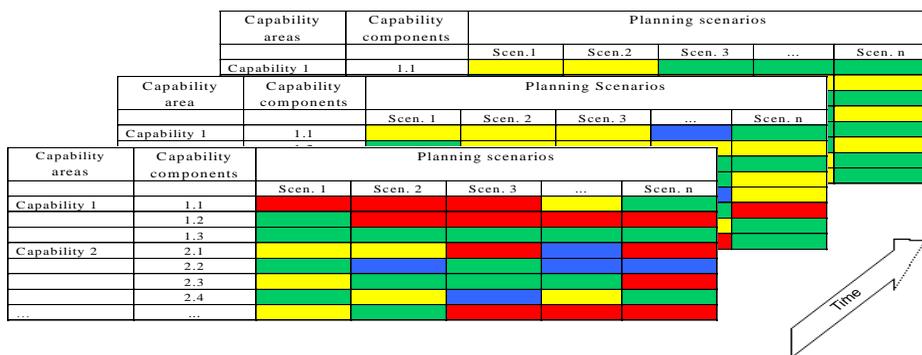


Figure 12: Evolving Capabilities and Risks in the Transition to the Future Force Structure.

- contribution of a unit to an operation or a standing force, e.g., the NATO Response Force or the European Rapid Reaction Force; and/or
- introduction of a new weapon platform and/or achievement of its full operational capability, etc.

The transition itself needs to be affordable and based on a transition strategy or, at a minimum, prioritisation among competing demands – participation in operations or development of new capabilities, technological modernisation or investment in people, etc.

It is also recommended to assess planning risks at transition milestones and assist decision making with suitable visual aids. Different colours are used to denote ‘sufficient capability,’ ‘surplus,’ ‘minor deficiency,’ and ‘major deficiency’ (as illustrated in Figure 12).⁴⁶

Conclusion

In a brief introduction to defence planning like this one, it is not possible to provide detailed treatment of the subject or to address all issues of importance. Two additional issues are of particular importance to practitioners in defence policy making and planning.

The first issue is the context for the planning process. For a defence establishment, defence planning is a comprehensive process that encompasses all required capabilities—weapon systems and C2 included—and the respective resources, as well as the

⁴⁶ *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), www.mors.org/meetings/cbp/read/TP-3_CBP.pdf.

capabilities provided by organisations other than the armed forces. Nevertheless, it is not conducted in a void.

Three contexts may have an immense impact on the national defence planning process and decisions – international, security sector and budgetary. In a way, the national defence planning may be immersed in the respective processes of allied defence planning (e.g., the defence planning in NATO and the European Union), the definition of roles and distribution of capabilities among the organisations in the national security sector and the process of drafting, debating and deciding on the state budget.⁴⁷

Second, and related to allied and security sector planning, is the issue of specialisation. In the current security environment many countries cannot cope with the challenge to preserve a balanced yet efficient force structure.⁴⁸ Attempts to preserve a balanced force structure while downsizing lead to exponential growth of unit costs. On the other hand, specialisation in niche capabilities may provide high-value contributions to collective security. Decisions on capability specialisation in the national security sector also may provide economies of scale.

Decisions of specialisation account for existing strengths, traditions, technological and defence industrial ambitions, and inevitably lead to a specific portfolio of defence capabilities.

In sum, there is no algorithm for the application of scenario-based capability-oriented defence planning. Nevertheless, effective defence policies are based on disciplined approaches to the creation of force structure and force development plans that share some common steps:

- Definition of defence objectives, missions, and ambitions
- Design of and agreement on plausible scenarios, or environments in which these missions will be carried out (often including development of adequate operational concepts and selection of ‘course of action’)
- Decomposition of scenario activities into tasks and definition of ‘mission essential task lists’ (tasks are often drawn from generic task lists)
- Definition of the capabilities needed to accomplish the tasks. This step includes a number of sub-steps, the latter two performed in iteration:

⁴⁷ Todor Tagarev, “Capabilities-Based Planning for Security Sector Transformation,” Lecture to NATO Advanced Studies Institute (Bansko, Bulgaria, 10-18 April 2007); under publication in vol. 24 of *Information & Security: An International Journal*, <http://infosec.procon.bg>.

⁴⁸ See, for example, *European Defence Integration: Bridging the Gap between Strategy and Capabilities*, Conference Report (Brussels: Center for Strategic and International Studies in cooperation with the New Defence Agenda, October 2005); Ugurhan G. Berkok, “Specialization in Defence Forces,” *Defence and Peace Economics* 16, no. 3 (June 2005): 191-204.

- Definition of the needed types of capabilities
- Assessment of planning risks
- Design of a cost-effective force package that would provide capability levels needed to accomplish the tasks with acceptable risk
- Design of a force structure appropriate for all anticipated missions and scenarios.

All these steps may be performed in a variety of ways. What is important is to adhere to a rational, disciplined approach to defence planning and the principles of transparency and accountability. The examples from the experience of democratic societies with mature defence policymaking and planning mechanisms, presented in this chapter, may help countries that endeavour to manage effectively and efficiently the development of their armed forces.

Key Further Readings

Henry C. Bartlett, G. Paul Holman, Jr., and Timothy E. Somes, “The Art of Strategy and Force Planning,” in *Strategy and Force Planning*, 4th edition (Newport, R.I.: Naval War College Press, 2004), 17-33.

Handbook on Long Term Defence Planning, RTO Technical Report 69 (Paris: NATO Research and Technology Organization, April 2003), www.rta.nato.int/pubs/rdp.asp?RDP=RTO-TR-069.

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), www.mors.org/meetings/cbp/read/TP-3_CBP.pdf.

Todor Tagarev, “The Art of Shaping Defense Policy: Scope, Components, Relationships (but no Algorithms),” *Connections: The Quarterly Journal* 5, no. 1 (Spring-Summer 2006): 15-34, <https://consortium.pims.org/the-art-of-shaping-defense-policy-scope-components-relationships-but-no-algorithms>.