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ESTONIAN NATIONAL DEFENCE COLLEGE

RENEWED NATIONAL DEFENSE PLANNING AND MANAGEMENT: CAPABILITY-BASED PLANNING, PROGRAMMING, BUDGETING AND EXECUTION SYSTEM FOR SMALL STATES

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LIST OF ABBREVIATIONS

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ABAP	Annual Budget and Action Plan
ABP	Assumptions-based planning
ACLANT	Allied Command Atlantic
ADF	Australian Defense Force
AIDS	Acquired Immuno-Deficit Syndrome
AOR	Area of Responsibility
AR	Annual Report
ATP	Allied Tactical Publication
ATSA	Air Traffic Service Authority
BES	Budget Estimate Submission
BTD	Border Troops Department
CASA	Civil Aviation State Administration
CBP	Capabilities-based planning
CCMR	Center for Civil-Military Relations
CHOD	Chief of Defense
CFSP	Common Foreign and Security Policy
CIMIC	Civil-Military Cooperation
CINC	Commander-in-Chief
CIS	Communications and Information System
CJCS	Chairman of the Joint Chiefs of Staff
CMC	Crisis Management Center
COA	Course of Action
COG	Center of Gravity
COMSEC	Communications Security
CONOPS	Concept of Operations
COP	Contingency Plan
CPA	Chairman's Program Assessment
CPG	Contingency Planning Guidance
CPR	Chairman's Program Recommendation
CSBM	Confidence and Security-Building Measures
C2	Command and Control
C3	Command, Control, Communications
C4	Command, Control, Communications and Computers
C4I	Command, Control, Communications, Computers and Intelligence
DepSecDef	Deputy Secretary of Defense
DES	Department of Emergency Situations
DF	Defense Force
DIT	Department of Information Technologies

DG	Defense Guidance
DoD	(U.S.) Department of Defense
DPG	Defense Planning Guidance
DPQ	Defense Planning Questionnaire
DRB	Defense Recourses Board
EU	European Union
EOD	Explosive Ordnance Disposal
FBP	Force Building Program
FG	Fiscal Guidance
FP	Functional Plan
	Force Proposals
FY	Fiscal Year
FYDP	Five-Year Defense Program[1]
GDP	Gross Domestic Product
GOP	Guidelines for Operational Planning
GS	General Staff
HNS	Host Nation Support
HQ	Headquarters
IO	International Organization
IT	Information Technology
JCS	Joint Chiefs of Staff
JIPB	Joint Intelligence Preparation of Battlefield
JMCP	Joint Military Capabilities Plan
JOC	Joint Operations Command
JPD	Joint Planning Document
JSCP	Joint Strategic Capabilities Plan
JSPS	Joint Strategic Planning System
JV	Joint Vision
LOA	Level of Ambition
LOC	Lines of Communication
MACA	Military Assistance to Civil Authorities
MCM	Mine Counter-measures
MDP	Major Defense Program
METL	Mission-Essential Tasks List
MFA	Ministry of Foreign Affairs
MFP	Major Force Program
MID	Ministerial Initiating Directive
MOD	Ministry of Defense
MOE	Measures of Effectiveness
	Ministry of Economy

[1] From about 1995: Future Years Defense Program

MOF	Ministry of Finance
MOH	Ministry of Health
MOI	Ministry of Interior
MOU	Memorandum of Understanding
MRP	Military Requirements Plan
MS	Main Staff
MTC	Ministry of Transport and Communications
NAC	North Atlantic Council
NATO	North Atlantic Treaty Organization
NGO	Non-Governmental Organization
NMS	National Military Strategy
NSC	National Security Council
	National Security Concept
NSS	National Security Strategy
O&M	Operations and Maintenance
OPLAN	Operation Plan
OPP	Operational Planning Process
OSD	Office of the Secretary of Defense
PBD	Program Budget Decision
PDM	Program Decision Memorandum
PG	Planning Group
POM	Program Objective Memorandum
POW	Prisoner of War
PPB	Planning, Programming, Budgeting
PPBE	Planning, Programming, Budgeting, Execution
PPBES	Planning, Programming, Budgeting, and Execution System
PPBS	Planning, Programming, and Budgeting System
PRR	Private Requirements Report
QDR	Quadrennial Defense Review
RFI	Requests for Information
ROE	Rules of Engagement
RSOI	Reception, Staging, Onward Movement and Integration
R&D	Research and Development
SBS	State Budget Strategy
SDP	Standing Defense Plan
SecDef	Secretary of Defense
SIS	Security and Information Service
SOF	Special Operations Force
SOP	Standing Operating Procedure
SOR	Statement of Requirements
SPG	Strategic Planning Guidance
SPS	State Protection Service

SUPLAN	Supporting Plan
S&T	Scientific and Technical
TOR	Terms of Reference
USAF	United States Air Force
USD	United States dollar
VIP	Very Important Person
WMD	Weapons of Mass Destruction
ZBB	Zero-based Budgeting

PREFACE

Paradigms, policies, and institutional arrangements, developed in the Euro-Atlantic area mainly in the Cold War period and modernized — though somewhat inconsistently — over last decades, to address the issues of national security are continuously losing their effectiveness, vis-à-vis emerging security risks.

Under the circumstances of the evolving complexity of crisis situations, increasing operational tempos, and a shortening of warning time, seconded by sometimes severe resource constraints, it seems to be relevant to talk from a small nation's perspective not as much about adaptation of any existing model of national defense arrangements, but rather the development of a different approach.

After five years in senior management positions at the Estonian Ministry of Defense, the above-presented idea became focal point of the author's activities for two years as a civil servant, and in fact remained so ever since in his capacity as a scholar.

In fall 2000, a major reform project was launched at the Ministry of Defense of Estonia in cooperation with the Center for Civil-Military Relations of the U.S. Naval Postgraduate School to address four problem areas identified in planning and management system used in Estonia at the time: a disconnect between civil and military planners; an outdated operational planning methodology; inconsistencies in the existing force planning mechanism; and insufficiency of existing resource planning system. One of key objectives of this effort was to develop a document that comprises an entire hierarchy of plans, from strategic to operational level.

For that purpose, an Estonian Interdepartmental Working Group was established consisting of representatives from Ministry of Defense, General Staff, Service Staffs, Ministry of Foreign Affaires, Ministry of Finance, Ministry of Interior, Border Guard, Rescue Board, and Police. In this working group, the author was a co-chairman, sharing that honor and responsibility with the U.S. counterpart Dr. Thomas Young. The U.S. Project Team, during two years of work, brought to the table extensive academic and military experience, including Senior Military Advisers in the ranks of a retired Lieutenant General and Rear Admiral, and area experts from NATO, U.S. European Command, RAND Corporation, New Zealand, Denmark, and Sweden. The outcome of the effort — a 327-page Defense Planning Manual completed in late 2002 — was, however, clearly an Estonian product, discussed, vetted and formulated to meet its specific circumstances.

Since 2003, being as a faculty member increasingly involved in CCMR activities in Central and Eastern European and former Soviet Union coun-

tries, it became obvious for the author that problem areas the working group dealt with in Estonia are not unique but rather a common starting point for defense sector reform efforts in many countries. Hence, the need to continue working on renewed defense planning and management system, suitable for small countries.

The blueprint of the system the author presents in this study, essentially an academic summary of Estonian Defense Planning Manual, was first published in 2003 in series of proceedings of the Estonian National Defense College. Key concepts and major tools of this blueprint were further refined through a number of workshops and seminars in Armenia, Azerbaijan, Bulgaria, Estonia, Georgia, Mexico, Moldova, and Ukraine conducted in support of defense sector reform efforts of these countries from 2003 up to this date.

It should be underscored here, that workshop attendees were as a rule senior defense officials from Ministries of Defense and Lieutenant-Colonel to Major General level officers of General Staffs of respective countries. The discussions, thus, were focused on a practical applicability, and presented tools and concepts underwent scrutiny of highly experienced professionals. Needless to say, these formal and informal discussions with practitioners of eight different countries, not to mention fellow faculty members, active duty and retired officers from the United States, Netherlands and Canada, contributed immensely to improving the concepts and tools of the system outlined in this study.

Materials of proceedings of CCMR workshops the author lead or participated in recent years — lectures delivered, notes from group discussions held, and country-customized documents drafted — are used as additional sources; some of them are attached as annexes to give the reader better understanding of the nature of processes and procedures discussed in this study. Country-specific terms and possibly sensitive clauses are removed from sample documents, as a rule.

Although not published as stand-alone documents, many of these concept papers, lectures and draft documents are accessible via Internet on the web sites of Ministries of Defense of respective countries. However, in view of the fact that these publications are fragmented and public relations offices of the Ministries may decide at any moment to remove these files from public access, the author opted not to refer to specific web sites. All information concerning referred workshops is documented and held at the Center of Civil-Military Relations, U.S. Naval Postgraduate School, Monterey, California.

In the course of refining the system of planning and management tools, it became clear that some sort of broader conceptual framework is needed that could put what essentially is an application, into the context of characte-

ristics and requirements of contemporary security environment, and provide theoretical coverage of political science. Hence, this study was conducted.

The author would use the opportunity to express his sincere gratitude to his Mentor, Professor Doctor Albert A. Stahel and his Opponent, Professor Doctor Dieter Ruloff from the University of Zurich. Without academic guidance and fair criticism provided by these distinguished scholars, this study would have not been completed.

SUMMARY

The study begins with the discussion of system-level theories of international relations. The objective of this discussion is to derive some key features of the notion of 'security' within these alternative concepts and to compare them.

The lens, through which the whole paradigm of security will be seen, is that of the executive apparatus of a sovereign state. In the context of this study, this executive apparatus is seen as distinct from elected political decision-makers, as well as from the broader strata of 'informed and interested' opinion leaders, pressure groups, and defense intellectuals of any given country. Conceptually, within the framework of this study, the executive apparatus could be seen as a 'black box' supporting elected political decision-makers in the identification of security challenges, and developing and implementing ways and means to cope with these challenges in response to the political will expressed by the elected leaders.

In the context of the present study, realism, neoliberal institutionalism and social constructivism provide the most general framework for understanding states' behavior in providing for their security. It can be said that, in essence, these theories outline two alternative approaches to the term 'security'. Realist and neoliberal institutionalist theories see security as function of power, whereas social constructivists see security as social construction. The implied behavior of actors (states) in achieving their security, however, could vary considerably in the case of each theory.

A comprehensive application of social constructivist school of thought to a security field is a concept of multisectoral security, developed by Barry Buzan and his colleagues. That approach underlines the basic assumption, that security is not defined in objective terms — as an array of discrete values of some established indicators — but rather in relation to some perceived dynamics of state's affairs. Moreover, this statement also implies that there is likely more in security than pure power-balance.

The '**security as a function of power' approach** has the following characteristic features: the basic unit of the concept is a sovereign state; these sovereign states operate and interact with each other in anarchic environment; each state has its own interests to pursue; policies developed to pursue these interests are result of rational analysis; activities of states while pursuing their interests are often seen as threatening other states; the threats to other states are seen as objective and quantifiable; these threats could be countered by objective and quantifiable means; the cornerstone of security problematique is survival of a sovereign state, therefore appropriate actions must be taken as the first priority.

From the sovereign state's perspective, then, security is something objective and rests basically in the sovereignty and independence of that state. Sovereignty and independence could be threatened by measurable actions of other states, and restored if appropriate and measurable counter-actions are taken. This approach implies that a necessary and sufficient set of indicators could be developed, the monitoring of which actually drives security-providing actions.

The characterizing features of the **relativist approach** to security are: the referent object may be other than sovereign state; on the international level, referent objects operate and interact under condition of anarchy; the threat, endangering survival of the referent object is relative to some perceived dynamics of affairs; any issue could be labeled as security matter, consequently, the security problematique is considerably wider than survival of sovereign state; there is a securitizing actor, who through the speech act (securitizing move) claims powers to handle the issue by extraordinary means; in order to succeed, securitizing move must be accepted by sufficiently wide audience; whilst securitized, the issue receives highest priority.

From the sovereign state's perspective, a relativist approach is also fully applicable: the referent object is (or could be among others) the sovereign state; the security is about survival of the referent object; the state's executive apparatus is most likely fulfilling the role of securitizing actor; implicitly required procedures of acceptance a security move are already in place; whilst recognized as such, the security receives highest priority in the agenda.

The fundamental finding is that, from the perspective of conceptualization of 'security', multisectoral theory of Barry Buzan actually subsumes this particular aspect of different realist and liberal institutionalist theories.

Further, the analysis of the empirical data — perception of security challenges as formulated in policy documents of several small and large, allied and non-aligned countries, as well as their collective defense organization — lead to observation that perceived security challenges have in fact been grouped into five sectors: military, political, societal, economic and environmental. The very same sectors constitute the backbone of Buzan's theory.

From the basic assumption — that the executive apparatus of a sovereign state is considered a 'black box' supporting elected political decision-makers in the identification of security challenges, and developing and implementing ways and means to cope with these challenges in response to the political will expressed by the elected leaders — it follows that, in this particular context, from the perspective of a 'black box', it is actually irrelevant which theoretical approach guided the formulation of the political will of the elected decision-makers.

Therefore, since the multisectoral theory subsumes the aspect of conceptualization of 'security' of different realist and liberal institutionalist theories; since states and organizations in the real world have grouped their perceived security challenges into five sectors largely corresponding with the multisectoral theory; and since any selected theory will not have specific implications for the actions of executive apparatus regarding the defense planning and management, it is plausible to ground the reminder of the study on the multisectoral security theory of Barry Buzan.

The essence of multisectoral concept of security is well captured in the following statement: "Security means survival in the face of existential threats, but what constitutes an existential threat is not the same across different sectors." (Buzan, Waever and de Wilde 1998, 27) The following passage deals with manifestations of existential threats, or to be more precise, what is or could be **perceived** as existential threat, in each sector.

For the purposes of this study, the root challenges of each of the security sectors, from the perspective of state apparatus, are defined as follows:

- the root challenge of the **military security** sector is to secure territorial integrity of the state in question, and the coherence of its' superstructure, vis-à-vis challengers from both inside and outside of the state, under conditions of use, or threat of use, the military force;
- the root challenge of the **political security** sector is to secure integrity of the legitimacy of the state/government in question, both from outside — denial or withdrawal of diplomatic recognition by other states and/or international bodies — and inside — denial of recognition of governing authority by the society or faction(s) of it;
- the root challenge of the **societal security** sector is to secure sustainable self-identification of the society in question against threats from outside — infiltration of societal identificators alien to local descriptors of identity — and inside — desires of sufficiently large societal groups to adopt some other identity, wider or smaller than that of the society in question;
- the root challenge of the **economic security** sector is to achieve always-dynamic balance between mercantilist/neomercantilist policies of self-sustainment, and liberal policies of division of labor based on efficiency, in order to ensure the resources, finance and markets necessary to sustain acceptable levels of welfare and state power, under necessary condition of undisrupted functioning of global market;
- the root challenge of the **environmental security** sector is to maintain stable and sustainable relationships between humankind and the rest of

biosphere without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both.

Analysis of the contemporary security environment has proved that there is a tendency of blurring dividing lines between different types of crisis situations, e.g. the problem that initially surfaced as a civil emergency may quickly escalate to an asymmetric armed conflict. By and large, then, one must state that national security problems have obtained a dynamism and complexity never seen before.

Hence, looking at the theory implications and policy documents of several countries, as well as international organizations, three key features, characteristic to contemporary security and political environment have surfaced:

- Complexity;
- Rapid changes;
- Resource constraints.

In order to handle security challenges under the circumstances of the complexity of security challenges within an uncertain and rapidly changing environment, and under resource constraints, a national defense planning and management system should provide for complex solutions to complex problems. Necessary requirements for such a system are flexibility, responsiveness, built-in mechanisms for inter-agency coordination and cooperation, national and international inter-agency interoperability, as well as careful allocation of resources to meet the most high priority challenges.

With respect to the role of a state in providing security, the analysis proved that regardless of which concept — minimal or maximal — the state's superstructure is based on, it has definite role in providing security. In the case of the minimal state, this role is likely to be limited to military and certain aspects of political security sectors. In the case of the maximal state, its role appears in all sectors of security.

The main requirements for the state executive apparatus to be brought forth are as follows: at the minimum, the state has responsibilities to provide for military and limited political security, with the focus on development and sustainment of strong idea of state. To that end, the executive apparatus of the state should be developed and maintained in a way that ensures the ability to act within both military and political sectors, and provide expertise for legislation in all sectors, whilst operating on shared doctrinal basis.

It has been established above, that contemporary security environment is characterized by uncertainty, complexity, and rapid changes. In the same time, the resources at the disposal of any country to counter security challenges emerging from this uncertain, complex and rapidly changing environment have became more and more constrained. The question now arises, which defense planning methodology should guide the development of a

defense apparatus and allocate scarce resources for countering security challenges that best suits this environment.

Analysis proves that the method which suits the best contemporary security environment characterized by uncertainty, complexity and rapid change; as well as increasingly limited resources available for the defense is capability-based planning. Generically, CBP consists of the following key components:

- Policy guidance
- Development of scenarios to guide contingency planning
- Identification of Missions
- Development of Capability Requirements
- Identification of Capability Gaps
- Development of Solutions to bridge Capability Gaps
- Selection and Approval of Solutions that will guide further resource allocation.

It has been established that a state is responsible for providing military security to the nation; and to that end an executive apparatus should be developed. This apparatus should be capable of operating under the circumstances of complexity of security challenges within an uncertain and rapidly changing environment, and under resource constraints. One of the key requirements to *modus operandi* of such a system is to ensure allocation of limited resources to meet the most high priority security challenges.

Methodology that meets these requirements is a planning, programming and budgeting system. Conceptually, the PPB system is a set of rules, procedures, and techniques introduced for the specific purpose of improving high level planning. Its product is a multi-year budget, which lists the programs and/or major activities of an organization, and assigns all costs associated with each. The system enables the decision-maker to see the future implications of today's choices and to evaluate the organization's progress toward its stated objectives. PPBS combines systems analysis and program budgeting. Two imperatives should always be followed: in planning, look broadly at the costs and benefits of alternative plans, measurable and immeasurable; and link planning and budgeting, so that planning is realistic and effective and leads, rather than follows the budget. In other words, the PPB system is developed to support informed decision-making about the allocation of resources to meet crucial security challenges based on explicit criteria, and to promote consensus on strategic objectives and priorities, by means of program budgeting that ensures orientation of the defense organization to quantifiable outputs projected over extended time horizon.

The generic PPB system consists of three phases. The planning phase addresses national security and defense concerns in medium-term framework. In particular, broad national and derivative military security objectives

and policies to attain these objectives are defined, military responses to identified security challenges are developed, outlines and priorities of military organization tailored to meet set objectives are established, and milestone activities to develop or sustain military capabilities required to implement established policy and carry out strategy are identified.

The programming phase encompasses, first, the development of fiscally constrained service program proposals, representing a comprehensive and detailed expression of the total requirements to accomplish the service mission set in planning phase. Secondly, the programming phase encompasses cross-program analysis in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output.

The budgeting phase encompasses converting resource requirements into a comprehensive defense budget, based on the information from the approved medium-term plan and incorporating the latest fiscal and policy decisions.

In a broader sense, then, the key criteria a coherent and efficient National Defense Organization needs to meet are:

- **uniformity** of conceptual basis of all security-providing agencies;
- **responsiveness** of the whole organization, and all its components, to rapidly changing situation;
- **feasibility** of the organization under increasing constrains in all major types of resources – time, money and people.

Based on above-outlined criteria, the specific ('benchmark') questions to validate the hypothesis should be as follows:

- does the system ensure the ability of the state to tackle challenges within the military and political sectors of security, i.e. securing the territorial integrity and coherence of state's superstructure under conditions of use, or threat of use, the military force, and secure intactness of legitimacy of the state;
- does the system ensure the availability of professional expertise to support the development of national legislation and inform political guidance;
- does the system ensure a uniform doctrinal basis for all security-providing agencies;
- does the system ensure the responsiveness to rapidly changing situation, to include providing for inter-agency coordination, cooperation, and interoperability; and,
- does the system ensure the allocation of resources to meet the most high priority challenges within existing constraints?

The current writer argues that two methodologies discussed above — Capabilities-Based Planning (CBP) and Planning, Programming and Budgeting

System (PPBS) — complement each other. The CBP is developed specifically to operate under conditions of uncertainty, i.e. under the characteristic feature of a modern security environment. The PPBS, in turn, does not specify the requirements for the methodology used in the planning phase of the process. Instead, PPBS focuses on the execution of the priorities and findings of the CBP through the allocation of resources to meet crucial security challenges. Hence, the utilization of CBP methodology would provide for the identification of security challenges and the development of military responses to them; whereas the utilization of PPBS would limit itself to effecting the optimal allocation of resources.

The hypothesis of this study is that the national defense organization which operates as Planning, Programming, Budgeting and Execution System (PPBES), utilizing a capability-based approach for the analysis of current security environment and planning relevant response activities, and a program-based approach for identifying and managing necessary resources to develop and sustain required capabilities would meet the 'benchmark' criteria established above.

The suggested defense planning system is military capabilities-based. The Operational Planning and associated force development processes should look towards the development of those military capabilities necessary to meet a range of operational requirements and tasks, specified through political guidance. This system is suited to today's security environment where specific threats are unclear, clear-cut military responses are inevitably rare, and the range of potential military tasks is determined more by security commitments, rather than threats alone.

In the context of this system, military capability is defined as the quantitatively measurable capacity of each structural element of the defense force to perform a given task under specified conditions up to established standards. Each structural element may have more than one capability and each capability may be carried by more than one structural element. For the purposes of this study, it is important to bear in mind that no capability exists independently from the structure — organization, people, platforms, systems and procedures — actually carrying that capability!

Within this system, the Operational Planning Process (OPP) is the key method to determine capability requirements for the various force elements. Operational planning is carried out within a strategic framework and seeks to translate strategic guidance and direction into a scheduled series of integrated military actions that are to be carried out by forces to achieve strategic objectives efficiently and with acceptable risks. At the strategic level, operational planning involves the identification of strategic military objectives and tasks in support of the National Security Concept (and National Military Strategy) through the development of formal national-level operation plans,

and the development of the force and materiel requirements necessary to accomplish those tasks.

Based on the planning timeframe, the suggested defense planning system is divided into long-term (10–15 years), medium-term (5–7 years), and short-term or annual planning. Based on the objective of planning, the system is divided into capability-based and resource-based planning cycles. Functionally, this planning system is composed of planning, programming, and budgeting. The fourth basic component — reporting — should ensure adequate feedback to both capability-based and resource-based planning cycles.

The whole planning system (with the exception of formal military operational planning, not to be addressed in detail within this study) is based on seven major guiding, planning, and reporting documents:

1) National Security Concept;
2) National Military Strategy;
3) Chief of Defense's (CHOD's) Private Requirements Report;
4) Joint Military Capabilities Plan (JMCP);
5) Military Requirements Plan (MRP), that includes relevant Planning Guidance and future year programs for five years after the next;
6) next year's Annual Budget and Action Plan (ABAP), to include relevant Planning Guidance;
7) Annual Report (AR).

The National Security Concept and National Military Strategy should constitute, in combination, a strategic-political level direction that describes national perception of security environment, identifying security risks and challenges, and providing guidance for the development of responses to identified security challenges (strategy), as well as for the development of national defense organization streamlined to implement developed response options. These strategic-political level guidelines, approved at the level of political leadership of the country, are not itself part of the routine defense planning and execution process in the meaning of this study, but establish broad policy and resource objectives and priorities to guide the national defense organization to achieve a government's policy aims.

The 5-year Military Requirements Plan (MRP), Annual Budget and Action Plan (ABAP), and Annual Report (AR) constitute the core of the annual planning and management system, with these living documents updated annually. Detailed guidance for the preparation of both the MRP and ABAP is provided through the Minister's and CHOD's annual Planning Guidance documents. These documents incorporate the results of what was and was not accomplished out of the requirements established by the analysis of previous year's report, as well as other relevant decisions and priorities.

The Joint Military Capabilities Plan (JMCP), which is based on the National Security Concept (NSC) and National Military Strategy (NMS), does not need to be updated annually and remains generally unchanged for a longer period, until changes in NSC and/or NMS require its revision. Updates to the JMCP, which do not alter the ground laying political guidance provided by the NSC and/or NMS, are made by reviewing and revising select parts of the JMCP (e.g., ministerial level planning guidance, Contingency Plans) as required.

The first phase of this suggested system is national-level defense planning. The purpose of planning is to identify, based on principles specified in NSC and NMS, the tasks and mission requirements for the defense forces, and, critically, the specific capabilities that need to be developed within it. The primary outcome of the planning phase is the Joint Military Capabilities Plan (JMCP), which includes identified shortfalls in capabilities of the existing force structure, organized into Mission Areas. These identified shortfalls or capability gaps will be the primary inputs for future programming. The JMCP integrates into a comprehensive framework the contingency planning guidance, key planning tools, as well as outcomes of the planning process.

Based on the JMCP, the resource, training, and readiness requirements, as well as development priorities of the armed forces, can then be specified as part of the programming phase of the medium-term planning cycle. The development of the entire JMCP is not a part of annual routine. However, certain parts of the JMCP need to be reviewed annually and updated as necessary.

The second main phase of this planning system is programming. It is based on the outcomes of planning, which should emphasize addressing capability gaps — i.e., recognized differences between required and existing capability — identified during the planning phase. A key output of the programming phase is the production of the Military Requirements Plan (MRP). The MRP addresses capability gaps in the current force structure and describes, in a phased and sequenced manner, the ways and means to overcome these deficiencies. In so doing, the MRP outlines a proposed force structure, which is designed to meet the operational requirements outlined in the NMS and further defined in much greater detail in the JMCP.

The MRP serves as a basis for annual defense budgets. The MRP is an integral part of annual planning and execution routine and covers years 2–6 of the medium-term planning cycle. Every year, the first year of approved MRP will serve as a foundation for next year's Annual Budget and Action Plan, with the time period covered by the new, revised, MRP sliding one year into the future.

The third phase of the planning system is budgeting, which is based primarily on the outcome of the programming phase, i.e., the MRP. The principal outcome of this phase — the Annual Budget and Action Plan — is de-

veloped based on the first year's development plan of the approved MRP and follows the same format. In order to link the Action Plan with finances, Major Defense Programs in the format of a state budget are used. Annual Budget and Action Plan constitutes an integral part of the annual planning and execution routine.

The fourth phase of the planning system is reporting. Reporting is conducted in two major areas: financial reporting in accordance with the relevant Ministry of Finance's regulations and activities' reporting. The Annual Activity Reports should provide adequate feedback for both the Capability-based and Resource-based planning cycles.

Validation of the concepts and characteristics of suggested planning, programming, budgeting and execution system against earlier established criteria produced the following findings:

- the suggested system ensures ability of the state to tackle challenges within military and political sectors of security, depending on the degree and consistency key tools, concepts and processes are utilized by executive agents responsible for respective sector;
- the suggested system ensures availability of professional expertise to support the development of national legislation and political guidance. In terms of procedures within the defense sector, providing this expertise is institutionalized; at the national level, expertise is made available;
- the suggested system ensures uniform doctrinal basis for executive agents within military security sector; and potentially for all security-providing agencies, if implemented across all relevant executive agents;
- the suggested system provides for in-country inter-agency coordination, cooperation, and interoperability between defense and security forces. Suggested system also provides for international inter-agency coordination, cooperation, and interoperability between defense forces or security forces of countries that have adopted this or similar methodology. The system also ensures responsiveness to rapidly changing situation within limits set by the very nature of functioning of state apparatus as complex hierarchical system;
- the suggested system does ensure allocation of resources to meet the most high priority challenges within existing constraints.

Hence, it is credible to conclude that the hypothesis — National Defense Organization which operates as planning, programming, budgeting and execution system (PPBES), utilizing capability-based approach for the analysis of current security environment and planning relevant response activities, and program-based approach for identifying and managing necessary resources to develop and sustain required capabilities — meets all 'benchmark' criteria derived from the concept of multisectoral security, characteris-

tics and requirements of contemporary security environment, and roles and responsibilities of state in providing security, and is therefore valid.

In the end, it should be underscored that, although this system has been validated as the one designed to tackle uncertainties of a security environment and to produce the best possible security under existing resource constraints, this system can not turn poor judgment into good; it can not prevent poor or haphazard analysis; it can not guarantee leadership, initiative, imagination, or wisdom. It can be a splendid tool to help top management make decisions; but there has to be a top management that wants to make decisions.

Chapter 1.
SELECTING THEORETICAL FRAMEWORK

■

The first chapter is dedicated to establishing a theoretical framework for this study. In the beginning of this chapter, the author will discuss three system-level theories of international relations — realist, neoliberal institutionalist, and social constructivist theories.

The classification of international relations theories into system-level and middle-range theories has been shown by Dougherty and Pfaltzgraff (1990). Such categorization is not very strict as some theories might fall between the two categories, whereas others might not even fit the definition of 'theory' (in terms of their explanatory and predictive capability) at all. However, a closer look at the mentioned theories is considered useful in this dissertation as they attempt to explain in a generalized way a wide range of phenomena — in the context of the present study, realism, neoliberal institutionalism and social constructivism provide the most general framework for understanding a states' behavior in providing for their security.

It can be said that, in essence, these theories outline two alternative approaches to the term 'security'. Realist and neoliberal institutionalist theories see security as a function of power, whereas social constructivists see security as social construction. The implied behavior of actors (states) in achieving their security, however, could vary considerably in the case of each theory.

The objective of this discussion is to derive some key features of the notion of 'security' within these alternative concepts and to compare them. After that, additional attention will be paid to drawing empirical data from some exemplary national policy documents with regard to what real states in the real world consider their security concerns.

And finally, an analysis will be undertaken to establish which of the examined approaches corresponds better with reality. In other words — which of the approaches suits better to manage the security concerns, states have actually formulated.

For any study trying to address the problematique at the crossroads of several distinct (yet closely related) disciplines, the question of theoretical framework is of utmost importance, since that choice to a large extent also predetermines the scope of deliberations and puts its limitations to expected outcome.

This chapter is, therefore, dedicated to discussion of broad concepts of security in order to decide which of the available theories serves the best the

purposes of this study — development and validation of a national-level defense planning and management system for small states[2]. The lens through which the whole paradigm of security will be seen is that of the executive apparatus of a sovereign state. In the context of this study, this executive apparatus is seen as distinct from elected political decision-makers, as well as from broader strata of 'informed and interested' opinion leaders, pressure groups, and defense intellectuals of any given country. Conceptually, within the framework of this study, the executive apparatus could be seen as a 'black box' supporting elected political decision-makers in the identification of security challenges, and developing and implementing ways and means to cope with these challenges in response to the political will expressed by the elected leaders.

For the purposes of choosing the theoretical framework, the notion of security is looked at from two aspects. From one side, the conceptual meaning of security, i.e. how security is defined in relation to concepts of statehood, international relations etc.; from the other, the substantial meaning of security, i.e. what fields or aspects of reality are or could be embraced under the notion of security.

Three mainstream 'families' of theories will be examined below: realist, neoliberal institutionalist, and social constructivist.

Perspectives on international security by system-level theories

Realist theories

Dunne and Schmidt have distinguished four different schools of realist thinking throughout its history: two types of structural realism (key authors being respectively Thucydides and Waltz); historical realism (represented, for instance, by Morgenthau); and liberal realism (Hobbes, Bull). (Dunne and Schmidt 2001, 149) Further, after the end of the Cold War, other

[2] In the context of this study, the term 'small state' refers to Crowards' classification and incorporates 'small', 'medium small' and 'medium large' states, with the population ranging from 0.5 to 12 million, and GDP from 0.7 to 19 billion USD. (For details, see Crowards 2002) Of these two parameters, the population is considered more important for this study, for it will limit conceivable size of the executive apparatus of the state. This, in turn, will constrain capabilities of this apparatus to handle any possible planning and management system. The other parameter of 'small state' — its GDP — underscores the limited nature of resources at the disposal of the state.

branches of realist thinking like 'realist institutionalist approach' (Schweller and Preiss 1997, Krebs 1999) and 'postclassical realism' (Brooks 1997) have been developed by modifying Waltz's basic approach.

Of these different branches of the realist school of thinking, neorealism, postclassical realism and realist institutionalism are considered to provide a sufficiently wide cross-section of contemporary realist views on international relations. They all deal with the issue of a state's survival in an anarchic international environment.

Neorealism

In 1979, Waltz published a systemic theory of international politics where states as the main actors in international politics are viewed as being functionally similar and having similar interests. A state's primary goal is survival, as this is a prerequisite to the achievement of all other goals. (Waltz 1979, 91–95) States, under this approach, are considered to operate in an anarchic environment, that is, one lacking any central authority where all members of the system are formally equal. In reality states are not equal, though. They are characterized by their different capabilities including size of population and territory, availability of resources, economic capabilities, military strength, political stability and competence. (ibid., 131) The anarchic nature of the environment turns the international system into one of self-help where the existence of units depends on their own efforts. Such a system encourages states to worry about relative gains in cooperation as these gains may be used against them, as well as to value short-term goals over long-term goals. (ibid., 105) One of the key variables Waltz introduced was 'structure'. Structure conditions the outcomes of state activities. In general terms, structure is one of the two main components of the political system in structural realism (the other being 'units', i.e. states). (ibid., 79) Under neorealism, political structure designates the set of constraining conditions. Structure depends on the principle by which a system is ordered (that is anarchy for the international system) and the distribution of capabilities between units. (ibid., 100–101) Hence, in the neorealist world states are under constant threat, and they must keep their defense effort at a very high level in order to survive. In the world of Kenneth Waltz, a state's security is a product of self-help in a world where material factors have a predominant effect on a state's survival.

Postclassical realism

This theory considers states as rational central actors of the international system that egoistically pursue their goals and views international politics as competitive. Postclassical realism also stresses the importance of material factors rather than non-material factors such as ideas and institutions. States

are seen as seeking *both* security and power. The postclassical world is a place where states have a choice, and the ultimate goal for a state is to seek ways to increase its economic resources that is its long-term power. In foreign policy, this goal is reflected as a state's desire to control and shape its external environment. (Rose 1998, 152) Power is needed to increase the flexibility of a state in pursuit of its other interests. (Brooks 1997, 462) Instead of seeing the likelihood of conflict as a constant possibility conditioned only by structure and distribution of capabilities among states, postclassical realism sees it as being dependent on other variables as well: in particular, technology, geography, economic pressures. (ibid., 456) Postclassical realism sees states willing to use their military force only when it is the most cost-effective way to increase their power (e.g. through conquest). (ibid., 463) It also allows for a search of domestic-level explanations (decision-making) in explaining trade-offs made between different policies (despite focusing primarily on material factors operating at the international level). (ibid., 471) Thus, states in the postclassical world are rational actors that can moderate their defense effort in accordance with the external pressures and state interests. Defense planning becomes thereby a much more rational process, and it has a more varied effect on the state's overall security situation.

Realist institutionalism

To accommodate the changes that have taken place after the end of the Cold War, especially the persistence and growth in importance of international institutions, state-to-state interactions have been proposed as an additional variable between neorealism's unit and system level variables. It has been seen as a way to overcome "…neorealism's ultraparsimonious, structural formulation that now appears more as a theoretical straightjacket than progressive research paradigm." (Schweller and Priess 1997, 9) Power and interests of dominant members of the system, realist institutionalists claim, form the foundation of rights and rules in the international system. (ibid., 10) Thus, balance of power systems could be considered as negotiated orders from the perspective of great powers and imposed orders from the perspective of secondary powers. The legitimacy of international order and associated institutions arises not only from coercion, but also through providing tangible benefits to weaker states and from socializing the elites of these states to the value system of more powerful states. The stability of international order and associated institutions depends mainly on a balance of power between status quo and revisionist states. The balance at the systemic level is achieved when the revisionist (power maximisers) and conservative (security maximisers) forces are in balance. This way, institutionalist realism offers (as did postclassical realism) perspective of rational state behavior. In

an institutionalist realist world, there are states willing to change the international system and those trying to defend themselves. Again, defense planning is aimed at tackling rationally calculable military challenges.

Neoliberal institutionalism

Neoliberal institutionalism shares several basic assumptions with realist theories. It views states as central actors in international system and treats them as rational actors pursuing their interests. Neoliberal institutionalism suggests the possibility for states to pursue more varied interests than survival and/or power maximizing and to seek cooperative action in support of such interests in the anarchic international environment. Neoliberal institutionalism treats states as rational egoists who can create and maintain principles, norms, rules and decision-making procedures, that is, institutions (or regimes) to reduce discord between them. (Krasner 1983, 2; Keohane 1984, 83–84) Rational egoism means also that state action is based on rational calculation, that "…leaders will seek to maximize *subjective* expected utility." (Keohane 1993, 288, original italics) International regimes have been seen as an intervening variable standing between the basic causal variables (power and interests), and outcomes and behavior of states. (Krasner 1983, 5–9) Finally, according to Keohane, "…states can use regimes to pursue their parochial and particularistic interests, as well as more widely shared objectives." (Keohane 1983, 171)

For the purposes of this study, it is important to underscore that regarding the conceptual meaning of security — how security is defined in relation to concepts of statehood, international relations, etc. — realist and neoliberal institutionalist schools of thought share a common approach, i.e. they see security as being provided in an anarchic environment . However, states can and do cooperate. Thus a defense effort can be reduced and coordinated at levels that are barely imaginable in the cases of various realisms.

Social constructivism

According to Wendt, "…social constructivism is a structural theory of international system that makes the following core claims: (1) states are the principal units of analysis for international political theory; (2) the key structures in the system are intersubjective, rather than material; and (3) state identities and interests are in important part constructed by these social structures, rather than given exogenously to the system by human nature or domestic politics". (Wendt 1994, 385) Social constructivism is based on two main

principles: people act toward objects and other actors on the basis of the meanings that objects and actors have for people; the meanings in terms of which the action is organized arise from interaction. (Wendt 1992, 396,403) Constructivist theory postulates that actors (states, nations) acquire their identities by participating in intersubjective understandings and expectations that constitute their conceptions of 'self' and 'other'. A state's social identity is defined as "…relatively stable, role-specific understandings and expectations about self." (ibid., 397–398) Identities are the basis of actors' interests and social identities are the key link in the mutual constitution of agent and structure. The corporate identity of the state generates four fundamental interests of the state:

- Physical security, including its differentiation from other actors;
- Ontological security or predictability in relationships to the world, which creates a desire for stable social identities;
- Recognition as an actor by others, above and beyond survival through brute force;
- Development, in the sense of meeting the human aspiration for a better life, for which states are repositories at the collective level.

In contrast to singular corporate identity states usually have multiple social identities. (Wendt 1994, 385; 1999, 224–230) Social constructivism does not see anarchy and self-help as independent variables influencing states' behavior. The meaning of 'anarchy' depends on how states see their security. In particular, if states identify negatively (one's gain in security is other's loss) or indifferently (they do not see their security as interconnected) with each other, the international security system is that of self-help. If states perceive the security of each state as the responsibility of all, the system is not of self-help, and may range from concerts to well-institutionalized collective security. (Wendt 1992, 400) Therefore, anarchy is related to insecurity and the importance of relative power only because of collective insecurity-producing practices states resort to. Anarchy is, then, according to Wendt, one of the two major systemic determinants of a state's self-interest or egoism. The second determinant is sovereignty, which social constructivism sees as being a social identity. It provides for satisfying the corporate needs for security and recognition as well as enables states to legally determine their own interests. (Wendt 1994, 388)

In sum, in the constructivist world, states shape their identities that they strive to protect from everything that could undermine them. It is also a task of the defense sector. Social constructivism provides a new theoretical dimension for the analysis of state behavior. Instead of being rational actors in an objective world, states largely shape their world, as well as their security concerns.

Summary of system-level theories

The system-level theories discussed above outline different perspectives of the international system. Realist theories see the international system as a competitive one, where states are led by objectively defined self-interest in competition for survival and/or power. States could co-operate, but for a limited time and in limited range of issues. Security concerns arise from other states and are military in nature. Hence, in a realist world, defense planning and management efforts of states — and particularly their executive apparatuses — are the primary tool for achieving national security.

Neoliberal institutionalism treats states as rational egoists that are able to moderate their security competition and actually co-operate in the security field. States are able to establish institutions that could deal with concerns of collective security. In the neoliberal institutionalist world, defense planning and management could be opened to other states and coordinated.

Social constructivism focuses on a states' role in shaping their identity and international system, and derives security concerns from there. To put it otherwise, in a social constructivist world, the primary interest of a state is to protect its identity (sovereignty). The way how this identity is constructed, however, implies that there are less objectively existing threats to states' identities and security than realist or neoliberal institutionalist approach would identify, but these threats could manifest themselves through a much wider array of perceived challenges than merely military. Therefore, the social constructivist approach to security deserves closer examination.

Multisectoral security theory

A comprehensive application of social constructivist school of thought to a security field is a concept of multisectoral security, developed by Barry Buzan and his colleagues. This concept is a clear alternative to realist-objectivist one, for it sees security in relative terms. In words of Barry Buzan: "Security is a relational phenomenon. Because security is relational, one cannot understand the national security of any given state without understanding the international pattern of security interdependence in which it is embedded." (Buzan 1991, 187) That approach opens a whole different perspective of handling security issues. It underlines the basic assumption that security is not defined in objective terms — as an array of discrete values of some established indicators — but rather in relation to some perceived dynamics of state's affairs. Moreover, this statement also implies that there is likely more in security than pure power-balance. As Buzan and his colleagues point out: "The need is to construct a conceptualisation of security

that means something much more specific than just a threat or problem. Threats and vulnerabilities can arise in many different areas, military and non-military, but to count as security issues they have to meet strictly defined criteria that distinguish them from the normal run of the merely political." (Buzan, Waever and de Wilde 1998, 5) Hence, a distinction between 'normal' and 'extraordinary' modes of handling state's affairs has been brought in. In this regard, it is relevant to underline that "in theory, any public issue can be located on the spectrum ranging from nonpoliticized (meaning the state does not deal with it and it is not any other way made an issue of public debate and decision) through politicized (meaning the issue is part of public policy, requiring government decision and resource allocations or, more rarely, some other form of communal governance) to securitized (meaning the issue is presented as an existential threat, requiring emergency measures and justifying actions outside the normal bounds of political procedure)." (ibid., 23–24) Therefore, in order to become a security issue, threats and vulnerabilities must be securitized, "they have to be staged as existential threats to a referent object by a securitizing actor who thereby generates endorsement of emergency measures beyond rules that that would otherwise bind." (ibid., 5) Or, to restate the main idea, "security issues are made security issues by acts of securitization. …Security *is* a quality actors inject into issues by securitizing them, which means to stage them on the political arena in the specific way…and then to have them accepted by a sufficient audience to sanction extraordinary defensive moves." (ibid., 204) The important aspect in this approach is that although some of the realist's instruments — category of threat, survival of a unit — have been employed, a considerably different frame of reference has been constructed. First, in relativist approach — and this is the link to the world of realism — "…security is about survival. It is when an issue is presented as posing an existential threat to a designated referent object (traditionally, but not necessarily, the state, incorporating government, territory, and society)." (ibid., 21) But Buzan and his colleagues take the issue further and argue, "The special nature of security threats justifies the use of extraordinary measures to handle them." (ibid.) The key element of the concept relativist approach is bringing in, is a securitizing actor, some institution who legitimately can — and in many formalized structures usually must — attach the label of security to issues constituting existential threat to a referent object that institution is responsible for. In words of Buzan et al.: "'Security' is the move that takes politics beyond the established rules of the game and frames the issue either as special kind of politics or as above politics." (ibid., 23) The capstone of this approach is well formulated as follows: "What is essential is the designation of an existential threat requiring emergency action or special meas-

ures and the acceptance of that designation by a significant audience." (ibid., 27)

Technically, the move itself by which an issue is securitized is known as a speech act. In the words of Ronnie Lipschutz, "As a speech act, security is about specifying, through discourse, the permitted conditions under which acts that 'secure' the state can take place." (Lipschutz 1995b, 216) Or, in more concentrated form: "…the *word* 'security' is the *act*; the utterance is the primary reality." (Waever 1995, 55) This notion of labeling an issue as a security issue through a speech act leads to the conclusion that "'Security' is thus a self-referential practice, because it is in this practice that the issue becomes a security issue — not necessarily because a real existential threat exists but because the issue is presented as such a threat. …A discourse that takes the form of presenting something as an existential threat to a referent object does not by itself create securitization…but the issue is securitized only if and when the audience accepts it as such." (Buzan, Waever and de Wilde 1998, 24–25)

The latter clause is also very important, since it implies not only a security move by a securitizing actor but also requires acceptance of securitization of that particular issue by a sufficiently wide audience. In other words, "…securitization is essentially an intersubjective process. The senses of threat, vulnerability, and (in)security are socially constructed rather than objectively present or absent." (ibid., 57)

In terms of a securitizing actor, Ronnie Lipschutz claims that "…the logic of security is exclusionist: It proposes to exclude developments deemed threatening to the continued existence of that state and, in doing so, draws boundaries to discipline the behaviour of those within and to differentiate within from without. The right to define such developments and draw such boundaries is…the prerogative of certain state representatives…" (Lipschutz 1995b, 214) With respect to the latter clause, Ole Waever holds a view that "Security is articulated only from a specific place, in an institutional voice, by elites." (Waever 1995, 57) Or, in other words, "…a problem would become a *security* issue whenever so defined by the power holders." (ibid., 56)

Hence, it is plausible to assume that the process of securitization, embracing both its aspects — security move and its acceptance — is somehow formalized in mature societies. Most likely, it is the state executive apparatus which is legally and procedurally designated to undertake securitizing moves if deems it necessary, and the mechanisms of elections, referenda or vote at legislative body are in place to either accept or reject the move. Naturally, the scope of actors in a securitization process is far from being limited to state structures. "In democracies, many voices, including pressure groups and defence intellectuals, will engage in the discourse of securitization…" (Buzan, Waever and de Wilde 1998, 55)

Another aspect of securitization, to be briefly mentioned here, is that of the nature of the threat. Depending on the nature of the threat in question, "securitization can be either ad hoc or institutionalised. If a given type of threat is persistent or recurrent, …the response and sense of urgency become institutionalised." (ibid., 27) Familiar examples of an institutionalized response to persistent threat are state's standing military, with its intelligence, planning and execution assets, procedures and responsibilities; also internal security agencies — the police, ambulance service, or border guard.

In the broader context of placing issues into non-politicized, politicized, or securitized realms of societal life, it is important to bear in mind that "use of security label does not merely reflect whether a problem *is* a security problem, it is also a political choice, that is, a decision for conceptualisation in a special way. When a problem is 'securitized,' the act tends to lead to specific ways of addressing it: Threat, defence, and often state-centred solutions." (Waever 1995, 65) In other words, politicizing or securitizing an issue does not merely alter the rules or procedures according to which the issue will be handled — from forming public opinion to drafting the legislation to developing contingency war-plan — but it also to a large extent predetermines the available or publicly acceptable set of solutions to the problem at hand. For by definition, to successfully securitize an issue means granting to securitizing actor "…a right to handle the issue through extraordinary means, to break the normal political rules of the game (e.g., in the form of secrecy, levying taxes or conscription, placing limitations on otherwise inviolable rights, or focusing society's energy and resources on a specific task)." (Buzan, Waever and de Wilde 1998, 24) To put it bluntly: "The main political function of national security is justify the use of force." (Buzan 1991, 89)

And last but not the least aspect of securitizing, the one that actually has its mirror image in the realist' world — top priority of handling sovereignty-related threats — is useful, though also a potentially dangerous political quality of security, "...the action priority that it creates. …The word itself is therefore a powerful tool in claiming attention for priority items in the competition for government attention." (ibid., 370)

To generalize

Within the concept of realists and neoliberal institutionalists, according to Frederick H. Hartmann and Robert L. Wendzel, "…there exist threats to the territory of one state posed by the activities of other states. In this…world, with each state in command of a discrete territory and population, and with

each capable of monopolizing the legitimate use of force within that territory, the essential security function remains…self-defence and, if necessary, war. Other threats may exist and be of concern to governments but, according to the traditional line of thinking, they are not security threats." (Lipschutz 1995a, 5) Or, restating this idea, "In traditional … representations of world politics as the struggle for power among states, the will to security is born out of a primal fear, a natural estrangement and a condition of anarchy which diplomacy, international law and the balance of power seek, yet ultimately fail, to mediate." (Der Derian 1995, 27) This view of security takes its roots in the world of anarchy, where "the use and threat of force are well understood to be a deeply embedded feature of anarchic international relations. …States in an anarchy require military power both for their own defence and for the broader security purposes of system management. But once acquired, such power generates a counter-security dynamic of its own which threatens both individual states and the order of the system as a whole." (Buzan 1991, 270) This is the world that continues to exist and operate along the logics of neorealism and interdependence. "In that world, all states are external to one another and view each other intersubjectively. Security is defined in terms of one or more of these external actors penetrating the threatened state in some material fashion. Missiles, pollutants, and immigrants all come from the 'outside' and menace the inside." (Lipschutz 1995a, 19) To put it otherwise, the basic political unit of security as a function of power approach is a sovereign state that is seen as a single entity that pursues its interests and, in doing so, interacts with other sovereign states that are pursuing their interests. Naturally, the interests, policies developed to pursue these interests, and actions to implement these policies by different states may — and often do — conflict with each other. As a result of this conflict, one or another sector of state's life — or even existence of the state itself — could be threatened by other states in one or another way, by military as well as by non-military means.

Within the framework of this approach to security, "…policymakers define security on the basis of a set of assumptions regarding vital interests, plausible enemies, and possible scenarios, all of which grow, to a non-insignificant extent, out of the specific historical and social context of a particular country and some understanding of what is 'out there'." (Lipschutz 1995a, 10) A number of distinguished scholars, for instance Morgenthau, Aron, and many others, took the position that, "…to ensure its security, a state would make its own choices according to expediency and effectiveness, and these might not always involve military means. A state would make threats in the sector in which the best options were available. A response (security policy, defence) would often, but not always, have to be made in the same sector, depending on whether one sector might overpower another,

and military means simply were often the strongest available." (Waever 1995, 52) In other words, the policies that a threatened state develops to cope with the consequences of this conflict of interests are seen as those of a power-based approach, attempting to balance against the strongest opponent, whereas the means to be employed are often military.

Hence, within this state-centric concept, "…security problems are developments that threaten the sovereignty or independence of a state in a particularly rapid or dramatic fashion, and deprive it of the capacity to manage by itself." (Waever 1995, 54) Or, in words of Buzan: "…national security is about the ability of states to maintain their independent identity and their functional integrity." (Buzan 1991, 116) Departing from this understanding of security problem, the question arises, can we define the nature of the security problem in more precise way? Waever suggests, "…The basic definition of a security problem is something that can undercut the political order within a state and thereby 'alter the premises for all other questions.' …*Survival* might sound overly dramatic but it is, in fact, the survival of the unit *as* a basic political unit — a sovereign state — that is the key. Those issues with this undercutting potential must therefore be addressed prior to all others because, if they are not, the state will cease to exist as a sovereign unit and all other questions will become irrelevant." (Waever 1995, 52–53) The latter statement gives an important requirement for the development of the state's security policy — namely, this policy must address the issues that have potential to endanger the survival of the state. Following the logic of security as a function of power, Matthews, Lipschutz and others understood "…security policy to be largely the result of the rational assessment, by knowledgeable analysts, of a universe of potential threats, of varying risk, to which a country might be subjected. These clearly defined and bounded threats could be countered by appropriate means, including the development and deployment of new weapons systems, shifts in military doctrine, and payoffs to allies." (Lipschutz 1995a, 6) Or otherwise, in the context of security as a function of power, state's security policy is developed by rationally analyzing quantified threats, and responses to that defined array of threats are also quantified, based on the same logic rational analysis. Security, in this meaning, is thus "…a kind of stabilization of conflictual or threatening relations, often through emergency mobilization of the state." (Buzan, Waever and de Wilde 1998, 4)

To sum up, the **'security as a function of power' approach** has the following characteristic features: the basic unit of the concept is a sovereign state; these sovereign states operate and interact with each other in anarchic environment; each state has its own interests to pursue; policies developed to pursue these interests are result of rational analysis; activities of states while pursuing their interests are often seen as threatening other states; the threats

to other states are seen as objective and quantifiable; these threats could be countered by objective and quantifiable means; the cornerstone of security problematique is survival of a sovereign state, therefore appropriate actions must be taken in the first priority.

From the sovereign state's perspective, then, security is something objective and rests basically in the sovereignty and independence of that state. Sovereignty and independence could be threatened by measurable actions of other states, and restored if appropriate and measurable counter-actions are taken. This approach implies that a necessary and sufficient set of indicators could be developed, monitoring of which actually drives security-providing actions.

The characterizing features of the **relativist approach** to security are: the referent object may be other than sovereign state; on the international level, referent objects operate and interact under condition of anarchy; the threat, endangering survival of the referent object is relative to some perceived dynamics of affairs; any issue could be labeled as security matter, consequently, the security problematique is considerably wider than survival of sovereign state; there is a securitizing actor, who through the speech act (securitizing move) claims powers to handle the issue by extraordinary means; in order to succeed, securitizing move must be accepted by sufficiently wide audience; whilst securitized, the issue receives highest priority.

From the sovereign state's perspective, a relativist approach is also fully applicable: the referent object is (or could be among others) the sovereign state; the security is about survival of the referent object; the state's executive apparatus is most likely fulfilling the role of securitizing actor; implicitly required procedures of acceptance a security move are already in place; whilst recognized as such, the security receives highest priority in the agenda.

We will return to the comparison of these two broad approaches to security in the end of this chapter when the choice of methodology for the rest of this study has finally to be made. Meanwhile, we will address the other aspect of security — its substance.

Meaning of Security

A good point of departure to identify which spheres of societal life could be compiled under the notion of security is to look at empirical data, provided in official security policy documents of different states[3]. Comparative analy-

[3] The author of this study is painfully aware that official security policy documents, due to the interdepartmental nature of their development and approval procedures,

sis of risk perceptions of the Baltic Sea states has brought forward several issues from remarkably different spheres of life, considered as security risks. Sweden, for instance, sees the range of issues threatening its security being "…from global environmental and economic shocks, inadequate nuclear safety, increasing economic disparity, and refugees, to illegal immigration, organized crime, terrorism, and proliferation, to…the threat to use or use of limited force against Sweden." (Murumets 2000, 30). For other small states in the region, the spectrum of perceived risks is quite similar. For Norway, "…the risk of future military confrontation in our part of the world is minimal. …The further outlook for developments in the field of security policy is, however, uncertain. Norwegian security and defence policy must, therefore, also take account of challenges that could arise in the longer term. These challenges embrace everything from the infringement of Norwegian sovereignty to crises and even military attacks on Norwegian territory. Challenges against Norwegian security may also include other types of dangers such as proliferation of nuclear, biological and chemical weapons, terrorist attacks, environmental destruction, and international military crises and wars." (Norway 1998) The same concerns have largely remained in Norwegian threat perception five years later, although the priorities are somewhat changed: "International terrorism has become a major security challenge in the 21st century, and it will take major efforts to eradicate it. Other major security challenges are international organized crime and proliferation of weapons of mass destruction and their means of delivery. Less obvious, but just as important, are epidemic diseases, the increase in man-made catastrophes, mass displacement of people, hunger, ethnic and cultural conflicts." (Devold 2003) A similar and rather comprehensive risk analysis appears in Estonia's national security concept:

> The major risk to Estonia's security is potential instability and developments in the international arena that are politically uncontrollable, as well as international crises. …Estonia does not see a direct military threat to its security neither now, nor in the foreseeable future. …Just as there is no direct military threat, there is also no direct danger at present that Estonia would yield to outside politi-

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carry the manifestations of parochial interests and prejudices of all government agencies and officials involved in the drafting and coordination process, do present the least common denominator involved agencies were able to agree upon, and therefore are seldom consistent even internally, not to mention consistency with regard to any system-level theory discussed in the beginning of this chapter. However, these documents do reflect predominant patterns of thinking within the ruling elites of given state, and most certainly do influence day-to-day decisions made at top levels of the state activity.

> cal pressure to alter its domestic or foreign policy course. …Against a backdrop of a reduced military threat, rapid changes in the international arena, in economy and in technology have brought a number of so-called new, non-military risks to the fore. On a global scale these include ecological risks, the potential for ethnic conflict, international organised crime, the proliferation of weapons of mass destruction, and the potential volatility of social and economic problems. …In addition to ecological danger, economic and humanitarian catastrophes may result in floods of refugees and widespread inmigration, both of which have the potential to de-stabilise the states of the region. …The explosive growth of post-Cold War phenomena such as international organised crime and terrorism, as well as smuggling of narcotics and arms, among other things, can also influence Estonian society. The increasing use of electronic information systems in Estonia and their interconnectedness with global information systems increases the risk of computer crime as well as the vulnerability of the national information system. …New economic risks are inherent in increasing globalisation. Estonia's economy is strongly integrated into the global economy. For that reason, Estonia is vulnerable to possible global recession or fluctuations in markets important to Estonia. (Estonia 2001)

A broad spectrum of security risks — considerably broader than purely military — is reflected not only in threat perceptions of small states but appears also in those of European big nations. The seminal 1998 British Strategic Defense Review, for example, states: "Instability inside Europe as in Bosnia, and now Kosovo, threatens our security. Instability elsewhere - for example in Africa - may not always appear to threaten us directly. But it can do indirectly, and we cannot stand aside when it leads to massive human suffering. …There is an increasing danger from the proliferation of nuclear, biological and chemical technologies. …Drugs and organised crime are today powerful enough to threaten the entire fabric of some societies. …We have seen new and horrifying forms of terrorism and how serious environmental degradation can cause not only immediate suffering but also dangerous instabilities. And the benefits of the information technology revolution that has swept the world are accompanied by potential new vulnerabilities." (United Kingdom 1998) Another big European power — Germany — perceives as credible risks "instability, fundamentalism, terrorism, proliferation, and the escalation of ethnic, religious, and economic antagonisms." (Murumets 2000, 60) The most recent security policy document of Germany — White Book of 2006 — identifies as security risks globalization, terrorism, proliferation and military build-up, regional conflicts, illegal arms trade, obstacles to development

and fragile statehood, stable access to resources (in particular — energy resources), migration, and epidemics and pandemics. (Germany 2006, 17–20) Germany claims "The chief determinants of future security policy development are not military, but social, economic, ecological and cultural conditions, which can be influenced only through multinational cooperation. It is therefore not possible to guarantee security by going it alone, or with armed forces only. What is called for, rather, is an all-embracing approach that can only be developed in networked security structures based on a comprehensive national and global security rationale." (ibid., 22) Even former superpower — Russia — has included into the list of its security threats concerns about "proliferation, regional conflicts, terrorism, drug trafficking, and environmental problems including nuclear safety." (Murumets 2000, 100) Another, and contemporary superpower — the USA — stresses, unlike many other countries, the economic aspect of its security: "A strong world economy enhances our national security by advancing prosperity and freedom in the rest of the world." (U.S. NSS 2002, 17) and elsewhere: "A return to strong economic growth in Europe and Japan is vital to U.S. national security interests. We want our allies to have strong economies for their own sake, for the sake of the global economy, and for the sake of global security." (ibid., 18)

Obviously, these relatively lengthy lists of issues or events of security concern could be generalized under the reasonable number of more general categories. "The security agenda today is also broader and more varied than during the Cold War," reasons Denmark. "Firstly, it has become possible and necessary to see military issues in a wider context, including political, economic and cultural aspects. Secondly, there is an increasingly widely held view that new issues such as environmental damage, influxes of refugees and international, organised crime can be security problems on a par with traditional military challenges." (Denmark 1997) Although the basic security policy assumption remains intact: "The current security policy situation is characterised by the lack of a conventional threat to the Danish territory in the foreseeable future." (Denmark 2005, 6), the focal point of Denmark's security concerns have somewhat shifted since New York terror attacks of 2001:

> The terrorist attacks of 11 September 2001 and subsequent terrorist attacks in Europe and other places demonstrate that the security policy challenges and risks confronting Denmark and other nations have significantly changed. New asymmetric and unpredictable threats, such as international terrorism and the spreading of weapons of mass destruction and their means of delivery, have entered the scene.

> The threats do not have to originate from Denmark's geographical proximity, but may constitute a risk to Denmark, our allies and our common values, even if they manifest themselves further away. Accordingly, the priority of security policy should be aimed at possessing the capability to counter the threats where they emerge, regardless of whether this is within or beyond Denmark's borders. (ibid.)

Following Denmark's suit, Latvia declares, "The threat can emerge either in the political, military, economic, social, or ecological spheres, individually or in combination." (Murumets 2000, 88) Similarly, Finnish analysts have concluded that "International security and national security are ultimately based on a range of factors, which may be political, economic or military, or may concern human rights, the functioning of society, public order or environmental matters." (Finland 2001) As it comes to sustainability of these security trends, the British security community maintains: "…over the next twenty years, the risks to international stability seem as likely to come from other factors: ethnic and religious conflict; population and environmental pressures; competition for scarce resources; drugs, terrorism and crime." (United Kingdom 1998) To put the dot on i, Estonia's national security concept summarizes: "Security-related changes around the world have brought with them so-called new security risks as defined in NATO's strategic concept, such as the proliferation of chemical weapons and weapons of mass destruction, organised crime, floods of those seeking refuge from crises and catastrophes, and so forth." (Estonia 2001) In the most concentrated fashion, contemporary spheres of security concern have been listed in the document Estonia's national security concept refers to, the NATO's new strategic concept: "The Alliance is committed to a broad approach to security, which recognises the importance of political, economic, social and environmental factors in addition to the indispensable defence dimension." (NAC 1999) In sum, then, the examined empirical data have proven that a number of countries — small and large, allied and non-aligned — and their organization of collective defense have implicitly or explicitly grouped their security concerns into five sectors: military, political, societal, economic and environmental. The empirical data have also brought forward non-state actors (terrorist organizations, organized criminals, trans-national companies) in the field of security. These data lead to the conclusion that "the 'national' security problem turns out to be a systemic security problem in which individuals, states and the system all play a part, and in which economic, societal and environmental factors are as important as political and military ones." (Buzan 1991, 368)

For any theory, its' practical applicability serves as an additional criteria of trustworthiness. From that perspective, it is important to underline, that

the very same sectors of security, derived from empirical data, are an integral part of the relativist approach to security, briefly examined above. In the words of Barry Buzan: "… although 'national security' suggests a focus in the political and military sectors, where the state is most strongly established, the idea cannot be properly comprehended without bringing in the actors and dynamics from the societal, economic and environmental sectors." (ibid., 363)

Conclusions

With the latter statement in mind, it is time to return to the main purpose of this chapter — to choose the overarching theory that will guide the rest of this study. We have glanced at two fundamentally different approaches to the security problematique and defined their main features. The final comparison is needed. In fact, proponents of the new, multisectoral and relativist approach have come forward with their own analysis of two approaches: "the most obvious difference between our new [Buzan et al.'s] framework and the traditional approach to security studies is the choice of a wide (multisectoral) versus narrow (monosectoral) agenda. …Traditional security studies give permanent priority to one sector (military) and one actor (the state) plus any links or crossovers from other sectors that relate directly to the use of force. The two approaches are also incompatible methodologically to the extent that our [Buzan et al.'s] definition of security is based on the social construction of threats and referent objects, whereas traditionalists take an objectivist view of these factors." (Buzan, Waever and de Wilde 1998, 207) Bearing in mind the focal point of this whole study — perspective of the executive apparatus of a sovereign state — it is important to delineate clearly aspects where realist/neoliberal institutionalist and relativist approaches can work together. Again, Buzan and his colleagues have addressed this issue already: "The sectoral approach is crucial to the new framework for three reasons. First, it maintains a strong link to traditional security studies. …The use of sectors thus maintains interoperability between the old and new approaches, enabling the latter to incorporate smoothly the insights of the former. Second, the sectoral approach reflects what people are actually doing with the language by adding "security" onto sector designators (economic, environmental, and the like). …The third reason for using sectors…is that they provide a way of understanding the different qualities of security that are features of the wider agenda." (ibid., 195–196)

To sum up, through this chapter several system-level theories have been briefly analyzed and compared. The fundamental finding is that, from the perspective of conceptualization of 'security', the multisectoral theory of

Barry Buzan actually subsumes this particular aspect of different realist and liberal institutionalist theories.

Further, the analysis of the empirical data — perception of security challenges as formulated in policy documents of several small and large, allied and non-aligned countries, as well as their collective defense organization — lead to the observation that perceived security challenges have in fact been grouped into five sectors: military, political, societal, economic and environmental.

From the basic assumption formulated in the beginning of this chapter — that the executive apparatus of a sovereign state is considered a 'black box' supporting elected political decision-makers in the identification of security challenges, and developing and implementing ways and means to cope with these challenges in response to political will expressed by the elected leaders — follows that, in this particular context, from the perspective of a 'black box', it is actually irrelevant which theoretical approach guided the formulation of the political will of the elected decision-makers.

Therefore, since the multisectoral theory subsumes the aspect of conceptualization of 'security' of different realist and liberal institutionalist theories; since states and organizations in the real world have grouped their perceived security challenges into five sectors largely corresponding with the multisectoral theory; and since any selected theory will not have specific implications for the actions of executive apparatus regarding the defense planning and management, it is plausible to ground the reminder of the study on the multisectoral security theory of Barry Buzan.

Chapter 2.
THE CONCEPT OF MULTISECTORAL SECURITY

■

Based on the outcome of the previous chapter — establishment of the multisectoral security theory of Barry Buzan as overarching approach to guide the reminder of this study — this chapter will be solely dedicated to close examination of Buzan's theory. In this chapter, the author will deconstruct, and re-assemble from the perspective of executive apparatus of a sovereign state, key aspects of this theory. Defining key existential threats in each sector of security will establish a 'required and necessary minimum' of aspects of security that should be addressed by any state whilst developing its national security arrangements.

The analytical framework for describing each sector is to address three questions:

1. *What constitutes this particular sector?*
2. *In which form threats and vulnerabilities are manifested within a given sector?*
3. *What is the 'root challenge' in each of the sectors?*

For the purposes of this study, these findings will be utilized in the following chapter in order to establish what roles and responsibilities a state has, or conceptually should have, in providing security.

In the previous chapter, the relevance of Buzan's multisectoral approach to security was established with regard to three major system-level theories, as well as by checking its key provisions against empirical data gathered from existing policy documents of several states. Throughout this chapter, the theory of multisectoral security will be analyzed sector by sector in order to establish and define root challenges to be addressed by sovereign states in general, and in particular, by executive apparatuses of these sovereign states. The extent to which these challenges could be reasonably addressed, though, and what means are or could be available for a sovereign state to address these challenges, is the primary focus of chapter 4.

The essence of the multisectoral concept of security is well captured in the following statement: "Security means survival in the face of existential threats, but what constitutes an existential threat is not the same across different sectors." (Buzan, Waever and de Wilde 1998, 27) This chapter deals with manifestations of existential threats, or to be more precise, what is or could be **perceived** as an existential threat, in each sector.

Military Security

For a long period up to the end of the Cold War, the military security constituted the main security concern for virtually all states. It is not only because a global bipolar balance of power based on nuclear deterrence efficiently overrode security concerns from other sectors of societal life, but also because "military action can, and usually does, threaten all the components of the state." (Buzan 1991, 116) Or, to put it otherwise, "military threats threaten everything in a society, and they do so in a context in which most of the rules of civilized behavior either cease to function or move sharply into the background. They are existential threat par excellence." (Buzan, Waever and de Wilde 1998, 58)

One, perhaps the most important characteristic of this sector is the use, or the threat of use of military force in order to achieve a state's political ends. By using, or threatening to use military force, states leave the grounds of healthy political competition — a 'regime', as neoliberal institutionalists would label it — and enter the anarchic world where the efficiency and efficacy of national policies is determined almost entirely by the military might.[4] In the words of Barry Buzan, "the use of force breaches normal peaceful relations, and disrupts diplomatic recognition. In that sense, even the threat of force implies willingness to cross the important threshold that separates the regular competitive interplay of political, economic and societal sectors from the all-out competition of war." (Buzan 1991, 118) In doing so, "military actions not only strike at the very essence of the state's basic protective functions, but also threaten damage deep down through the layers of social and individual interest which underlie, and are more permanent than, the state's superstructures." (ibid., 117) In sum, then, the military security sector is primarily constituted of policies and actions that seek to preclude the use, or threat to use, military force to achieve some ultimate ends.[5]

The next question to deal with under the notion of military security is about the forms threats and vulnerabilities manifest them. Buzan and his colleagues argue, "military security matters arise primarily out of the internal and external processes by which human communities establish and maintain (or fail to maintain) machineries of government. …In practice, the military

[4] It should be underscored here, that, in fact, both customary and codified international law make extensive provisions for the use of force. Also, the law of war has been established and developed ever since antiquity to mitigate the effects of war.

[5] On the other hand, though, recognizing that "…war is…a continuation of political activity, carried out with other means" (Clausewitz 1976, 87), the military sector of security is and should be also concerned with the planning and management of the application of military force as state's defensive *ultima ratio*, if other legitimate venues to defend its 'self' have failed.

security agenda revolves largely around the ability of governments to maintain themselves against internal and external military threats, but it can also involve the use of military power to defend states or governments against nonmilitary threats to their existence, such as migrants or rival ideologies." (Buzan, Waever and de Wilde 1998, 50) Still, the main feature of this sector is the actual or possible application of military force, whereas spheres of application can be internal as well as external to the state in question.

Let us first deal with the internal manifestations of military security concerns. Authors of multisectoral approach to security claim, "when the perceived threat is internal, military security is primarily about the ability of the ruling elite to maintain civil peace, territorial integrity, and, more controversially, the machinery of government in the face of challenges from its citizens." (ibid., 50–51) Mohammed Ayoob has portrayed in his 1995 work "The Third World Security Predicament: State Making, Regional Conflict, and the International System" the typical forms of such challenges as "militant separatist, revolutionary, terrorist, or criminal organizations or movements, although some governments also securitize unarmed challengers to their authority or jurisdiction in order to use force against them." (cited by Buzan, Waever and de Wilde 1998, 50–51) The bottom line of the internal aspect of military security is, hence, about securing the integrity of state's territory and coherence of given state's superstructure vis-à-vis challengers from inside the society.

Now let us turn around and look at the external — or international — aspects of military security. At the interstate level, Buzan and his colleagues define the military security agenda as "primarily about the way in which states equip themselves to use force and how their behavior in this regard is interpreted and responded by other states." (ibid., 52) To expand this definition, one can agree with Buzan, Waever and de Wilde's idea, that "when securitization is focused on external threats, military security is primarily about the two-level interplay between the actual armed offensive and defensive capabilities of states on the one hand and their perceptions of each other's capabilities and intentions on the other. External threats range from fear of the complete obliteration of state, society, and people to gunboat diplomacy-style coercion and intimidation on particular issues of policy." (ibid., 51) In more generalized fashion, though, it could be stated, that "other things being equal, in this [military] sector the logic of threats and vulnerabilities between any two units in an international system is a function of the interplay between their respective military capabilities and their degree of amity and enmity, which are outcomes of the (de)securitization process." (ibid., 58) The bottom line here is, to compare a similar statement for an internal aspect of military security above, about securing integrity of state's

territory and coherence of state's superstructure vis-à-vis challengers from outside the country — usually, but not necessarily, other states.

There is an important clause, however, not to be disregarded while dealing with aspects of military security. "The military sector is the one in which the process of securitization is most likely to be highly institutionalized. …It is also worth noting that…not everything in the military sector is necessarily about security. …for some states an increasing number of military functions are not security issues at all. …they maintain substantial armed forces and often use those forces in roles that have much more to do with political and economic relations than with military ones." (ibid., 49) In this case we are talking of employment of military assets and personnel in different kinds of peacekeeping and disaster relief operations, often far away from national territories, not to mention military support to diplomatic activities. These applications have very little — if at all — to do with immediate threats to sovereignty or existence of states in question, but at the same time they manifest clearly the commonly understood principle of indivisibility of security. We will return to this theme later in this study, when talking about roles, missions, and different requirements to national security apparatus.

To sum up. In the words of the authors of the multisectoral approach, "protecting the territorial integrity of the state is the traditional object of military security, and the two immediate environments for the state — regional and domestic — are again the main concerns in this sector." (ibid., 70) Or otherwise, integrating statements from above, and defining internal and external aspects of military security: **the root challenge of the military security sector is to secure the territorial integrity of the state in question, and the coherence of its' superstructure, vis-à-vis challengers from both inside and outside of the state, under conditions of use, or threat of use, the military force.**

Political Security

The next sector to be discussed here is the one that concerns political security. Political security, in the words of the authors of the multisectoral security theory, "…is about the organizational stability of states, systems of government, and the ideologies that give governments and states their legitimacy." (ibid., 119) Or, to put it otherwise, "political security as distinct from politics in general is about threats to the legitimacy or recognition either of political units or the essential patterns (structures, processes or institutions) among them." (ibid., 144)

The main distinction between the military and political sectors is well captured by Buzan and his colleagues, saying: "Political sector is about the

organizational stability of social order(s). The heart of the political sector is made up of threats to state sovereignty. Since threats can also be levelled through military means…the political sector will take care of non-military threats to sovereignty." (Buzan, Waever and de Wilde 1998, 141)

As it comes to different manifestations of threats within the political sector, Barry Buzan has portrayed them as follows: "Political threats are aimed at the organizational stability of the state. Their purpose may range from pressuring the government on a particular policy, through overthrowing the government to fomenting secessionism, and disrupting the political fabric of the state so as to weaken it prior to military attack. The idea of the state, particularly its national identity and organizing ideology, and the institutions which express it, are the normal target of political threats." (Buzan 1991, 118–119) Buzan and his colleagues have refined this idea later, stating that "it is all a question of the ideas on which political institutions are built. Ideas that hold a state together are typically nationalism (especially civic nationalism but sometimes ethno-nationalism) and political ideology. By threatening these ideas, one can threaten the stability of the political order. Such threats might be to the existing structure of the government (by questioning the ideology that legitimates it), to the territorial integrity of the state (by encouraging defections from the state identity), or to the existence of the state itself (by questioning its right to autonomy)." (Buzan, Waever and de Wilde 1998, 150)

Now, the question arises — how these threats could be realized. Buzan has claimed, "institutions can be threatened by force, or by political action based on ideas which have different institutional implications." (Buzan 1991, 86) Later, Buzan et al. have furthered this idea by suggesting that "typically, political threats are about giving or denying recognition, support, or legitimacy…" (Buzan, Waever and de Wilde 1998, 142) By and large, then, one could agree with the authors of multisectoral security concept in summarizing: "Existential threats to a state are those that ultimately involve sovereignty, because sovereignty is what defines the state a state. Threats to state survival are therefore threats to sovereignty. Even minor violations of sovereignty are threats, because sovereignty is a principle that claims the ultimate right of self-government; thus, it becomes endangered if it becomes partial in any sense." (ibid., 150) In more precise expression, political threats could be divided into two broad categories — made to "(1) the internal legitimacy of the political unit, which relates primarily to ideologies and other constitutive ideas and issues defining the state; and (2) the external recognition of the state, its external legitimacy." (ibid., 144)

Let us, for a moment, return to the interplay of military and political sectors in the context of coherence of the structure of the state in question. Since the issue of strong and weak states will be discussed in greater detail in one

of the following chapters, it is relevant at this point simply to state, that states with high a degree of internal coherence are regarded as strong states, whereas, naturally, states with relatively lower degree of internal coherence are considered weak states. In this respect, Buzan has been clear by stating, "since direct territorial control is no longer the prime target, military threats have declined in utility…. the main danger to weak states is their high vulnerability to political threats. Such threats are not, like military invasions, aimed at extinguishing the sovereignty of the country. Instead, they seek to reorient the political behaviour of the state by manipulating the main factional disputes within it." (Buzan 1991, 155–156)

To summarize the characteristics of the political security sector, it is necessary and sufficient to underline that "in the political sector, existential threats are traditionally defined in terms of the constituting principle — sovereignty, but sometimes also ideology — of the state. Sovereignty can be existentially threatened by anything that questions recognition, legitimacy, or governing authority." (Buzan, Waever and de Wilde 1998, 22) Or to put it otherwise, employing the template already used in the military sector: **the root challenge of the political security sector is to secure the integrity of legitimacy of the state/government in question, both from outside — denial or withdrawal of diplomatic recognition by other states and/or international bodies — and inside — denial of recognition of governing authority by the society or faction(s) of it.**

Societal security

The third sector within a multisectoral approach to security to be discussed here is that of societal security. Buzan et al. maintain, "The organizing concept in the societal sector is identity. Societal insecurity exists when communities of whatever kind define a development or potentiality as a threat to their survival as a community." (ibid., 119) As it comes to what actually constitutes the meaning of identity, authors of multisectoral approach have said: "Objective factors such as language or location might be involved in the idea of national identity, but it nevertheless remains a political and personal choice to identify with some community by emphasizing some trait in contrast to other available historical or contemporary ties. Threats to identity are thus always a question of the *construction* of something as threatening some "we" — and often thereby actually contributing to the construction or reproduction of "us"." (ibid.) Or, in a more compressed fashion, "…the key to society is those ideas and practices that identify individuals as members of a social group. Society is about identity, the self-conception of communities and of individuals identifying themselves as members of a community."

(ibid.) Ronnie Lipschutz, saying, "Defining security involves establishing a definition of the collective self vis-à-vis other collective selves", captures the same idea. (Lipschutz 1995b, 217) In sum, then, in the societal sector "the referent object is large-scale collective identities that can function independent of the state, such as nations and religions." (Buzan, Waever and de Wilde 1998, 22–23)

Another question to be clarified is the relationship between state security and societal security. In this respect Waever and his colleagues have suggested: "State security has *sovereignty* as its ultimate criterion, and societal security has *identity*.[6] Both usages imply survival. A state that loses its sovereignty does not survive as a state; a society that loses its identity fears that it will no longer be able to live *as itself*." (Waever 1995, 67) Obviously, societal threats can be difficult to disentangle from political ones. "In relations between states, significant external threats on the societal level amount to attacks on national identity, and thus easily fall within the political realm. Societal threats are often part of a larger package of political and military threats…" Barry Buzan has established. (Buzan 1991, 122)

Now let us have a glance at how the vast array of different forms, threats and vulnerabilities manifest themselves in the societal sector, depending upon how the identity of any particular society is constructed:

> "If one's identity is based on separateness, on being remote and alone, even a very small admixture of foreigners will be seen as problematic (e.g., Finland). Nations that control a state but only with a small numeric margin (e.g., Latvia) or only through repression of a majority (e.g., Serbs in Kosovo) will be vulnerable to an influx or superior fertility rate of the competing population (e.g., Russians, Albanians). If national identity is tied to specific cultural habits, a homogenizing "global" culture, such as the U.S.-Western Coca-Cola (or, more recently, McDonalds) imperialism, will be threatening (e.g., Bhutan, Iran, Saudi Arabia). If language is central to national identity, the contemporary global victory of English combined with an increasing interpenetration of societies will be problematic (e.g., France). If nation is built on the integration of a number of ethnic groups with mobilizable histories of distinct national lives, a general spread of nationalism and ideas of self-determination can be fatal (e.g., the Soviet Union, Yugoslavia, Czechoslovakia, the United Kingdom, India, Nigeria, South Africa); if a nation is built on a melting-pot ideology of different groups blending into one new

[6] In his presentation of social constructivist approach, Wendt claims that sovereignty **is** social identity. (See Wendt 1994)

> group, the existing national identity will be vulnerable to a reassertion of racial and cultural distinctiveness and incommensurability (e.g., multiculturalism in the United States). If the nation is tied closely to the state, it will be more vulnerable to a process of political integration (e.g., Denmark, France) than will be the case if the nation has a tradition of operating independent of the state and of having multiple political layers simultaneously (e.g., Germany)." (Buzan, Waever and de Wilde 1998, 124–125)

By and large, empirical examples brought forward in the previous paragraph could be generalized into three most common issues that have been viewed as threats to societal security:

"1. *Migration* — X people are being overrun or diluted by influxes of Y people; the X community will not be what it used to be, because others will make up the population; X identity is being changed by a shift in the composition of the population (e.g., Chinese migration into Tibet, Russian migration onto Estonia).
2. *Horizontal competition* — although it is still X people living here, they will change their ways because of the overriding cultural and linguistic influence from neighboring culture Y (e.g., Quebecois fears of Anglophone Canada and, more generally Canadian fears of Americanization).
3. *Vertical competition* — people will stop seeing themselves as X, because there is either an integrating project (e.g., Yugoslavia, the EU) or a secessionist – "regionalist" project (e.g., Quebec, Catalonia, Kurdistan) that pulls them towards either wider or narrower identities." (ibid., 121)

Finally, some attention should be paid to the sources of threats to societal security in terms of being external or internal to that particular society. From outside the society, according to Barry Buzan, "even the interplay of ideas and communication can produce politically significant societal and cultural threats…. Matters of language, religion and local cultural tradition play their part in the idea of the state, and may need to be defended or protected against seductive or overbearing cultural imports. If the local culture is weak or small, even the unintended side-effects of casual contact could prove disruptive and politically charged." (Buzan 1991, 122–123) At the same time, "if societal security is about the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture and religious and ethnic identity and custom, then threats to these values come much more frequently from within the state than from outside it." (ibid., 123)

To sum up the characteristics of this sector of security: **the root challenge of societal security sector is to secure sustainable self-identification of the society in question against threats from outside — infiltration of societal identificators alien to local descriptors of identity — and inside — desires of sufficiently large societal groups to adopt some other identity, wider or smaller than that of the society in question.**

Economic Security

The most controversial, and hence the most difficult to manage, is the economic sector of security. In this respect we have to underline three main aspects: first, the existence of a globally operating network of economic relations virtually uncontrollable by any national or supranational authority; second, the degree of penetration of economics into politics and vice versa; and third, the very nature of economic relations, i.e., being based upon the inherent principle of competition. Let us examine these aspects in more detail.

In words of Barry Buzan, "the problem in characterizing the international economy is that from one view it appears to be a system in its own right, and from another, to be so heavily entangled with the international political system as to be nearly indistinguishable from it." (ibid., 231) He goes on, arguing that "the international economy is just as thoroughly penetrated by state structures and the dynamics of power and security, as the state system is cut through patterns of production, consumption and class, and by dynamics of the market." (ibid., 232) Under these conditions it becomes obvious that "part of the international economic security problem arises because of the disjuncture between the global operation of the market, and the fragmented structure of political authority under anarchy. Baldly put, the scale of the international economy far outreaches both the capability and the legitimacy of any national political authority to manage it." (ibid., 249)

As it comes to the third aspect mentioned above, the nature of relations between actors in an open market, the central problem is that, in the words of Buzan, "the normal condition of actors in a market economy is one of risk, aggressive competition and uncertainty. …A vast range of economic threats fall within the rules of the market game, and therefore cannot, in logic, be seen as exceptional enough to warrant invoking national security." (ibid., 123–124) That leads to the conclusion that within the economic sector, "economic threats fall very largely within the boundaries of normal conduct, and cannot easily or clearly be linked to the logic of national security." (ibid., 126) However, when consequences of economic threat reach beyond the strictly economic sector, into the military and political spheres, Buzan distinguishes three somewhat clearer national security issues that can

emerge. The linkages involved are "between economic capability on the one hand, and military capability, power and socio-political stability on the other." (ibid., 126)

In addition, it is important to stress that in the economic sector, "…supranational referent objects from specific regimes to the global market itself can be existentially threatened by factors that might undermine the rules, norms, and institutions that constitute them." (Buzan, Waever and de Wilde 1998, 22) In other words, the failure of the international environment itself to function undisruptedly constitutes an additional security risk for all actors involved. "If the key to economic security on the state level is the position of the state within the international networks of trade, production and finance," Buzan wrote, "then the key at the system level is the stability of the whole network of market relations itself. …When it functions smoothly, some actors will do well, and others badly, depending on what leverage their assets gives them, and how efficiently they play their hand. But if the market network itself is disrupted, then nearly all the actors in the system end up worse off, as happened during the 1930s." (Buzan 1991, 249)

After clarifying these important limitations of the economic sector of security, let us try to establish what actually constitutes this sector:

> "The simplest view is to equate security with the economic conditions necessary for survival. …The national equivalent of 'basic human needs' has two elements. The first is that like individuals, states require ready access to the means necessary for their survival. …If…they do not encompass sufficient resources, then access to trade becomes an essential part of their basic economic security. …The logical security strategies are to ensure continuity of supply (by expanding the state to incorporate the necessary resources, or by cultivating stable trading systems), and to buffer vulnerabilities by stockpiling essential goods. …The second element…has to do with the internal construction of the national economy. …The 'health' and even the survival of a state depend not on sustaining a static condition, but on adapting towards the most advanced and successful practices elsewhere in the international system. Failure to adapt, or even relative slowness at doing so, means a steady loss of power, and a steady rise in vulnerability for those that have been more successful[7]." (ibid., 241–242)

[7] It is interesting to note, that this clause seems not to hold regarding the development dynamics of the Democratic Peoples' Republic of Korea

In the context of the description above, and in attempt to compare the economic sector with the other ones we have already examined, we can only agree with Barry Buzan, who wrote: "Economic threats do resemble an attack on the state, in the sense that conscious external actions by others results in material loss, strain on various institutions of the state, and even substantial damage to the health and longevity of the population." (ibid., 130) In greater detail, Buzan describes one all too probable scenario of economic threats to domestic stability:

> "These occur when states pursue economic strategies based on maximization of wealth through extensive trade. Over time, such policies result in high levels of dependence on trade in order to sustain the social structures that have grown up with increasing prosperity. …Even countries with large domestic resources and markets, and a relatively small percentage of GDP in external trade…can become significantly locked into the structure of trade. Where such complex patterns of interdependence exist, many states will be vulnerable to disruptions in the flows of trade and finance. …the risk of such vulnerabilities may create a national security rationale for avoiding excessive or asymmetrical dependencies that might offer political opportunities for the use of economical pressure." (ibid., 128)

Moreover, under the objective conditions of deepening interdependence throughout the whole global economic system, "economic threats such as suspensions of credit, exclusion from markets and denial of key imports can begin to take on the swiftness and impact previously associated only with military threats, though rather few states are powerfully enough placed in the international economy to be able to use economic threats this way." (ibid., 139) The latter observation forms one of the manifestations of threats and vulnerabilities within the economic sector of security.

By and large, Buzan et al. outline the problems of economic security; "the logic of economic security for states is similar to that for individuals except that in principle (although rarely in practice) states can form entirely self-contained economic systems. There is, in effect, a state equivalent of basic human needs. Unless a state is self-reliant in the resources required to feed its population and industry, it needs access to outside supplies. If that need is threatened, the national economy can be clearly and legitimately securitized." (Buzan, Waever and de Wilde 1998, 105)

Having stated that, we have to examine the means to address this security problem. "In the economic domain," Buzan argues, "the most obvious way for actors to increase their security is to decrease the interdependencies that

make them vulnerable. But the resultant self-reliance is only achieved by threatening the division of labour and economies of scale that make production efficient." (Buzan 1991, 236) To overcome this controversy, in general, there are two main contending positions that reflect different views about "whether states and societies or markets should have priority and whether private economic actors have security claims of their own that must be weighed against the verdict of the market." (Buzan, Waever and de Wilde 1998, 95) On one hand, there are mercantilists and neomercantilists who put politics first, seeing "the state as both embodying the social and political purposes for which wealth is generated and providing the security necessary for the operation of firms and markets." (ibid.) On the other, there are liberals who put economics first, arguing that "the economy should be at the root of the social fabric and that the market should be left to operate as freely as possible without interference by the state." (ibid.) The practice of international economy has proved, in fact, that "…the discourse on economic security is now shaped largely by the dominance of the liberal agenda and by the consequences of attempts to implement that agenda in the areas of trade, production, and finance. …The contemporary discourse on economic security centers on concerns about instability and inequality." (Buzan, Waever and de Wilde 1998, 97)

In this context, it is also worth noting that although little of a strictly economic security agenda exists within liberalism, "economic activity fairly easy triggers survival issues in all of the other sectors — sometimes on the basis of economic failures (e.g., famine, negative development) and sometimes on the basis of economic successes (cultural homogenization, loss of autonomy in military production, pollution, the gutting of state functions). This overspill quality means that much of what is talked about as "economic security" has in fact to do with logics of survival in other sectors and not the economic one." (ibid., 116)

Bearing in mind all that has been said above, we can outline one peculiar characteristic of economic security under liberalism: "it is about the creation of stable conditions in which actors can compete mercilessly." (ibid., 98)

Let us generalize. In the words of Buzan, "economic security is talked about as if the words referred to some concrete (usually unspecified) condition, a state of being that could actually be achieved, and which therefore represents a realistic and rational political goal. …The reality of economic security is a slippery relativity combined with a peculiarly intense nexus of contradictions and trade-offs. ... Distinctions between threatening and normal behaviour are exceptionally difficult to draw, and the possibilities for political misuse of the idea are legion." (Buzan 1991, 235) He continues this flow of logic and concludes, "relative security is possible (some units do better than others), but absolute security is not. …The overall productivity and

prosperity of the system depends on the less efficient and less innovative units being driven out of business by the more efficient and more innovative ones." (ibid.)

To sum up the characteristics of the economic sector of security, **the root challenge of the economic security sector is to achieve an always-dynamic balance between mercantilist / neomercantilist policies of self-sustainment, and liberal policies of division of labor based on efficiency, in order to ensure the resources, finance and markets necessary to sustain acceptable levels of welfare and state power, under necessary condition of undisrupted functioning of global market.**

Environmental Security

The last sector of security to be discussed is the environmental. From the very beginning, it should be underlined that "threats and vulnerabilities in the environmental sector are issue specific and seldom universal. Moreover, causes and effects may be located at different levels and in different regions." (Buzan, Waever and de Wilde 1998, 85) That said, it is nevertheless important to bear in mind, that "ecological threats to national security, like military and economic ones, can damage the physical base of the state, perhaps to a sufficient extent to threaten its idea and institutions." (Buzan 1991, 131)

Buzan and his colleagues have, in principle, outlined three relationships of threats that define the possible universe of environmental security.

"1. Threats to human civilization from the natural environment that are not caused by human activity. …
2. Threats from human activity to the natural systems or structures of the planet when the changes made *do* seem to pose existential threats to (parts of) civilization. …
3. Threats from human activity to the natural systems or structures of the planet when the changes made *do not* seem to pose existential threats to civilization. …

The last of these relationships registers little in the discourse of environmental security… The first does register but only at the margins. …The second relationship is the main reason to talk about environmental security: It represents a circular relationship of threat between civilization and the environment in which the process of civilization involves a manipulation of the rest of nature that in several respects has achieved self-defeating proportions." (Buzan, Waever and de Wilde 1998, 79–80)

Before we can examine the problematique of environmental security any deeper, it should be mentioned, that "one of the most striking features of the

environmental sector is the existence of two different agenda: a scientific agenda and a political agenda. …[a scientific agenda] offers a list of environmental problems that already or potentially hamper the evolution of present civilization. The political agenda… consists of the public decision-making process and public policies that address how to deal with environmental concerns. ...The scientific agenda is about the authoritative assessment of threat for securitizing or desecuritizing moves, whereas the political agenda deals with the formation of concern in the public sphere about these moves and the allocation of collective means by which to deal with the issues raised. …The scientific agenda underpins securitizing moves, whereas the political agenda is about three areas: (1) state and public awareness of issues on the scientific agenda (how much of the scientific agenda is recognized by policymakers, their electorates, and their intermediaries — the press); (2) the acceptance of political responsibility for dealing with these issues; and (3) the political management questions that arise: problems of international cooperation and institutionalization — in particular regime formation, the effectiveness of unilateral national initiatives, distribution of costs and benefits, free-rider dilemmas, problems of enforcement, and so forth." (ibid., 71–72)

Buzan et al. have also outlined six major areas, where environmental security concerns manifest them:

- *Disruption of ecosystems* includes climate change; loss of biodiversity; deforestation, desertification and other forms of erosion; depletion of the ozone layer; and various forms of pollution.
- *Energy problems* include the depletion of natural resources, such as fuel wood; various forms of pollution, including management disasters (related in particular to nuclear energy, oil transportation, and chemical industries); and scarcities and uneven distribution.
- *Population problems* include. Population growth and consumption beyond the earth's carrying capacity; epidemics and poor health conditions in general; declining literacy rates; and politically and socially uncontrollable migrations, including unmanageable urbanization.
- *Food problems* include poverty, famines, overconsumption, and diseases related to these extremes; loss of fertile soils and water resources; epidemics and poor health conditions in general; and scarcities and uneven distribution.
- *Economic problems* include the protection of unsustainable production modes, societal instability inherent in the growth imperative (which leads to cyclical and hegemonic breakdowns), and structural asymmetries and inequity.

- *Civil strife* includes war-related environmental damage on the one hand and violence related to environmental degradation on the other. (ibid., 74–75)

The linkage to other sectors of security becomes clear if we define environmental security in terms of sustaining ecosystems that are necessary for the preservation of achieved levels of civilization. It follows then, "when and where this security fails, the conflicts will be over threats to these levels of civilization — that is, threats to nonenvironmental existential values." (ibid., 84) Moreover, Buzan et al. stress, that "crucial for understanding environmental security is the idea that it is within human power to turn the tide. The problem is one of humankind's struggle not with nature but with the dynamics of its own cultures — a civilizational issue that expresses itself mainly in economic and demographic dimensions and that potentially affects the degrees of order in the international system and its subsystems." (ibid., 80–81) This understanding is, for example, reflected in the National Security Strategy of the United States: "Economic growth should be accompanied by global efforts to stabilize greenhouse gas concentrations associated with this growth, containing them at a level that prevents dangerous human interference with the global climate." (U.S. NSS 2002, 20)

By and large, then, the concern in environmental security sector is "whether the ecosystems that are crucial to preserve (or further develop) the achieved level of civilization are sustainable. …At stake is the maintenance of achieved levels of civilization, including a development perspective free of environmental disasters." (Buzan, Waever and de Wilde 1998, 76) From this statement follows the basic logic of environmental security: "in a global perspective, humankind is living beyond the carrying capacity of the earth. In local and regional circumstances, this condition is often even more manifest." (ibid., 81)

To sum up, in the environmental sector the baseline concern is about "the relationship between the human species and the rest of the biosphere and whether that relationship can be sustained without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both." (ibid., 23) For the purposes of this study, this idea should be somewhat rephrased: **the root challenge of the environmental security sector is to maintain stable and sustainable relationships between humankind and the rest of biosphere without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both.**

Summary

After examining the five sectors of security, we can only agree with Barry Buzan, who summarized: "The security of human collectivities is affected by factors in five major sectors: military, political, economic, societal and environmental. Generally speaking, military security concerns the two-level interplay of the armed offensive and defensive capabilities of states, and states' perceptions of each other's intentions. Political security concerns the organizational stability of states, systems of government and the ideologies that give them legitimacy. Economic security concerns access to the resources, finance and markets necessary to sustain acceptable levels of welfare and state power. Societal security concerns the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture and religious and national identity and custom. Environmental security concerns the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend. These five sectors do not operate in isolation from each other. Each defines a focal point within the security problematique, and a way of ordering priorities, but all are woven together in a strong web of linkages." (Buzan 1991, 19–20)

For the purposes of this study, the root challenges of each of the sectors, from the perspective of state apparatus, are defined as follows:

- the root challenge of **military security** sector is to secure territorial integrity of the state in question, and the coherence of its' superstructure, vis-à-vis challengers from both inside and outside of the state, under conditions of use, or threat of use, the military force;
- the root challenge of **political security** sector is to secure integrity of the legitimacy of the state/government in question, both from outside — denial or withdrawal of diplomatic recognition by other states and/or international bodies — and inside — denial of recognition of governing authority by the society or faction(s) of it;
- the root challenge of **societal security** sector is to secure sustainable self-identification of the society in question against threats from outside — infiltration of societal identificators alien to local descriptors of identity — and inside — desires of sufficiently large societal groups to adopt some other identity, wider or smaller than that of the society in question;
- the root challenge of **economic security** sector is to achieve always-dynamic balance between mercantilist/neomercantilist policies of self-sustainment, and liberal policies of division of labor based on efficiency, in order to ensure the resources, finance and markets necessary to sustain acceptable levels of welfare and state power, under necessary condition of undisrupted functioning of global market;

- the root challenge of **environmental security** sector is to maintain stable and sustainable relationships between humankind and the rest of biosphere without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both.

These established root challenges for each of the sectors of security will be utilized in chapter 4 in order to establish what roles and responsibilities a state has, or conceptually should have, in providing security.

Chapter 3.
CHARACTERISTICS AND REQUIREMENTS OF CONTEMPORARY SECURITY ENVIRONMENT

■

In this chapter, the writer will describe and analyze characteristics of current security environment with particular focus on the Euro-Atlantic area. One begins with examining implications, stemming from the theory of multisectoral security. Further, the author will describe, sector by sector, and based on actual policy documents, how these theory implications are reflected in official positions of countries in the Euro-Atlantic area. In order to broaden the empirical basis, policies of European and non-European countries, as well as NATO and non-NATO countries will be looked at. After that, attention will be paid to dynamics and interaction of security challenges across sectors. Finally, the author will derive key features, characteristic to contemporary security and political environment. These key features, and derived requirements for national level defense planning and management system, will be later used to validate the proposed concept.

Theory implications

The end of Cold War, the collapse of the Soviet Union and, as the consequence of the latter, the termination of global rivalry of two major military blocks has tremendously changed the nature of both national and international security concerns. James Der Derian wrote: "The demise of a bipolar system, the diffusion of power into new political, national, and economic constellations, the decline of civil society and the rise of the shopping mall, the acceleration of *everything* — transportation, capital and information flows, change itself — have induced a new anxiety." (Der Derian 1995, 25) Barry Buzan has brought in another word — density — to depict the features of post-Cold War security: "Rising density changes the profile of threats and vulnerabilities that define the security problem." (Buzan 1991, 369) In more detail, Buzan has portrayed the emerging security canvas as follows:

> Rising density is measurable across most of the sectors of security. Military capabilities have reached levels where it is possible for the major powers both to involve the whole planet in conflict, and to in-

> flict levels of destruction that could eliminate the human species. In the political sphere, ideas now circulate globally, many issues are discussed in global or semi-global forums as a matter of routine, and the model of the industrial democracies has emerged as a kind of universal holy grail of development, albeit by very different routes. Economically, the world is increasingly tied into a global market of production, trade and finance, whose circulation system is an ever more efficient transportation network by land, sea and air, and whose nervous system is a world-wide web of electronic communication and data processing facilities. Environmentally, the collective impact of human activity is producing effects of regional and global scale, in the process creating both common fates and a need for collective action. (ibid., 151–152)

Indeed, the thorough change of the nature of key security determinants has also brought about a deep shift in composition as well as in prioritization of security concerns. "The fading of military threats naturally causes other types of threat to come more clearly into view," Buzan wrote, "but it is also true that other types of threat are rising in importance regardless of the decline of military concerns." (ibid., 369) For the purposes of this study, it is important to underscore, that regardless of transformation of national and international security environment, "…the deep *political* structure of the [international] system has not changed. Anarchy remains the organizing principle, and the state remains the primary unit." (Buzan 1995, 197) Based on this assumption, the state still retains its basic roles and responsibilities as a key security-providing entity. What states can and should do in providing for both domestic and international security will be examined in greater detail in the following chapter.

For the purposes of this chapter, the key characteristics of the contemporary security environment distilled from the theorists' visions are complexity, constant and rapid change, and cross-sector influence of security challenges.

General features

With a foundation, laid down by leading theorists of multisectoral security, it is time to see how this analysis has been reflected in policy documents of European and non-European, NATO and non-NATO countries. But before describing emerging risks sector by sector, let us look at how some countries see the general outlines of contemporary security. Perhaps the most concentrated and precise description of the security situation is given in the seminal

British Strategic Defense Review, where shifts in the nature of security risks and priorities are said to be "…reflecting a changing world, in which the confrontation of the Cold War has been replaced by a complex mixture of uncertainty and instability." (United Kingdom 1998)

The keyword 'uncertainty' needs closer examination at this point, for the implications of operating under the condition of uncertainty pose specific requirements for a national crisis management or crisis response planning and execution system, to include defense sector, to be able to respond to security challenges. In somewhat narrower sense, in the context of defense planning, the impact of uncertainty has been captured as follows:

> Defense planners must…cope with uncertainty as to the enemy's capabilities and intentions… Uncertainty on the part of defense planners about enemy intentions is… serious because that enemy may not be known at the time the weapon is developed, and…the war zone could be anywhere in the world…
>
> There are two types of uncertainty regarding the enemy. The first concerns his capabilities. Intelligence about enemy capabilities is never perfect. However, intelligence about system capabilities usually increases as the system is developed and placed into actual service. Second, we are usually ignorant about the enemy's strategy and intentions. This is an important factor because the effectiveness of our strategy is greatly influenced by that undertaken by the enemy. What will counter one enemy strategy may not counter another…
>
> Besides the uncertainty we have with our enemies, we also have uncertainty about the intentions and abilities of our allies. As history has demonstrated, there can be a wide range in the effectiveness of allies during a war. (Perdue and McNaught 1989, 109)

The key characteristics of operating under the condition of uncertainty in a broader sense, across all sectors of security — perhaps less environmental sector — could be generalized and formulated in the following way. First, planners must cope with uncertainty regarding challenger's capabilities and intentions[8]. That is true, besides the obvious military sector, also for the po-

[8] As a side remark, it should be pointed out here that states, and to that matter — their executive apparatuses — tend to have major difficulties with adequately identifying threats. This inability is, as a rule, further reinforced by accompanying lack of ability to quantify threats either. In a very narrow context of military stand-off, threats could have been quantified during the Cold War. However, available record demonstrates that even within the parameters of confrontation of two military blocks, this quantification was conducted poorly.

litical sector of security — in terms of capabilities and intentions of internal groups challenging legitimacy to govern; it is true for societal sector — in terms of capabilities and intentions of external as well as internal groups challenging cohesion and identity; and it is true for economical sector — in terms of capabilities and intentions of groups challenging the existing balance between self-sustainment and division-of-labor policies and/or trying to limit or deny access to markets, resources or capital. And second, planners should also take into account inherent uncertainty regarding the abilities and intentions of partners — from other countries to counterpart agencies.

The notion of complexity is also depicted in Finnish security and defense policy: "In today's world, military conflicts are not the only threats to security: other threats include human rights violations, damage to infrastructure, information threats, disasters, terrorism, international crime, environmental change, epidemics and movements of people." (Finland 2001) Analogous understanding, as a matter of fact, is shared by all member states of the European Union. EU Security Strategy says: "Large-scale aggression against any Member State in now improbable. Instead, Europe faces new threats which are more diverse, less visible and less predictable." (European Union 2003, 3) Similar understanding of outstanding security risks is shared by another Nordic country, Denmark: "Underdevelopment, overpopulation, pollution and international crime are the most important, together with two contemporary and contradictory trends, transnationalisation and nationalism." (Denmark 1997) Moreover, this approach is not unique only to Europe. Leading U.S. analysts wrote: "A number of new developments may pose severe challenges to Western society, including uncontrolled migration across borders and regions, international crime, disease — especially pandemics like AIDS and malaria, and issues of the environment." (Carlucci, Hunter, and Khalizad 2001, xvi)

On a broader scale, and as a manifestation of theory of multisectoral security taking roots in government policies, the Finnish security policy paper underscores yet again the complexity of modern challenges. "Disruptive situations are amongst the threats defined under the broad concept of security. Other threats include infectious diseases spread as a result of increased mobility, information threats spread through information networks, threats aimed at electronic communications and information systems, the increase in international organized crime, terrorism, changes in the environment, major disasters and sudden, large-scale population movements caused by crisis situations." (Finland 2001) Complexity of security challenges is also reflected in official policies of Estonia: "Changes in security environment, both on global and regional scale, have also actualized new security risks, such as the potential volatility of social and economic problems, the proliferation of weapons of mass destruction, organized crime, floods of refugees

from crises and catastrophes, and so forth," states the Estonian National Security Concept. (Estonia 2001) The same concerns are shared on the other side of the Atlantic. "Newer concerns, including cross-border crime and illegal narcotics trafficking, threats in cyberspace, the challenge of mass migration, the rise of religious extremism, humanitarian disasters, failed states and warlordism, environmental degradation, and the spread of disease, are all part of the new security agenda." (Carlucci, Hunter, and Khalizad 2001, 2–3) The most critical challenges to national security from the U.S. perspective, however, are not declared to come from the 'soft' end of risks, as it is the case for some European countries. Instead, RAND analysts maintain, "…key challenges to the Unites States, its allies, and its friends can come from so-called asymmetric warfare, conducted by a variety of countries and non-state actors, in part as a response to U.S. military dominance. Three areas are most important: terrorism …; cyber threats to critical infrastructure; and WMD and the means of delivering them." (Ibid, xvi–xvii)

While distilling the key characteristics out of policy documents of many countries and international organizations, the same terms — uncertainty, complexity and rapid change — surface.

Terrorism and Weapons of Mass Destruction

To reflect the extent of the security risks caused by terrorism, Weapons of Mass Destruction and means of their delivery have been pointed out by several countries in the Euro-Atlantic area it is relevant to look closer at how this threat is portrayed. "Enemies in the past needed great armies and great industrial capabilities to endanger America. Now, shadowy networks of individuals can bring great chaos and suffering to our shores for less than it costs to purchase a single tank. Terrorists are organized to penetrate open societies and to turn the power of modern technologies against us." (U.S. NSS 2002, iv) With a somewhat lesser degree of dramatics, the issue of terrorism remains a security concern also for Europe. "Terrorism is a threat to international security and to human rights, democracy and the rule of law," Finnish national security policy states. "…The potential of weapons of mass destruction getting into terrorist hands poses a particularly serious threat." (Finland 2001) After the September 11, 2001, attacks, it is obvious, that the United States would pay most of its attention to that specific threat. "…new deadly challenges have emerged from rogue states and terrorists," the U.S. security strategy maintains. "None of these contemporary threats rival the sheer destructive power that was arrayed…by the Soviet Union. However, the nature and motivations of these new adversaries, their determination to

obtain destructive powers hitherto available only to the world's strongest states, and the greater likelihood that they will use weapons of mass destruction … make today's security environment more complex and dangerous." (U.S. NSS 2002, 13) This document goes on, clearly linking terrorism with failed and/or rouge states: "Rogue states and terrorists…rely on acts of terror and, potentially, the use of weapons of mass destruction — weapons that can be easily concealed, delivered covertly, and used without warning." (Ibid., 15) There is, however, an important clause: "Poverty does not make poor people into terrorists and murderers. Yet poverty, weak institutions, and corruption can make weak states vulnerable to terrorist networks and drug cartels within their borders." (Ibid., v) Similar thought was also expressed in updated British Strategic Defense Review: "Countering terrorism is usually a long term business requiring the roots and causes to be addressed as well as the symptoms." (United Kingdom 2002, 10) Hence, in order to handle the terrorist threat, one should also address the issues not only within military but also other security sectors — economic, political, and societal. This, in turn, underscores yet again the complex nature of contemporary security environment, and calls for complex response.

Military

Changes in the international security environment have had their influence on all security sectors. Perhaps the most drastic has been the pressure to rethink the nature of military security. British Strategic Defense Review concluded: "In the Cold War, we needed large forces at home and on the Continent to defend against the constant threat of massive attack from an enemy coming to us. Now, the need is increasingly to help prevent or shape crises further away and, if necessary, to deploy military forces rapidly before they get out of hand. Most force projection operations of this kind are likely to be multinational." (United Kingdom 1998) In other words, new security environment calls for new type of military force. Keywords to distill from this conclusion are 'crisis management', which in itself entails requirement for inter-agency cooperation between political decision-makers, diplomats, military and law enforcers, and 'multinational force projection' that expands interoperability requirement to international level. The same idea is also present in the most recent Defense White Book of Germany: "An all-round picture of the situation and, building upon that, a shared situational understanding of all the actors form the basis for security policy decisions, at national and international level. In developing a picture of the national situation, an interministerial approach is needed that considers and brings together all aspects." (Germany 2006, 22)

Another characteristic of re-thought military security is reflected in the Finnish national security concept: "The latest wars and crises have shown that military force can be used not only against the opponent's military power but also to paralyze infrastructure critical to the functioning of society. Before taking up arms, information-based operations are launched to conduct reconnaissance and to hamper opponent's operations. Today's technically sophisticated and networked societies are more vulnerable than before." (Finland 2001) From this statement, again, requirement for close interagency cooperation and coordination stems.

The impact of technological and social change has been brought in to conceptual military thinking by two recent British strategic defense reviews:

> "Technological and social change will also open up broader possibilities which will have a profound effect on our future security. Many of these developments will be double-edged, bringing new vulnerabilities as well as opportunities. They include new ways of fighting such as information warfare (which attacks through the computer systems on which both our forces and civil society increasingly depend); greater pressures on operational decisions (instant media reporting from both sides of the front line); the wider spread of technologies which may be used against us (such as biological weapons); and highly sophisticated civil capabilities that will be readily available both for us and potential adversaries. And where we (and our Allies) exploit technology to strengthen our existing superiority in conventional weapons, our potential adversaries may choose to adopt alternative weapons and unconventional (or 'asymmetric') strategies, perhaps attacking us through vulnerabilities in our open civil societies." (United Kingdom 1998, reinforced in 2003)

And last, but not least, after the demise of two-block confrontation of the Cold War, prescribing the paradigm of massive conventional-to-thermonuclear conflict in military thinking, the nature of armed conflicts themselves have changed drastically and consequently, new theories have emerged to embrace these changes. Among these, for example, concepts of asymmetric-, effects-based-, and network-centric warfare should be mentioned (see, for instance, van Creveld 2006, Lonsdale 2004, United Kingdom 2003, Leech 2002, Smith 2002, McKenzie 2000 and works of Alberts et al. 1999, 2001, 2003). However, these concepts, and their reflections in official

policy documents of states[9], deal primarily with the problems of understanding the changing nature of warfare and developing strategies and responses that incorporate this change. Although instrumental in terms of shaping the political will of elected leaders or in terms of operations analysis and planning, these concepts are largely above or below the level of analysis employed through this study — the perspective of national-level defense planning and management.

Political and Societal

Two additional security challenges — uncontrollable migration and organized crime — that have been identified as general features of modern security environment by several countries, pose threats to societal and political sectors of security respectively. Both are well captured in Finnish national security concept. "Crises may cause a sudden and large migration of people. Armed conflicts and the human rights violations that often accompany such conflicts may force people to become refugees. This may actually be the prime objective of groups that strive for ethnic unity or aim to gain control over a region or its natural resources. Major natural catastrophes, too, may lead to an uncontrolled wave of migration. Smaller-scale migration can often be explained by differences in the standard of living, but that too may affect security, for example by increasing tension between population groups in the destination country." (Finland 2001) Regarding organized crime, Finnish national security concept says: "Organized international crime is still increasing. Crime prevention and investigation calls for closer cooperation between the judicial authorities of different countries. The key element in international crime prevention is the fight against terrorism and trafficking in drugs, weapons and human beings. Financial crime has also become more and more international, and to fight against it, effective international police cooperation is needed." (Ibid.) Again, a requirement for efficient international, as well as in-country inter-agency coordination and cooperation is an obvious consequence.

[9] It has been noted earlier that official policy documents of countries are as a rule compromises between multiple sets of departmental and party-political interests and are seldom fully consistent with any theory. Hence, the question arises about the objectivity and adequacy of these documents in strict scientific terms. However, the author claims that in the context of notion of security as a construct, these documents provide snapshots of **perception** of key characteristics of security environment and challenges, and remain, thus, acceptable source.

Environmental

The interdependence and probable inter-sectoral spillovers of security challenges is well portrayed in Finnish national security concept. "Environmental change may pose a direct or indirect threat to the security of society. Armed conflicts may also cause environmental damage. Regional and local conflicts are often caused by disagreements over diminishing natural resources or the control of arable land and habitable areas." (Ibid.) As a consequence, this approach calls for international community to engage using crisis prevention and crisis management techniques, as well as provide economic and humanitarian assistance. Capability requirements to manage these engagements include first and foremost sound international coordination and interoperability of all agencies involved.

Dynamics and Equilibiria

So far, we have looked at changing and emerging security challenges statically, as they appear in different security sectors. Finally, we should also consider the dynamics of the influence these challenges have to overall security situation, as well as ways and means states react to identified challenges.

The dynamics of modern global security environment are well portrayed by Barry Buzan:

> "Huge volumes of information can now be transferred almost instantaneously from one part of the planet to any other, and huge volumes of good likewise flow around it. Myriad organizational networks exist to facilitate and sustain these movements. For individual states this development poses both threats and opportunities. Invasions or attacks can come swiftly from thousands of miles away. Economic and financial developments on other continents can have major local effects. Societies, cultures, and environments are all under intense pressure from global flows of language, style, information, goods, pollutants, diseases, money, propaganda, entertainment, and people. These threats are accompanied by opportunities. Military and economic assistance can arrive quickly if needed. Global sources of finance, information, and markets are available to assist economic development. It is becoming impossible for states to isolate themselves from these flows." (Buzan 1995, 192)

Alike understanding of the dynamics of the security environment is shared in National Security Concept of Estonia: "Today's world is characterized by

rapid changes. The security environment in Europe and the world as a whole has not yet achieved stability. Although direct military threat — outbreak of large-scale nuclear or conventional warfare — has been reduced in Europe, the dynamics of local and regional crises, often arising without warning, may exert a ripple effect on countries in vicinity, thereby not ruling out the need to retain military defense." (Estonia 2001) The latter aspect needs to be addressed in security policy of any state, and crisis response assets of the state must be prepared to tackle hard security risks.

Another way to look at the dynamics of challenges across all sectors of security would be through the lens of achieving or maintaining equilibrium between challenges and responses to them. In chapter 2 of this study, root challenges were defined for each of security sectors as 'securing', 'achieving' or 'maintaining' certain states of affaires. This approach implies, that a particular state of affaires could be described in terms of equilibrium between identified challenges and preventive measures[10] undertaken by a sovereign state to counter them. Whilst achieved, this equilibrium could be — borrowing analogy from physics — either stable or instable. In other words, preventive measures implemented by a state could either counter with sufficient effectiveness most (though likely not all) of the perceived challenges and their combinations over a reasonably long time, or these implemented measures could counter only one specific challenge or combination of challenges and emergence of any new challenge would disrupt the equilibrium and drive a state into crisis. Consequently, from this perspective, states, and particularly their executive apparatuses, should be concerned not only with one-time identification of challenges and response-development, but they need to constantly monitor the evolving security environment in order to timely identify emerging challenges, assess their risk potential as stand-alone challenge as well as in any combination with already identified challenges, and if necessary, re-design the set of preventive measures to ensure new array of challenges is still effectively countered, i.e. stable equilibrium maintained. Keywords to derive from this approach are complexity, flexibility, and responsiveness.

[10] In this particular context, preventive measures are seen as broad spectrum of state's activity ranging from fostering specific ideologies or passing specific legislation, to the development of contingency plans, establishment of specific branches of executive apparatus, and maintaining elements of these branches at designated state of readiness.

Management requirements

A general pattern to handle constant change tends to be, according to Buzan et al., "…in terms of aggregate security — that is, they [actors] let security concerns from one sector color their security definitions in other sectors, or they add everything up and make a judgement on the basis of some overarching narrative that structures security as such." (Buzan, Waever and de Wilde 1998, 190) This, again, underscores the very complex nature of constantly and rapidly changing environment.

How, then, states could manage this complex change. European Security Strategy provides: "In contrast to the massive visible threat in the Cold War, none of the new threats is purely military; nor can any be tackled by purely military means. Each requires a mixture of instruments… Dealing with terrorism may require a mixture of intelligence, police, judicial, military and other means. In failed states, military instruments may be needed to restore order… Regional conflicts need political solutions but military assets and effective policing may be needed in the post conflict phase." (European Union 2003, 7) That said, the focus of management of security challenges tends to shift overseas: "…the consequences of initially local crises may spread dramatically in an ever more interdependent world," the British strategic defense review concludes. (United Kingdom 1998) Same approach has been adopted by the European Union. "With the new threats, the first line of defence will often be abroad. The new threats are dynamic… This implies that we should be ready to act before a crisis occurs. Conflict prevention and threat prevention cannot start too early." (European Union 2003, 7) The same thought has been brought forward by then Secretary General of NATO, Lord Robertson, who underscored: "First, future crises will require prompt decision-making in national capitals, advanced planning in NATO, and rules of engagement to deal with the unexpected. Second, crises, which start small, can finish big, and crises can happen concurrently." (US DOD 2003)

Also, conflict and threat prevention are increasingly international undertakings. The Dutch defence white paper underscores: "More than ever before, the nature and scope of the defense effort are also determined by the willingness to share responsibility for the international community." (Netherlands 2000) Moreover, according to European Union security strategy, active international engagement in crisis management should apply to "…the full spectrum of instruments for crisis management and conflict prevention at our disposal, including political, diplomatic, military and civilian, trade and development activities. Active policies are needed to counter the new dynamic threats. We need to develop a strategic culture that fosters early, rapid, and when necessary, robust intervention." (European Union 2003, 11) Again, the Europeans are not alone in this understanding, for the then-

Secretary of Defense, Donald Rumsfeld, while summarizing the NATO Defense Ministers' meeting in Colorado Springs, October 2003, said: "…the seminar … highlighted the need for that response force to have capabilities that are agile, swift and lethal so that this wonderful alliance of ours can respond quickly and effectively to rapidly unfolding crises." (US DOD 2003)

In other words, taking into account the complex nature of security challenges, a matching response to any particular crisis should also be a well-balanced combination of political, economical and military instruments. As a consequence, while developing or acquiring procedures, technologies or platforms to respond to any of the challenges, one should cope with uncertainty and plan for a considerably broader application of given procedure, technology or platform than just to tackle the challenge that triggered the response.

There is yet another aspect of managing contemporary security challenges — resource constraints. As former U.S. Assistant Secretary of Defense for Systems Analysis, Alain C. Enthoven wrote: "…the fact is that our total resources are always limited and must be allocated among many competing needs in our society…" (Enthoven 1989, 7)

From another perspective, these days "…forces operate in a world of diverging threats and growing fiscal constraints…." (Ballard and Sifers 1995, 95) Although written about the military, both statements really apply to the whole spectrum of agencies handling both soft and hard security risks. Indeed, resource constrains is an aspect that should not be overlooked. Avoiding duplication of effort while seeking maximum efficiency, transparency, well-reasoned prioritization, and clearly focused resource allocation should be the guiding principles of any national defense establishment.

To sum up

There is a tendency of blurring dividing lines between different types of crisis situations, e.g. the problem that initially surfaced as a civil emergency may quickly escalate to an asymmetric armed conflict. By and large, then, one must state that national security problems have obtained the dynamism and complexity never seen before.

Hence, looking at theory implications and policy documents of several countries, as well as international organizations, three key features, characteristic to contemporary security and political environment have surfaced:

- Complexity;
- Rapid changes;
- Resource constraints.

In order to handle security challenges under the circumstances of complexity of security challenges within an uncertain and rapidly changing environment, and under resource constraints, **a national defense planning and management system should provide for complex solutions to complex problems. Necessary requirements for such a system are flexibility, responsiveness, built-in mechanisms for inter-agency coordination and cooperation, national and international inter-agency interoperability, as well as careful allocation of resources to meet the most high priority challenges.**

Chapter 4.
ROLES AND RESPONSIBILITIES OF A STATE IN PROVIDING SECURITY

■

In this chapter the writer will derive from the theory of multisectoral security the principal roles of a state as such, followed by discussion of major instruments in any state's disposal to perform these roles — legislation, policies, and public services.

First, the state in the context of the multisectoral approach to security will be defined. Further, two important issues related to statehood — concept of minimal and maximal state, as well as concept of weak and strong state will be briefly discussed. After that, the main responsibilities of a state in providing security will be addressed.

Drawing upon 'required and necessary minimum' of aspects of security, established in Chapter 2, the author will suggest which tools — or their combinations — suit best for addressing which aspect of security.

Further in this chapter the writer will focus on establishing key requirements for a state executive apparatus, as well as suggesting basic allocation of responsibilities between elected and democratically appointed leaders, administrators, and professional area experts (professional military, professional law enforcers, professional rescuers etc.)

One starts with the question "what is a state"? The answer is twofold. One can approach the state from the perspective of an individual, focusing on interrelations between state and its subjects. Another approach would consist of certain key characteristics of state as a class of objects, or as an element in international system.

In the very general sense, from the perspective of an individual operating under the conditions of uncertainty that causes insecurity, some kind of superstructure deems necessary that will take care of at least some aspects of insecurity. "Unacceptable chaos becomes the motive for sacrificing some freedom in order to improve levels of security," Buzan wrote, "and in this process, government and state are born." (Buzan 1991, 38) However, yielding part of one's freedom of choice and action to state's (or government's) discretion creates a situation where "The state is a major source of both threats to and security for individuals." (ibid., 35) For "the state sacrifices the interests of some for what is seen to be a higher collective interest, …" (ibid., 45) Consequently, from the perspective of an individual, one's security "is locked into an unbreakable paradox in which it is partly dependent on, and partly threatened by, the state." (ibid., 363–364) In sum, the state is

an instrument, established by the people, which provides for individual security in general terms while at the same time monopolizing privilege to confine individual freedom of choice and action for what is perceived as common good.

From the systemic perspective, "states…represent human collectivities in which governing institutions and societies are interwoven within a bounded territory. ...this nexus of territory, government and society is what constitutes the state." (ibid., 60) Hence, to be classified as a state, certain physical, institutional, and societal characteristics should be met. Buzan defines these characteristics of states as a class of objects by claiming "They must have a physical base of population and territory; they must have institutions of some sort which govern the physical base; and there must be some idea of the state which establishes its legitimacy in the minds of its people. … The additional factors which make states a distinctive group of entities are size and sovereignty." (ibid., 65–66) The physical base of the state, according to Buzan, "comprises its population and territory, including all of the natural resources and man-made wealth contained within its borders." (ibid., 90) The institutions of the state "comprise the entire machinery of government, including its executive, legislative, administrative and judicial bodies, and the laws, procedures and norms by which they operate." (ibid., 82–83) With regard to the idea of the state, Buzan suggests, "Sovereignty…is the glue that binds the territorial-polity-society package together. …It requires denial of any higher political authority, and the claiming by the state of supreme decision-making authority both within its territory and over its citizens." (ibid., 67) Buzan et al. further the idea of sovereignty elsewhere, elevating it to status of key determinant of the state: "The modern state is defined by the idea of sovereignty — the claim of exclusive right to self-government over a specified territory and its population. …Throughout history, the right to govern has been established by the capability to assert and defend that claim against armed challengers from within and without." (Buzan, Waever and de Wilde 1998, 49–50) To sum up, from the systemic perspective, to be considered a state, the entity in question must have physical base consisting of population and territory; established institutions and procedures to govern that territory; and most importantly — sovereignty over given territory and population.

Another issue to be discussed here is the concept of minimal or maximal state. Of the two approaches to the state elaborated above — that of interrelations between state and individual, and state as class of objects — this concept belongs to the former. "The minimal state arises out of John Locke's concept of a social contract which provides a view of the state very much oriented towards the individuals who make it up. …In this view, the state should not be much more than the sum of its parts…" (Buzan 1991, 39) Regarding the nature of interrelations between the minimal state and individual,

Buzan claims, "In the minimal state model, one assumes a low level of disharmony between state and individual interests. The state structure should be responsive to individual interests except for the restraints imposed in pursuit of civil order and external defence." (ibid., 42) To put it otherwise, in the case of the minimal state, it will not interfere into what people can do themselves, and the state's prerogatives are limited to providing external and some aspects of internal security. The maximal state, in Buzan's view, "grows from the assumption that the state is, or should be, considerably more than the sum of its parts, and that it therefore has interests of its own." (ibid., 40) Specifically, in the maximal state model, "internal security becomes a natural and expected dimension, and there is no necessary striving to harmonize state and individual interests." (ibid., 43) In other words, in case of maximal state, it has agenda of its own, and the state's prerogatives to interfere into people's activities are considerably broader, expanding into sectors of life well beyond the narrow and strict meaning of security. To sum up, for the purposes of this study and in the context of multisectoral approach, it should be underlined that **regardless of which concept — minimal or maximal — the state's superstructure is based on, it has a definite role in providing security. In the case of the minimal state, this role is likely to be limited to military and certain aspects of political security sectors. In the case of the maximal state, its role appears in all sectors of security**.

The next aspect of statehood to be discussed below is that of weak or strong state concept.

The cornerstone of this approach is the notion of an idea of state, for "…ideas were a vital component of the state, essential to its coherence and purpose, and providing a mechanism for persuading citizens to subordinate themselves to the state's authority." (ibid., 83) Buzan takes that concept further, claming that "…the ideas and the institutions are inseparably intertwined. …This interdependence means that institutions and organizing ideologies tend to stand or fall together in the context of any particular state, and this fact has obvious implications for either, or both, as objects of security." (ibid., 86) Hence, as Buzan states, "The fate of the government cannot be wholly separated from the issue of national security even in a weak state. The government is both an important symbol and a major manifestation of the state. The fate of particular governments may not be of much account to the state as a whole, but congenital weakness of government brings into question the integrity, and even the existence of the state, and therefore has to be regarded as a national security issue." (ibid., 105)

For further clarification of the issue, we should take a step aside and make a distinction between two sets of characteristics of the state — namely, its relationships to the society in terms of integrity, and its' relationships to other ex-

amples of the same class of objects. In words of Buzan, "…weak or strong *states* will refer to the degree of socio-political cohesion; weak or strong *powers* will refer to the traditional distinction among states in respect of their military and economic capability in relation to each other." (ibid., 97) In that respect, Buzan wrote, "By definition, governments in weak states will have serious concerns about domestic threats to their own authority. These threats can take many forms including military coups, guerrilla movements, secessionist movements, mass uprisings and political factionalism. Domestic threats are to a considerable extent endemic to states with no clear machinery for political succession." (ibid., 104–105) Buzan goes on and suggests: "If the idea of the state is strong and widely held, then the state can endure periods of weak institutions… without serious threat to its overall integrity. If the idea of the state is weakly held, or strongly contested, however, then a lapse in institutional strength might well bring the whole structure crashing down in revolution, civil war, or the disintegration of the state as a political unit." (ibid., 82) The importance of the idea of state is underlined by Buzan's conclusion that "Even a strong state must guard against subversive penetration of its political and military fabric by foreign agents and interests, but for a strong state the concept of national security is primarily about protecting its independence, political identity and way of life from external threats, rather than from threats arising within its own fabric." (ibid., 103)

Buzan suggests the following matrix of state's security characteristics both in terms of socio-political cohesion and relative power vis-à-vis other states:

		Socio-political cohesion	
		Weak	Strong
Power	Weak	Highly vulnerable to most types of threat	Particularly vulnerable to military threats
	Strong	Particularly vulnerable to political threats	Relatively invulnerable to most types of threat

(ibid., 114)

Examining this matrix, it becomes obvious, that the dimension of socio-political cohesion — in other words, strength of the idea of state amongst its subjects — is more important characteristic of state's security that it's relative power. For the latter depends on a number of determinants beyond the influence of any government — geo-political location, relative strength of national economy both in domestic and global terms, degree of interdependence, etc., whereas it is reasonable to assume that development and sustainment of socio-political cohesion within a state is to a remarkable degree depending on adopted policies of government. In words of Buzan, "…the building of strong states (those with high level of socio-political cohesion) is

a necessary, though not sufficient, condition for achieving adequate levels of national security." (ibid., 154)

That leads to the overall architecture of the state's superstructure, both in terms of its institutional outlook and operating procedures. "National security cannot be considered apart from the internal structure of the state," Buzan wrote. "A strong state defines itself from within and fills the gap between its neighbours with a solid socio-political presence. A very weak state may be defined more *as* the gap between its neighbours, with little of political substance underlying the façade of internationally recognized statehood. (ibid., 103) Hence, Buzan maintains, "The existence of stronger states will not by itself guarantee security, but their continued absence will certainly sustain insecurity." (ibid., 106) In other words, "…without strong states, there will be no security, national or otherwise." (ibid., 106) Or even in stronger wording, "In a strong state …it might thus be argued that *security is the only legitimate function of the state*." (Buzan 1995, 206)

The latter idea closes the loop: from the minimal/maximal state concept, least common denominator is the role of the state to provide for military and limited political security; from weak/strong state concept raises the requirement to develop and sustain strongly held idea of state.

That said, let us now have a look by what means a state can, in general, perform its primary function — to provide security.

Regardless of which concept of a state — minimal or maximal — we adopt, the author would argue that, essentially, there are three sets of tools for a state to perform its *raison d'etre*:

1. Conditioning 'operational' environment of the society as a whole, and its different sectors, through setting legislative framework[11]. In the context of this study, the keyword for this tool would be 'shape'.
2. Shaping, securing and promoting society's core values mainly through supporting — both morally and materially — relevant structures and activities (e.g. schools, broadcast, major cultural events, etc.). In the context of this study, the keyword for this tool would be 'support'.
3. Providing certain basic public services (in a very broad notion of the term 'public service'), e.g. provide defense against hostile foreign power, ensure internal security, to include public safety, law enforcement, search and rescue, (para)medical services, etc. through its executive apparatus; the scope and extent of these services largely

[11] Admitting that passing legal acts is the sole prerogative of elected legislature, there is still distinct role for the state's executive apparatus in the drafting, or at the least, advising the drafting, of legal acts. The extent of this role varies under different democratic systems of governance.

varies from state to state. In the context of this study, the keyword for this tool would be 'act'.

Now let us examine each of the root challenges of security sectors, defined in chapter 2, in order to ascertain applicability of above-mentioned sets of tools.

The military security sector focuses on securing territorial integrity of the state, and the coherence of its superstructure, vis-à-vis challengers from both inside and outside of the state, under conditions of use, or threat of use, the military force. Empirically, the first set of tools — legislation — is applicable, as well as activities of a state's executive apparatus. As it comes to applicability of tools aimed at shaping society's core values, their relevance, the author would claim, is practically nil in the military sector of security.

The political security sector focuses on securing the integrity of legitimacy of the state/government in question, both from outside — denial or withdrawal of diplomatic recognition by other states and/or international bodies — and inside — denial of recognition of governing authority by the society or faction(s) of it. Again, legislation is required to encompass activities in this sector. With regard to securing internal recognition of governing authority, the current writer would claim, promotion of common values contributes to sustainment of this recognition at least partially. And finally, the state's executive apparatus has its definite role in securing both external and internal recognition of the state's governing authority.

The third sector is that of societal security, focusing on securing sustainable self-identification of society against threats from outside — infiltration of societal identificators alien to local descriptors of identity, and inside — desires of sufficiently large societal groups to adopt some other identity, wider or smaller than that of the society in question. Obviously, a legal framework to provide supporting tools for societal self-identification is necessary, as well as other moral and material support to promoting and sustaining society's core values. The role of state's executive apparatus in this sector, however, is non-existent.

Further, in the context of economical security, that focuses on achieving an always-dynamic balance between mercantilist/neomercantilist policies of self-sustainment, and liberal policies of division of labor, based on efficiency, in order to ensure the resources, finance and markets necessary to sustain acceptable levels of welfare and state power, under necessary condition of undisrupted functioning of global market, well-developed legal framework is absolutely necessary. One could also assume that promoting an entrepreneurial spirit and a people's will to take their destiny into their own hands is relevant. That leaves for a supporting set of tools at least partial applicability. In terms of the state's executive apparatus, it may under certain conditions and policies have some

regulatory — but barely leading — role. Hence, it is plausible to recognize only partial applicability of this set of tools.

And finally, the environmental sector of security is primarily concerned with maintaining stable and sustainable relationships between humankind and the rest of the biosphere without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both. Again, legislation is required to guide society through complex and sometimes controversial issues of 'mankind — the rest of biosphere'-relationships. Promoting the values of 'green worldview' and sustainable development is undoubtedly an important security-providing function of the state. The role of the executive apparatus in the environmental sector of security, however, is practically limited to supervising functions at best, and the third set of tools could be regarded as non-applicable in this case.

Now let us construct a matrix, linking the mentioned three sets of tools to the sectors of security, where full applicability of a tool to relevant sector is marked by 'X', partial applicability by 'x/–', and inapplicability by '–'.

	Shape	Support	Act
Military	X	–	X
Political	X	x/–	X
Societal	X	X	–
Economical	X	x/–	x/–
Environmental	X	X	–

From this matrix we can see, that the state has to perform its legislative role in all sectors of security. The state's supportive role is not applicable to the military sector; is partially applicable in political and economical sectors, whereas limitations to a state's activities are determined primarily by the combination of core values and adopted policies; and is fully applicable to societal and environmental sectors. And finally, the state performs its actions through executive apparatus in military and political sectors, partially in economical, and does not have any major role in societal and environmental sectors.

It should be underlined here, that although recognizing existence of internal revenue services or environmental inspections as legitimate parts of the state's executive apparatus, these agencies nevertheless do not perform the role of the only, or at least major, regulators of processes undergoing in mentioned sectors. In other words, the state's executive apparatus does not have primary responsibility for the security of these three sectors.

In sum, a state's role in providing security through the means of legislation is present in all five sectors; through the means setting policies, the state provides security mainly in societal and environmental sectors, with limited responsibilities in political and economical sectors; and through its executive apparatus, the state is fully responsible for providing military and political security. Further deliberations within this study will be limited to optimizing the state apparatus' standard operating procedures, i.e., mainly the third set of tools, in order to increase efficiency and effectiveness of the state in providing military and political security.

Before moving any further, it should be noticed here, that there is no existing state apparatus that fully corresponds to a multisectoral approach to security. In other words, whatever the allocation of responsibilities between different government agencies in any state could be, from the multisectoral perspective there is always more than one agency with responsibilities in one or another sector. This fact implies a requirement for coordinated cooperation between agencies while coping with security challenges. Efficient cooperation, in turn, brings in the requirement for single and unified, or at least shared, doctrinal basis, as well as for standardized or at least compatible operating procedures.

The importance of operating procedures and the efficient and effective allocation of responsibilities within the state's superstructure has been mentioned above, since security cannot be considered apart from the internal structure of the state. There is, however, another dimension in the allocation of responsibilities to be discussed. Namely, that of between elected or democratically appointed leaders, administrators, and professional area experts[12] within the third set of tools, labeled above as 'act'.

For this purpose, the author would apply a sort of reverse engineering and 'borrow' from the military sphere the distinction between levels of activities — strategic, operational, and tactical. In the context of state's executive apparatus, i.e., in a much broader sense than purely military, strategic level of activities would consist of setting policies, objectives and priorities; conducting risk analysis; directing the implementation of adopted policies, to include issuing political and planning guidance; planning and development of organizational structure of executive branch in question; broad allocating of resources; and determining response to emerging crises.

[12] The term 'democratically appointed' refers to officials whose appointment requires consent of elected legislature (e.g., ministers, deputy ministers, and alike), i.e. state officials who bear political responsibility, are accountable to the legislature, and are therefore considered to be in 'public service'. The terms 'administrators' and 'area experts', in turn, refer to managerial and specialist strata of the executive apparatus falling under the provisions of 'civil service'.

The operational level of activities would consist of contingency planning and planning for ongoing activities; directing training and education of the cadre of professionals of the executive branch in question; advising the elected leaders in determination of response to emerging crises; and fine allocating of resources.

The tactical level of activities of the state's executive apparatus in providing military and political security would consist of training and educating the cadre of professionals; maintaining required level of performance of the executive branch in question; and executing assigned tasks as directed.

It should be underlined here, that strict military meaning of strategic, operational, and tactical levels of activities (Levels of War, in military lexicon) should be seen as an extreme of each level.

With the levels of activities defined let us consider allocation of responsibilities at each of these levels. The strategic level is primarily concerned with setting policies and objectives, and broad allocation of resources. In a democratic state, these functions are the prerogative of elected and democratically appointed leaders. In performing other tasks at the strategic level — analysis, planning, and management — specific skills and professional advice of administrators and area experts are required in support of what essentially is a decision-making process.

At this point, it is necessary to bring in the key concepts of securitizing and 'speech act'. In the first chapter of this study, it has been said that the process of securitization is typically formalized in mature societies, and that it is the state executive apparatus, which is designated to undertake securitizing moves, with the mechanisms in place to either accept or reject the move. That is exactly what takes place at the strategic level of the state's activity: relevant branch of the executive apparatus takes the 'speech act' and the legislative body either accepts or rejects that move, admittedly though, usually also considering wider public opinion regarding the matter.

At the operational level, the focus is on planning and management. The author would argue, therefore, that primary responsibility for activities at operational level should be shared between administrators and area experts, operating under the political guidance provided from a strategic level.

The main focus of activities at the tactical level is on implementation, which leaves, the author would argue, the primary responsibility with area experts assisted by administrators.

The key requirement in order to increase efficiency and effectiveness of the executive apparatus is, hence, seeking professional expert advice in making political and major management decisions, whereas the ultimate decision-making authority — and responsibility — resides with the elected and democratically appointed leaders.

Let us sum up. The main requirements to be brought forth are as follows: at the minimum, **the state has responsibilities to provide for military and limited political security, with the focus on development and sustainment of strong idea of state.** To that end, the executive apparatus of the state should be developed and maintained in a way that **ensures the ability to act within both military and political sectors, and provide expertise for legislation in all sectors, whilst operating on shared doctrinal basis.**

Chapter 5.
CAPABILITIES-BASED DEFENSE PLANNING: THEORY AND PRACTICAL EXPERIENCE

■

Chapter 3 of this study has established that a contemporary security environment is characterized by uncertainty, complexity, and rapid changes. At the same time, the resources at the disposal of any country to counter security challenges emerging from this uncertain, complex and rapidly changing environment have became more and more constrained. The question now arises, which national defense planning methodology should guide the development of a defense apparatus and allocate scarce resources for countering security challenges that best suits this environment? In this chapter, the writer will outline the conceptual basis of capabilities-based approach in defense planning (CBP) — a concept that emerged in the military realm after the Cold War — as well as some "lessons learned" from the practical application of this methodology. At the end of this chapter the present writer will define the generic sequence of CBP process that will be used for validation of the study's hypothesis.

Let us set the stage for further deliberations by quoting the former U.S. Undersecretary of Defense for Policy, Douglas J. Feith: "The Cold War system of two competing blocs has been replaced by a new system, one with a broad spectrum of potential opponents and threatening contingencies…We no longer confront severe but relatively predictable threats of the Cold War; instead we have entered an era of uncertainty and surprise…What we can predict today is that we will face unanticipated challenges, a range of opponents — some familiar, some not — with varying goals and military capabilities, and a spectrum of potential contingencies involving very different stakes for the United States and its foes." (Feith 2002) Under very broad possible circumstances, the challenge for defense planners and force developers is to "… transform our forces and planning to meet the dramatically different conditions of the new security environment." (Feith 2002) Again, the dramatically changed nature of security environment — with its characteristic uncertainty and rapid changes — requires from nations developing their defense apparatuses "… the flexibility to tailor military capabilities to a wide spectrum of contingencies, to address the unexpected, and to prepare for the uncertainties of deterrence." (ibid.) Secretary Feith went on stating: "We can no longer approach our military requirements by conveniently defining one or a few countries as the specified "threat", and then sizing our military capabilities against that defined threat. U.S. planning can no longer

be so "threat-based" because, in an era of uncertainty, the precise source of "the threat" is unpredictable." (ibid.) Indeed, about a decade ago, a similar observation was made by Thomas-Durell Young, who, analyzing an existing planning methodology in Australia, noted: "Prior to the end of the Cold War, most militaries of the Western Alliance planned their force structures primarily on the basis of an identifiable and quantifiable threat. …since the end of Cold War, the lack of such threats has resulted in a scramble to create new approaches by most members of NATO for developing and *justifying* force structures. … Defense and Alliance officials now face the difficult problem of translating the implications of a threat-ambiguous strategic environment into defense planning and force development methodologies that are applicable to modern structures and convincing to cost-conscious politicians." (Young 1995, 349) With regard to the strategic planning methodology employed by the United States, Lovelace and Young rightfully pointed out: "For almost 50 years, the United States assumed the strategic defensive in dealing with the containment of the monolithic Soviet threat. Two generations of military strategic planners have passed through this defensive strategic planning paradigm. "Threat-based" planning became so inculcated into the military culture that it became universally regarded as the only type of military strategic planning that made sense. After the dissolution of the Warsaw Pact and the disintegration of the Soviet Union, the U.S. military encountered great difficulty in breaking out of the threat-based planning paradigm and entering into a new era of objectives-based planning." (Lovelace and Young 1995, 14) The change of paradigm in military planning after the demise of bi-polar confrontation is well portrayed by Builder and Dewar:

> If planning is mostly about wrestling the outstanding uncertainties to the ground, the Cold War left military planners with precious little with which to wrestle:
>
> - The enemy was not uncertain; it was the communist bloc, led by the Soviet Union.
> - The threat was not ambiguous; it was the very survival of the nation under the shadow of a massive nuclear attack.
> - The resources were not highly uncertain; the threat was so dire that the necessary funds would be provided regardless of other claims and claimants.
> - The locus of conflict was clear enough; it was Central Europe, where the prize of two world wars was left divided between the Cold War adversaries.
> - The scenario was so consistent as to be called canonical; it was a Warsaw Pact invasion of Western Europe, escalating to the use

> of nuclear weapons, first in Europe and then in the heartlands of the two superpowers.
>
> …With the end of the Cold War, the planning uncertainties appear to have been turned on their heads:
>
> - The enemy is no longer certain; it may be "tin-pot" dictators or the reemergence of old enemies from past wars, hot and cold.
> - The threat to the nation is ambiguous; it may be oil as "life blood" or regional conflicts that could spread to involve old allies or enemies, but it is no longer the very survival of the nation.
> - The resources for national security are highly uncertain; the demands of other claims and claimants for the federal budget, long deferred by the Cold War, are legion and strident.
> - The locus of conflict, particularly for small wars or peacemaking operations, is no longer clear; it could be almost anywhere and everywhere in the world.
>
> The scenarios remain to be determined; the Persian Gulf remains popular because of its oil and the militarily successful conflict waged there. (Builder and Dewar 1994)

The new baseline for developing a modern national defense planning methodology, then, clearly requires that "[O]ur defense preparations must now focus on, and be responsive to, a wide spectrum of potential opponents, contingencies, and threatening capabilities, some of which will be surprising. A capabilities-based approach to defense planning will look more at the broad range of capabilities and contingencies that the Unites States may confront in the future, as opposed to planning against fixed set of opponents identified as the threat." (Feith 2002)

The magic term — Capabilities-Based Planning (CBP) — has been uttered. But what is CBP and how does it differ from other, alternative, methods of defense planning? The basic assumption is that a planning methodology needs to deal with uncertainty. Builder and Dewar have briefly characterized some methodologies: "Each [of the following approaches to planning] deals with uncertainty in a different way:

- parallel programming — it *accepts* uncertainty by programming for all alternatives
- worst case and all-inclusive goals--they *encapsulate* uncertainty by making all other situations lesser included cases
- trend extrapolation and most probable futures--they *resolve* uncertainty by predicting the future
- Assumption-Based Planning (ABP) — it deliberately *programs* against uncertainty through warning and hedging actions

- Strategy and vision--they can *finesse* many uncertainties by making them orthogonal or irrelevant to sharply focused ends." (Builder and Dewar 1994)

With regard to capabilities-based planning, one has to agree with Thomas-Durell Young, who concluded recently: "…the academic and professional literature that addresses defense planning *qua* planning is modest…Perhaps unjustified concerns by ministries of defense over the security of information, or simply lack of general interest by students in the field of strategic studies, have — singularly or combined — produced a rather anemic body of literature dealing with defense planning methodologies." (Young 2006, 35) Therefore, to distill the key features of CBP to be further used for the purposes of this study, the author was limited to two approaches — the overview of the Australian defense planning system (1995, updated in 2006), and a more recent U.S. approach, linked to the guidance and requirements of the 2001 Quadrennial Defense Review (QDR) document.[13]

To begin, let us define the conceptual difference of CBP from 'traditional' defense planning methodology, widely used in virtually all Western countries during the Cold War era. First of all, "…for nearly four decades …the method for accomplishing defense planning was one of bounding threats. The idea was that using those bounding threats as requirements, as represented by one or two point scenarios, would lead to the appropriate capabilities. There were always other considerations, but the bounding threat was a core concept taught to and used by generations of planners." (Davis 2002, 6) In turn, capabilities-based planning "…stands in contrast to what had become DoD's approach to planning, an approach based on official planning scenarios for major theater wars that not only identified adversaries, but also laid out scenario details, such as warning time and roles of allies." (Davis 2003, 141) Here, in ways how planning scenarios are defined, developed, and used, stands one of the key differences of CBP: "Point-scenario planning is characterized by a fixation on particular enemies, particular wars, and particular assumptions about those wars — a fixation that comes at the expense of more flexible and adaptive planning." (Davis 2002,

[13] There is new QDR published in February 2006. However, since one of primary sources for this chapter — RAND Corporation's study on the analytic architecture for CBP — was based on the provisions of the QDR of 2001, the latter is considered being more relevant for the purposes of deriving key features of the CBP methodology.

8) Or otherwise, CBP is designed to accommodate uncertainty, the infamous Clausewitzian 'fog of war'[14], a feature that point-scenario planning lacks.

In broader sense, then, Davis defines CBP as "…planning, under uncertainty, that aims to provide capabilities suitable for a wide range of future challenges and circumstances while working within an economic framework." (Davis 2003, 141) He goes into details elsewhere, maintaining: "This seemingly innocuous definition has three important features. First, the notion of planning under uncertainty appears in the very first clause: uncertainty is fundamental, not a mere annoyance to be swept under the rug. Second, the idea is to develop capabilities — i.e., the general potential or wherewithal — to deal effectively not just with a well-defined single problem, but with a host of potential challenges and circumstances… Third, this is to be done not with the largess of a blank-check policy (preparing for anything that might conceivably arise), but rather while working within an economic framework." (Davis 2002, 1–2)

Through the following passages, the author will describe and deconstruct the above-mentioned methodological approaches — Australian and the U.S. — in order to derive critical generic features of the CPB applicable for a small state.

Let us start with the Australian example. The cornerstone of this approach is summarized by Thomas-Durell Young as follows: "Without an identifiable threat upon which to focus, defense planning in Western countries is progressively more difficult to sell to wary politicians. What responsible political leaders and civilian officials are increasingly demanding from military establishments are well-reasoned justifications for military capabilities." (Young 1995, 365) In response to this demand, according to Young, "…after many false starts, the Australian Department of Defense…had developed principles and processes for guiding force development that reflect government strategy and guidance to defend the country, while making threats less weighty. In their place, "credible contingencies" that are based on capabilities rather than on existing threat…are employed." (ibid., 349) In other words, Australians have developed a planning methodology that is based on the Government policy guidance, and develops an economically feasible defense force that carries military capabilities required to counter 'credible contingencies'. How this methodology works?

The baseline requirement is the existence of a comprehensive government policy. As Young underscored, "Any sound defense planning and force development system can only be successfully implemented if there is a modi-

[14] "War is in the realm of uncertainty; three quarters of the factors on which action in war is based are wrapped in a fog of greater or lesser uncertainty." (Clausewitz 1976, 101)

cum of stated and clear government policy to guide planners[15]…In the end, guidance and priorities need to be promulgated in Ministry of Defense-level policy documents…" (Young 2006, 37) Based on this government-level guidance, following steps are undertaken.

> First, defense planners need to recognize the fundamentals of a country's geopolitical and geostrategic setting. …Second, it is necessary to develop a disciplined and systematic appreciation of the capabilities of the armed forces — both those in service and those likely to be produced in the future — possessed by the regional states. …An appreciation of a country's geographic setting and the military capabilities of regional states produce, in effect, warning time and defense preparation requirements. …Third, by combining the findings from first two steps, a series of credible contingencies and national defense requirements can be generated. …Essential elements of these analyses are the capabilities possessed by regional states, their strategic doctrine, level of training and sustainability; and the analyses also include an appreciation of the level of conflict one could reasonably expect to confront …Credible contingencies had a direct influence on developing the ADF's capabilities to meet levels of conflict that could arise in the near term, and the defense expansion base…for conflicts that would take longer to develop. …Fourth, and finally, financial assumptions were introduced. These data were essential to enable the Australian Department of Defense a five-year planning horizon to support and guide force development plans. A key purpose of the defense planning process is to provide force development priorities, as opposed to championing "worthy causes." An estimate of financial resources available for the near future, therefore, is extremely useful for planning purposes. (Young 2006, 38–39)

In brief, defense planners, in response to government guidance, conduct a comprehensive analysis of military capabilities possessed by relevant coun-

[15] With regard to quality and availability of policy guidance, Young has the following noteworthy observation: "To be sure, it is folly for any defense planner to wait for such guidance to be provided in formal documents. Inevitably, it is left to planners to discern guidance from a wide variety of sources, both obvious and obscure. For instance, important guidance for defense planning can be gleaned from such varied sources as a nation's constitution, its defense laws, speeches made by elected government officials, and even press interviews. Indeed, my experience leads to the conclusion that usefulness of these other sources of guidance and priorities can far exceed that of poorly-executed and public relations-oriented national policy documents." (Young 2006, 37)

tries identified within a geopolitical and geostrategic context, as well as by their own country; followed by the development of series of credible contingencies for both near- and medium-term timeframe, and with a five-year resource availability estimation taken into account while forming defense requirements. This approach, according to Young, establishes "…a practice by which defense officials can approach the definition of missions without accentuating implausible threat scenarios. …In consequence, the above procedures provide Australian defense planning with stable direction for developing force structure, which, in principle, structures the ADF for the defense of Australia in a top-down manner." (Young 1995, 354; 2006, 40–41) The end-product of a planning phase is, then, a family of credible contingencies that describe security challenges to the nation in terms of adversary capabilities, and resource-constrained capability requirements for own forces to confront these challenges.[16]

Further, employing the family of credible contingencies and resource-constrained capability requirements, a process of force development is undertaken. This process encompasses three major stages:

> *Stage 1: Development of Strategic Concepts*
> Derived directly from the defense planning process, the force development process must first identify the tasks the defense force is likely to be required to perform. …Once articulated in Strategic Concepts, the tasks identified raise the following questions:
> - What has to be done?
> - Where does it have to be done?
> - When and how many times does it have to be done?
> - How long will the tasks have to be done?
>
> Strategic concepts were never envisioned to be static, and were expected to be reviewed, revised, and revalidated over time as policy, technology, and the geo-strategic situation changed…
> *Stage 2: Defense Force Capability Options Papers*
> This particular stage in the planning methodology examines the extent to which current and approved ADF capabilities are sufficient to undertake the tasks identified in endorsed Strategic Concepts. Where tasks cannot be completed to a level judged to be sufficient or adequate, an analysis is undertaken to ascertain what broad options should

[16] In fact, during the Cold War, the United States used the Base Case Global Family of Operation Plans essentially for the same purposes. See also Lovelace and Young, 1995, 10-11.

> be considered for use in overcoming these deficiencies[17]. …this process can be summed up briefly:
> - Can the identified tasking be done now? ...
> - How much is enough? ...
> - What are the costs and risks? ...
> - What are the preferred generic options? ...
>
> *Stage 3: Specific Capability Proposals, Including Major Capability Submissions* Following approval…, the final step in the force development process is to determine specific solutions, and match resources with force structure requirements. The questions involved at this stage concern cost, the type and numbers of specific platforms and/or systems envisaged, and timing of procurement. Once these proposals/ submissions are endorsed…, they can be incorporated into the funding or programming process. (Young 2006, 41–45)

In brief, again, defense planners identify the array of tasks to be executed by their own forces across all credible contingencies; identify capability gaps in existing forces, i.e., areas where current and approved capabilities are insufficient to meet established mission requirements; and develop specific proposals to bridge identified capability gaps. When approved, these solutions will drive the future funding or programming process.
Before moving further, it is relevant to outline some shortfalls of this process, as well as to bring forward additional requirements to make this process work effectively.[18]

"…Australian Department of Defense…endeavored to ensure that [this planning method] was the result of a careful attempt to derive force structure by logical, quantitative, and verifiable means," Young stated. However, there were "institutional problems that impeded the methodology's implementation and operation…Some particularly vexing problems…have been:

- Until the late 1980s, the defense community was often provided with insufficient or contradictory policy, strategy, and strategic guidance …
- The challenges posed by the perennial need to reconcile funding current tasks to achieve readiness with long-range planning require-

[17] In an ideal world, such analysis should be based upon clear metrics that measure performance, derived from the results of a formal operational planning process. NATO uses such a process for its members and Partnership for Peace nations: Allied Command Operations, *Guidelines for Operational Planning (GOP)*, 1100/SHOPJ/ 0400-1-1321, June 2004. (Young 2006, 44)

[18] With regard to Strategic Concepts and Defense Force Capability Options, some specific challenges have been identified by Australian defense planners that transcend the scope of this study, for details, see Young 2006, pp. 46-47.

> ments to ensure modernization and future advanced capabilities[19]." (Young 2006, 47–48)

It has also been mentioned above, that to develop this methodology requires adjustments to existing defense bureaucracy. "A key lesson from the Australian practice," Young wrote, "is that a top-down approach was required to overcome institutional opposition (in particular, the individual services) to implement the planning process. The Australian experience also demonstrates that, without key government-endorsed guidance (i.e., policy, strategic, and financial), a top-down approach to defense planning is very difficult to execute." (Young 1995, 360) Hence, a firm and consistent leadership from the government, and senior civilian and military defense officials, is clearly needed. Further, Young underscores that "…the Australian experience reveals that a number of institutional and policy conditions are necessary. Government guidance is essential, i.e., strategy, strategic guidance, and financial direction. An appropriate institutional structure is also necessary for these directives to be implemented. Thus, the creation of a joint headquarters with adequate staffing, preferably headed by a senior military officer, to work with the civilian defense force development office, is also essential." (ibid., 364) In other words, besides the leadership demonstrated by single defense officials, organizational structure of strategic-military level of national defense apparatus may require adjustment — most notably, an establishment of adequately staffed joint headquarters — to function as a nexus between civilian leadership of the nation and armed services. And last but not least, a change in mentality of planners themselves is in order, for "[T]he Australian methodology requires careful and systematic consideration of what a defense force should be structured to do. In effect, it should imbue the defense planning process with a proactive mentality in what has been seen, in many instances, a reactive process and one that has been vulnerable to financial challenge." (ibid., 365) In sum, to implement the Australian model of CBP effectively, firm and consistent leadership, adjusting defense apparatus to execute this particular process and mental transformation of defense planners from reactive to proactive thinking are instrumental.

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[19] Regarding this particular problem area, Young noted: "…despite their development of a rather sophisticated and structured planning system, Australian politicians and defense officials (the very ones who championed this planning system) have not been averse to bypassing the planning system to purchase weapon systems, thereby defeating the purpose of top-down planning," referring to the government's decision in 1993 to purchase fifteen excess USAF F-111 aircraft that was made because they were a "good buy." There was no need for these aircraft that had been validated by the planning system. (Young 2006, 51)

Now it is time to have a look at a recent analog to the Australian model, a U.S. methodology that has been elaborated within the framework of policy guidance provided by Quadrennial Defense Review process of 2001. "Strategic planning," Davis wrote, "can be expensive, tedious, and counterproductive or lean, stimulating, and insightful." (Davis 2003, 134) As a starting point for the renewed U.S. methodology — the one that truly is lean, stimulating and insightful — Davis brought forward three critical components a defense planner should bear in mind. A planner "…must understand and define (1) the "operating space," (2) metrics for addressing the goodness of a design along multiple dimensions, and (3) the tradeoffs that might be made." (Davis 2002, 10) Based on these three components, and in specifically defense context, the key elements of CBP are:

– A conceptual framework for planning under uncertainty by emphasizing flexibility, robustness, and adaptiveness of capability.
– An analytical framework with three components:
  = understanding capability needs
  = assessing capability options at the level of mission or operation
  = choosing capability levels and choosing among capability options in an integrative portfolio framework that considers other factors (e.g., force management), different types of risk, and economic limitations.
– A solution framework that emphasizes "building blocks." (ibid., 4)

Let us see how these components are handled through the planning process.

Understanding Capability Needs

The first step in the process is to identify the range of plausible challenges. It begins by "recognizing the wide range of potential future threats, rather than focusing on one or two as was common during the cold war. It urges developing a lengthy list of "name-level scenarios" (scenarios defined only to the extent of giving them names that indicate broadly the nature of conflict being considered), both specific and generic…not just some "bounding threat," but a richer and more realistic list. The list should deal with the here and now, the mid term, and the longer term. It should include specific threats and more-generic threats." (ibid., 15) In brief, the developed list should cover all or nearly all plausible contingencies that may surface today, as well as in the foreseeable future. As one can expect, the scenarios are not all at the same level of detail, but "…largely vary in the types of threat, terrain, and operations emphasized; timing considerations; the strength of allied forces; the

logistical base for operations, and other factors. …some scenarios are generic, which avoids painting other countries as potential threats. Also, some items indicate what…forces must do; others indicate only that some unspecified role may be necessary." (ibid., xii–xiii) Obviously, this inconsistency in level of detail across all scenarios is insufficient to support any further analysis. Therefore, the scenario analysis should be broadened, and "…the enrichment of scenario analysis should occur in two steps: broadening the range of name-level scenarios…and — for each significant name-level scenario — developing a design space that recognizes the full dimensionality of uncertainty." (ibid., 21) In other words, the list of name-level scenarios should be expanded to accommodate all plausible contingencies. For the select scenarios, assessed to be critical for the development of the exhausting range of capability requirements, deeper analysis in the form of what Davis labels as 'scenario space', should be conducted across all inputs which can be placed into six categories:

1. Political-military context (e.g., how the war came about, who is allied with whom, the degree of strategic warning, forward stationing of forces).
2. Objectives and strategies (e.g., the other sides' political and military objectives; their military strategies, such as anti-access strategies that threaten regional states with WMD if they grant the United States basing rights, strategic deception minimizing usable warning, and distractions, such as apparently unrelated terrorist events in the United States itself).
3. Forces (size, character, and nominal capabilities).
4. Force effectiveness (accounting for training, morale, cohesion, etc.).
5. Environment (terrain, weather, etc.).
6. Other model assumptions (movement speed of maneuver forces, real-world weapon effectiveness given fog of war and unanticipated low-level tactics).

The interpretation of the outcome will also depend strongly on the criteria for success. For example, requiring an early halt is different from requiring an eventual halt; requiring the ability to accomplish a decisive counteroffensive deep into the enemy's homeland is different from just defeating his army; minimizing losses changes the character of outcome. Indeed, such issues of criteria may be regarded as a seventh category. (ibid., 23–24)

This comprehensive analysis of illustrative scenarios gives defense planners a sufficiently complete set of data to ascertain capability requirements for their own forces. The full list of requirements, again, is probably extremely

long and, more importantly, most of these capabilities are already present in the existing force structure. Instead, Davis suggests focusing attention on a few required capabilities, naming them 'operational challenges,' that are essential to conduct the planned operation. "…such operational challenges should be expressed as missions that a future commander in chief (CINC) might be assigned… This is not just a matter of taste; it is a matter of focusing on military *outputs*: the capabilities to accomplish such missions. This is in contrast to planning for more platforms or communications bandwidth, which are merely inputs from a top-down…perspective. It is also in contrast to listing "activity areas," such as improving precision of fires or improving collaborative planning. The operational challenges provide context and lead to valid metrics." (ibid., xiii)

The U.S. process has, thus far, taken us from identifying the full range of plausible contingencies, through scenario-space analysis of significant scenarios, to relatively few operational challenges presented in the form of military missions that, in turn, will define military output — capabilities required to execute these missions — and metrics to measure the required performance.

Assessing Capability Options

The next step for each operational challenge, then, is to conduct a mission-system analysis to ascertain which capabilities are required. In the words of Davis: "Having established needs, the next step is to create and assess options and suggest alternatives. The appropriate paradigm here is *mission-system analysis*… Given a mission and metrics of strategic and operational issues…, and given a set of capability options…, good assessment requires *exploratory analysis*…over a broad range of circumstances… The result is not a simple score, but rather a depiction of *when* the capability option does well, marginally, or poorly…The issue is how flexible, adaptive, and robust the capabilities will be." (ibid., xviii) Or, in more concentrated fashion, "…the purpose of mission-system analysis is to give meaning to the goal of achieving flexible, adaptive, and robust capabilities for the missions at issue." (ibid., 28–29) The keyword 'military output' has been mentioned above. Indeed, as Davis emphasizes, "The first tenet of mission-system analysis is to organize thinking around output. Doing so in the context of military transformation means organizing around mission capabilities." (ibid., 28) The analytical process itself begins with a mission-system description, "…in which the potentially critical components of capability are identified so that planners can assure that *all* of those critical matters are addressed effectively. …the requirement is to be able to accomplish the mission in diverse and stressing circumstances, which may include anti-access strategies,

short warnings, and other complications." (ibid., xiv) In his monograph, Davis brings an example to illustrate the internal logic of the mission-system analysis process:

> Suppose that we want to develop clear requirements for, and then develop capabilities for, a particular mission… We consider a variety of capability-set options… For each option, we assess strengths and weaknesses across a wide range of operating conditions (i.e., a scenario space, with "scenario" understood here to include not just the political-military setting, but all of the key assumptions such as warning times, force sizes, coalitions, and effectiveness). This concept of exploratory analysis across a scenario space is fundamental to planning for adaptiveness, flexibility, and robustness. (ibid., 29)

Hence, one can not underestimate the importance of exploratory analysis as a key element of mission-system analysis. "Its purpose is to confront uncertainty head-on, rather than downplaying its magnitude," Davis underscores. "It is quite relevant to capabilities-based planning because — however bitter the pill may be to swallow for those who ask their analysts to make predictions and cut out the complications — uncertainty is fundamental and often large (e.g., will warning time be an hour or a week?)." (ibid., 38)

In concentrated fashion, there are two critically important features mission-system analysis brings to the table: "First, the emphasis here is on operations or missions, rather than on total wars, because operations (or missions) are the critical building-block capabilities. Second, there is emphasis on evaluating capabilities under highly uncertain circumstances (warning time, quality of allies, qualitative capability of enemy forces, and so on)." (ibid., xviii) Davis goes on and suggests in the broader context of CBP that "Even with the best efforts, uncertainties will remain and some will not even be recognized, but mission-system analysis and associated decisions at the time of force planning can nonetheless go far in reducing operational risks years later." (ibid., 29)

The outcome of this phase of CBP, in short, is a set of capability package options carrying somewhat different combinations of required core capabilities, along with a 'scorecard' estimation of how ell each of these options performs under varying circumstances. As Davis puts it: "The result of mission-system analysis, then, is — for each option considered — a characterization of how well the capability package would fare throughout a scenario space. That is, the capabilities would be quite adequate in some circumstances and inadequate in others." (ibid., 30) The assessment of performance of each of capability options forms an important analytical support to the decision-making process to select options the development of which will get funding.

Choosing Capability Levels

"In a healthy defense-planning process, the full range of concerns are identified and estimates made of how they can be dealt with to various degrees of confidence — or, equivalently, with different types and degrees of risk. The issue of "How much is enough?" is then addressed and only then a final budget established — one to which subsequent program building must adhere." (ibid., 2) Thus, whilst general capability options have been selected, the next question to address within the CBP approach is to ascertain how much of a capability is enough to meet diverse requirements stemming from a number of different scenarios under existing resource limitations. Or, in the words of Davis, "A key element of any analytical architecture for capabilities-based planning must be an approach for moving assessment of a relatively narrow capability to assessment of how much is enough of that capability when viewed against competing demands for resources." (ibid., 43) In a broader picture, it means integration of capabilities and making choices within the fiscal framework. Methodology Davis suggests is the one of portfolio balancing. "Such balancing should combine "hard" analysis with judgment and with qualitative, value-laded tradeoffs across goals… It contemplates tradeoffs in which we consider not just capabilities for war fighting in two classes of conflict, but also such considerations as force management, reassurance of allies, and dissuasion of would-be adversaries. Costs are explicit, and the methodology rank-orders options by their attractiveness when considering effectiveness achieved on the margin." (ibid., xxiii)

Solution Framework: Building Blocks

One of the key elements of CBP, as was outlined above, is a solution framework organized around the concept of building blocks. Davis underscores: "CBP's implementation should emphasize flexibility, adaptiveness, and robustness of capability. That *implies* a modular, building-block approach to force design and operations." (ibid., xi) Indeed, as we have seen many times while walking through this methodology, "Modularity concepts are at the heart of building capabilities amid uncertainty. After all, capabilities-based planning applies when we do not know precisely what challenges will arise. Thus, we develop relatively generic capabilities that can be combined suitably to meet the needs." (ibid., 51) Naturally, in order to employ the concept of modularity, we need, first, to define what we mean by modules. In military domain, building blocks come in different forms and at all levels of war — strategic, operational, and tactical. However, according to Davis, we should distinguish building blocks in four dimensions:

"• Units (e.g., battalions)
• Operations (or missions) and related sub-operations
• Weapons systems and subsystems
• Support structures (e.g., logistics systems and, within them, individual systems such as prepositioning ships or tactical airlift)." (Davis 2003, 143) In short, the overall 'syntax' of building blocks is "Who does what, in pursuit of what goals, according to what concept, using what assets?" (Davis 2002, 52) The outcome of modular approach, taking into account results of mission-system analysis of capability requirements from significant operational challenges is, then, a set of building blocks — across all three levels of war: strategic, operational and tactical — in the form of units possessing systems and support structures that are tailored to conduct identified operations.

Another important aspect of using a modular approach is that of assembling building blocks at the right time at the right place, and with the best possible mix of required capabilities. As Davis puts it, "Building blocks are necessary but are not sufficient alone. Without the ability to assemble the building blocks suitably, capabilities are very limited. In a competitive environment, rapid and flexible assembly capability is particularly important." (ibid., 53) Taking one step further, to make these building blocks operational, it is also critical to have necessary 'plug-ins', i.e., the institutional framework encompassing theory and practice that enables modular approach. In the words of Davis, "Assembling the building blocks suitably for operations, then, is old hat, but having the organization, doctrine, command and control, and training for rapid and flexible assembly is not." (ibid., 54) This statement underscores broader implications for a defense organization if it is to employ a building block concept in operational planning and design, and in the conduct of operations.

Hence, availability of suitable building blocks and employment concepts is essential. But it is not yet the whole story, for "It almost invariably happens that what is needed is not quite what can be provided off the shelf. Therefore, building-block operations also require special tailoring. This might involve creating a unit that never before existed, creating a communications network to meet the particular needs of the commander, or, for example, inventing a new type of logistics such as the "Desert Express" created during the Gulf War to provide critical parts more or less overnight…" (ibid., 54) In other words, pro-active thinking is a must not only in the context of designing building blocks but also in assembling a unique capability package, custom tailored for a particular operation.

And last but not least: building blocks — units, systems, support structures — are not self-sustainable entities but component parts of, and hence rely on additional support structures from, larger organizations. As Davis points out: "A special problem with assembly and adaptation arises when an

organization fails to provide sufficient support structure to fully exploit its potential building blocks. …This phenomenon partly explains why deploying a brigade can virtually incapacitate a division. Although a brigade might appear to be a natural building block in today's world, it lacks the independent structure to be used in that way without serious repercussions. …If we want real flexibility, then we must pay the bill for the additional support structure that would give building blocks autonomy." (ibid., 56) To rephrase it: in order to fully exploit the potential of an 'organizational pool' of building blocks or capability modules, one must also ensure that this pool in question — e.g., a division, a fleet, a regional command, or a single service — possesses support capabilities sufficient to sustain entire array of possible capability employment combinations. "Flexibility, adaptiveness, and robustness depend on skills in assembling building blocks for at-the-time purposes and circumstances," Davis wrote. "They are undercut by overspecialized acquisition, by not achieving the interoperability that allows the blocks to fit together easily, and by refining detailed operations plans rather than honing skills for rapid at-the-time assembly. Part of the assembly challenge is having the capacity for at-the-time tailoring — e.g., creating special hybrid units and unique types of support, rather than using only large, preexisting support structures." (Davis 2003, 143)

The U.S. CBP methodology of QDR 2001, then, can be summarized as the one that "focuses on modular capabilities and emphasizes mission-system analysis, exploratory analysis, and hierarchical portfolio methods for integration and trade-offs in an economic framework." (Davis 2002, xxiv) The essence of this methodology is to deal with future uncertainty by generating 'capabilities' usable for different purposes and circumstances. Its key features are

- An emphasis on modular (building-block) capabilities usable in many ways
- Assembly capability
- Goals of flexibility, adaptiveness, and robustness, rather than "optimization"
- Multiple measures of effectiveness (MOEs)
- Explicit role for judgments and qualitative assessments
- Economics of choice[20]

[20] The foundations of modern defense economics have been laid by Hitch and McKean in early 1960s. (See Hitch, C.J. and R.N. McKean. *The Economics of defense in the Nuclear Age*. Cambridge: Harvard University Press, 1960 and Hitch, C.J. *Decision-Making for Defense*. Berkeley and Los Angeles. University of California Press, 1967). Their approach, and its later modifications, will be discussed in greater detail in the following chapter of this study.

- Recognition that "requirements" are the result of high-level choices that should be based on broad capabilities-based analysis. (Davis 2003, 142–143)

To sum up

It is time to draw a line below these two methodologies and see what generic features can be distilled from the detailed descriptions above. The comparison of the flow of two methodologies, aside some specific analytical tools suggested by Davis, is brought in the table below:

Australia, ca. 1972–1998	**United States QDR 2001**
• Clear Governmental policy guidance • Comprehensive analysis of military capabilities possessed by relevant countries identified within a geopolitical and geostrategic context, as well as by own country • Development of series of credible contingencies for both near- and medium-term timeframe • Identification of tasks to be executed across all credible contingencies • Identification of capability gaps • Development of specific proposals to bridge identified capability gaps • Approved solutions drive the future funding or programming process	• Policy Guidance of QDR 2001, Strategic Planning Guidance, Contingency Planning Guidance • Development of illustrative Planning scenarios, contained in the SPG and the CPG that list out specific contingencies against which DoD will plan • Scenario-space analysis of significant scenarios • Identification of operational challenges in the form of military Missions that will define the metrics for performance • Through mission-system analysis, identification of requirement for mission-essential capabilities, development of capability packages, and assessment of performance of each option under varying circumstances • Integration of capabilities and making choices within fiscal framework • Conceptual development of building blocks (capability modules) to be later financed through programs framework

Though somewhat differently packaged, the essential internal logic of the process remains the same. For the purposes of this study, then, the author

would define the key steps of the CBP process, omitting details and specific methods to be applied to sub-processes, in more generic fashion as follows:

- Policy guidance
- Development of scenarios to guide contingency planning
- Identification of Missions
- Development of Capability Requirements
- Identification of Capability Gaps
- Development of Solutions to bridge Capability Gaps
- Selection and Approval of Solutions that will guide further resource allocation.

Conclusions for this study

We have established in this chapter that the methodology of Capabilities-Based Planning is the one that suits the best contemporary security environment, characterized by uncertainty, complexity and rapid change; as well as increasingly limited resources available for the defense. According to Young, "…since 1970s (without increasing the defense-to-GDP ratio) the ADF has become an increasingly joint force, capable of executing additional national tasks. It has also retained an ability to participate in allied operations without employing a threat-based planning process." (Young 1995, 350) In other words, development and application of CBP in Australia has proved this methodology capable of tackling modern security challenges within severe resource constraints.

Chapter 6.
PLANNING, PROGRAMMING AND BUDGETING SYSTEM

■

In this chapter the writer will discuss the Planning, Programming and Budgeting System (PPBS). Drawing upon 'the mother of all PPBS-s', the system originated and further refined through more than forty years of implementation in the United States[21], the purpose and utility of the system, its main components, and additional requirements and limitations to its applicability will be outlined.

In the end of this chapter, the author will derive key features of generic PPBS to be later used for validation of the hypothesis.

In chapter 4 we have established that a state is responsible for providing military security to the nation; and to that end an executive apparatus should be developed. Based on conclusions from chapter 3, this apparatus should be capable of operating under the circumstances of complexity of security challenges within an uncertain and rapidly changing environment, and under resource constraints[22]. One of the key requirements to *modus operandi* of such a system is to ensure allocation of limited resources to meet the most high priority security challenges. Founders of modern defense economics have noted: "National security, from the point of view of an economist, may be said to depend on three things: (1) the quantity of national resources available, now and in the future; (2) the proportion of these resources allocated to national security purposes; and (3) the efficiency with which the resources so allocated are used.…The problems consist in choosing efficiently, or economically, among the alternative methods of achieving military tasks or objectives. These alternative methods may be different strategies, different tactics, various forces, or different weapons. …There is typically an infinity of ways to carry out a military mission, some much more efficient, or economical, than others." (Hitch and McKean 1960, 4–5) From this starting point,

[21] The conceptual basis for the PPBS was developed by the RAND Corporation in the 1950s and introduced to the DoD by Defense Secretary Robert McNamara in 1962. (Key, Nyberg and Smith 1998, 3–3)

[22] Within the context of PPBS, Hitch and McKean have defined resource constraints as follows: "In the very short run (say in a military situation in which a commander must use the specific forces at his disposal), resource constraints are properly viewed as quantities of specific inputs. In the longer run, in decisions affecting the situation several years hence, the main resource limitations are best viewed as general monetary constraints…" (Hitch and McKean 1960, 43)

Rowan Gaither has formulated the crucial objective for the defense establishment: "We must find the organizational instrumentalities for bringing our resources to bear on the task of survival by assuring their responsible availability to government." (quoted by Hitch 1967, 4)

Purpose

The author would start to discuss ways and means to meet this requirement by the following statement: "The way to get the most effective total defense program is to try to put each dollar where it will add the most to total effectiveness." (Enthoven 1989, 7) In other words, security and defense policy of a small nation with limited resources that is not tied to available resources and that does not explicitly deal with prioritization in allocation of scarce resources cannot be sustained for any considerable time. Indeed, if the responsibility of a state is security of a nation, and if available resources should be allocated to meet the most crucial challenges, then "Weapons requirements should conceptually flow from a full and complete analysis of national security objectives, the strategy required to achieve those objectives, and the threats to that strategy." (Puritano 1989, 56)

The next question, then, is what methods are available to conduct such an analysis and suggest the most effective techniques to manage this process and subsequent decision-making and implementation. Enthoven claims, "The open and explicit approach…is the best way of handling the uncertainties that pervade defense issues. It makes better sense to recognize explicitly that the future is uncertain and design a strategy based on uncertainty — one that includes options and gathering additional information to resolve uncertainties — than to pick a particular assumption and treat it as if it were a certainty." (Enthoven 1989, 15–16) This statement provides, first, a linkage to a defense planning methodology discussed in the previous chapter — capabilities-based planning that is tailored to operate under the conditions of uncertainty. And, second, in this context, 'open and explicit' has a strong implication for fostering participatory approach in the development of such a strategy, and further management of defense planning and execution. For the wider is the circle of actors — political leadership, civilian defense officials, senior military commanders at strategic and service levels — the broader is available expertise to support informed and responsible decision-making.

In the context of a wide participatory approach, however, it is obvious that "… there can be agreement about what national security objectives and commitments are in principle, but disagreement about how to achieve them. There can also be a wide range of views as to the necessary resources. An essential condition to meet our national security objectives is to match each

objective with the resources required to achieve it." (Perdue and McNaught 1989, 113) The focal point of the process, then, is, first, to develop consensus on ways and means to achieve commonly accepted national security objectives, and, second, to ascertain the need for resources to implement established policies. In this process, "Strategy, technology, and economy are not three independent "considerations" to be assigned appropriate weights, but interdependent elements of the same problem. Strategies are *ways of using* budgets or resources to achieve military objectives. Technology defines the *possible* strategies." (Hitch and McKean 1960, 3) Conceptually, then, we should agree with Perdue and McNaught: "The first step in determining defense resource needs is to identify national security interests and commitments. The second step is to assess the threat to these interests, the third to formulate defense policy and strategy for meeting contingencies, and the last to acquire the resources to carry out that policy and strategy." (Perdue and McNaught 1989, 112)

The two characteristics of a planning and management system that is designed to operate under conditions of uncertainty of security environment and resource constraints have thus been identified as participatory management and establishment of clear linkage between policy and resources to implement it.

In sum, the purpose of the PPBS is twofold. It has been mentioned a couple of times that the process we discuss should support informed and responsible decision making about allocation of resources to meet crucial security challenges. Indeed, "The great technical complexity of modern day weapons, their lengthy period of development, their tremendous combat power and enormous cost have placed an extraordinary premium on sound choices of major weapon systems," Hitch said. "These choices have become…the key decisions around which much else of the defense program revolves. …They must be directly related to our *national* security objectives…" (Hitch 1967, 23) In this respect, the underlying idea for the development of PPBS "… was to ensure that the Secretary of Defense could consider several alternatives in which costs, forces, and strategies had been considered together." (Enthoven 1989, 9) In other words, "The ultimate objective of the PPBS is to provide the combatant commanders (CINCs) the best mix of forces, equipment, and support attainable within fiscal constraints. So while many think of the defense budget as the output of the PPBS, the budget is really a means to the end. In this light, the purpose of the PPBS is to make a proposal that will field the forces and capabilities required to execute our national military strategy." (Key, Nyberg and Smith 1998, 3–2 – 3–3)

From the perspective of participatory management of the process, an approach that stems from the need to cope with uncertainties of the security environment, it is plausible to say that PPBS "… is an institutional mecha-

nism by which to promote consensus on strategic objectives and priorities." (Reed 1989, 132)

The instrument of choice to pursue these two goals is program budgeting. Lawrence Korb has neatly highlighted key structural characteristics of PPBS as follows:

> PPBS relies upon a structural program budget. The chief feature of this budget is its output orientation. The program budget allows the activities of several agencies to be assembled in terms of specific output packages, i.e., programs and subprograms of various convenient levels of aggregation…
>
> Ultimately, the program budget identifies elements down to the input level of the basic building blocks of the various required resources: manpower, materials, equipment, buildings, land, etc… These elements are then combined into various packages that produce desired outputs…Breaking down and combining data into useful building blocks allows decisionmakers to reconstruct the program budget at their particular levels of responsibility according to articulated objectives or goals.
>
> PPBS also requires that the outputs be to some extent quantifiable so that the projected expenditure data, which appears in the budget, can be meaningfully related to projected performance…
>
> The final structural aspect of PPBS is its extended time horizon. …to make rational choices, the decisionmaker must know something about the future expenditure implications of decisions made today. (Korb 1989, 29)

In short, program budgeting ensures orientation of the defense organization to quantifiable outputs projected over extended time horizon.

That said, it is time to have an overview of the PPBS and its key subsystems in the form these exist in the United States, i.e., customized to the unique system of constitutional checks and balances between legislative and executive power, and no less unique command and control arrangements of the U.S. military establishment.

Fundamentals

Before examining the formal sequence of phases in the planning, programming and budgeting process, the scope and objectives of each phase, as well as some key documents used to guide and inform the process, it is worth

looking for cornerstone principles the whole approach is founded upon. Enthoven defines six basic ideas, PPBS process revolves around.

"The fundamental idea behind PPBS was decisionmaking based on explicit criteria of the national interest in defense programs, as opposed to decisionmaking by compromise among various institutional, parochial, or other vested interests… Thus, PPBS starts with a search for plain statements of the openly defensible national purposes that each program is meant to serve, for alternative ways of achieving these purposes, and for criteria by which to judge competing alternatives[23]. This idea provides both the goal and the rationale for PPBS." (Enthoven 1989, 5) In other words, PPBS — in order to support informed decision-making — seeks to develop a framework of defense programs that should guide, based on explicit criteria, the identification and modification of alternative ways to meet national objectives.

"A second basic idea underlying PPBS was the consideration of military needs and costs together. Put another way, decisions on forces and budgets should be made together, because they cannot sensibly be made apart." (Enthoven 1989, 6) This idea is rooted in the original concept of Hitch and McKean that guided the establishment of the initial procedural PPBS framework: "For any level of either budget or objective, the choices that maximize the attainment of an objective for a given budget are the same choices that minimize the cost of attaining that objective." (Hitch and McKean 1960, 2) The same principle is well captured by then-U.S. Secretary of Defense Robert McNamara's statement from DoD Release No. 548–63: "…policy decisions must sooner or later be expressed in the form of budget decisions on where to spend and how much." (quoted by Enthoven 1989, 7) To follow the rephrasing from the first basic idea — program framework developed under the PPBS should also guide the development and sustainment of different means to meet national objectives.

"A third basic idea of PPBS was the explicit consideration of alternatives at the top decision level. By an alternative, we mean a balanced, feasible solution to the problem, not a straw man chosen to make a course of action preferred by the originating staff look better by comparison." (ibid., 9) To put it another way, the procedures embedded into the PPBS should ensure the development of credible analytical support for top-level decision makers to choose among balanced and feasible solutions.

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[23] What the founders of this approach — Hitch and McKean — tried to introduce was the principles of economic decision-making and costing analysis. The problem they failed to recognize was taking the military options suggested by Joint Chiefs of Staff as an input without examining any of the assumptions or even conclusions. This underestimation of the role and importance of planning will be addressed in greater detail further below.

The latter idea fostered the following one. "Thus, a fourth basic idea of PPBS…was the active use of an analytical staff at the top policymaking levels… [the analysis] thus integrated the weapons, data, and ideas of the services into force packages arranged so that the Secretary could see what types of capability were proposed…and how the package related to overall needs." (ibid., 12–13) An example is appropriate here. "A decision to procure a certain number of F-16 fighters, for example, should be the end product of a series of strategic decisions that include analysis of the threats; assessments of the adversary's capabilities; choices on doctrine; decisions on aggregate force structures; and, finally, choices among alternative types and numbers of weapon systems." (Reed 1989, 125) Indeed, one cannot underestimate the importance of consistent and thorough analysis, which is impossible without application of mathematical methods.[24] This approach was deeply rooted already in the initial version of PPBS: "System analysis at the national level…involves a continuous cycle of defining military objectives, designing alternative systems to achieve these objectives, evaluating these alternatives in terms of their effectiveness and cost, questioning the objectives and other assumptions underlying the analysis, opening new alternatives and establishing new military objectives, and so on indefinitely." (Hitch 1967, 52) As Korb wrote on the same issue: "Analysis and evaluation are integral parts of the PPBS process; without them PPBS is really a shell. They include the study of objectives and alternative ways of achieving them, of future environments, and of contingencies and how to respond to them. Since defense planning and budgeting need to be done over a number of years into the future, explicit recognition must be given to the uncertainties of the future." (Korb 1989, 29–30) The requirement for PPBS to be capable of dealing with future uncertainties provides another linkage to Capabilities-Based Planning, discussed in the previous chapter, methodology developed specifically to cope with uncertainties of security environment. Thus, to link up with the previous rephrasing, produced analytical support to top level decision makers should look several years into the future and be focused on a potentially multi-service force package output capabilities across broader mission areas instead of service-centered, and consequently, environment-limited options.

[24] The first set of mathematical tools — mathematics of maximization — was developed by Alain C. Enthoven of the RAND Corporation in late 1950s, addressing issues like theory of constrained maxima, economic efficiency, nonlinear programming, determining the maximum by the gradient method, decentralization and suboptimization and maximization against an opponent. (Hitch and McKean 1960, 361-405) Needless to say, mathematical methods supporting defense planning and analysis have always been developing along with the evolvement of new analytical approaches. See, for instance, Davis 2002.

"A fifth basic idea of PPBS was a plan combining both forces and costs which projected into the future the foreseeable implications of current decisions. Such a plan was not meant to be an inflexible blueprint for the future, or a set of goals that must be achieved. Rather, it was projection of the implications of past decisions, a set of official planning assumptions, and a point of departure in the continuing search for improvements." (Enthoven 1989, 14) The backbone of the PPBS process, in other words, should then be a comprehensive plan that looks several years into the future, incorporates key activities and milestones from the established program framework, and provides, based on output-focused analytical support, a blueprint dynamics of the outcomes of current decisions. Such a plan is a critical tool for top level management, for "A multiyear plan that deals with forces and costs in a comprehensive manner is necessary if the Secretary of Defense is to play an active role in shaping national security policy; indeed, it is essential if there is to be a comprehensive and consistent policy." (ibid., 15)

Another aspect of the utility of a multi-year plan that integrates policy objectives, activities to attain these objectives, and related costs is that its development provides a short feedback loop to the policy-shaping: "If an administration is not willing or able to meet the costs implied by its foreign policy and strategic objectives, it should revise its objectives to bring them into line with the budget it is willing and able to provide." (ibid., 6) In other words, if the plan indicates the cost of adopted policy being higher than given government could afford, there is still time to adjust policy objectives to cope with fiscal realities.

And last but not least, "A final basic idea underlying PPBS was that of open and explicit analysis; that is, each analysis should be made available to all interested parties, so that they can examine the calculations, data, and assumptions and retrace the steps leading to the conclusions." (ibid., 15) This idea reinforces the need for a participatory approach and, as was mentioned above, ensures availability of specific expertise and contribution from all participating agencies and departments.

All in all, the concept of PPBS could be summarized as follows: "…the fundamental idea behind PPBS was decisionmaking based on explicit criteria related to the national interest in defense programs as opposed to decisionmaking by compromise among various institutional and parochial interests. PPBS also emphasized the consideration of real alternatives, the importance of evaluating needs and costs together, the need for a multiyear force and financial plan, the regular use of an analytical staff as an aid to decisionmakers at the top levels, and the importance of making analyses open and explicit." (ibid., 16–17)

Another interesting perspective of this process is the one from a top decision maker. William Barney, then-director of Correspondence Programs at

the U.S. National Defense University, quotes former U.S. Secretary of Defense Harold Brown, who draws in *Thinking About National Security* key outlines of the PPBS as follows:

> First, the Secretary of Defense and the JCS (Joint Chiefs of Staff) decide on a military strategy. Then PPBS determines the optimum force structure to carry out the chosen military strategy or plan. It devises a five-year program to produce and maintain those forces in the most cost-effective way, revising the program annually…and rolling it forward one more year. Then it budgets annual increments of the program. PPBS compares alternative forces by objective rather than by military service and uses overall program costs, including maintenance and personnel, rather than initial acquisition costs alone. (Barney 1989, ix)

In other words, based on six basic principles outlined above, the U.S. version of PPBS encompasses three phases: "The planning phase attempts to set military and civilian goals and objectives and outlines the forces and resources needed to achieve these objectives. The programming phase develops and approves programs for reaching those objectives. In the budgeting phase, the inputs required for those approved programs are budgeted and priced as precisely as possible for the immediate budget year…" (Puritano 1989, 44)

However, before discussing each of these phases in greater detail, some basic conceptual understandings need to be established with regard to often misinterpreted and confused terms of 'planning' and 'programming'. First of all, "Conceptually, the planning and programming functions are sequential. In practice, the hand-off between the two is neither clean nor one-way, and the functions are highly interactive. Often, planning decisions are revisited during programming as cost estimates are revised and political realities change." (Builder and Dewar 1994) To properly distinguish between planning and programming, one should bear in mind, that "…the planning phase was about *what*, if anything, ought to be built, while the programming phase was about *how* to build it. That is the most basic distinction to make between planning and programming: planning produces *a determination of what to program* and programming produces *a design for how to program* (resource and schedule) it." (ibid.) If the products of these two phases are distinctly different, so should be their main challenges. "…The challenge of planning is to wrestle the *decision* uncertainties (e.g., the variables, alternatives, preferences) to the ground in a way and to a degree that facilitates the decision about what ought to be programmed. The challenge of programming, then, is to devise a program that effectively resolves the *design* uncer-

tainties (e.g., schedules, quantities, allocations) about how to proceed." (ibid.) In the end, the criterion of success can be established: "Good planning effectively deals with *decision* uncertainties, many of which cannot be resolved. Good programming addresses all *design* uncertainties, most of which can be resolved by careful design and attention to details." (ibid.)

That said one could start with closely looking at planning by defining its axioms:

"
- The purpose of planning is to inform and facilitate the decision as to what ought to be programmed.
- The job of planning is isolate and deals with the uncertainties that bear upon that decision.

If what ought to be programmed is known or the uncertainties that bear upon what ought to be programmed are resolved, then the planning is done." (ibid.)

Planning

Each and every functioning bureaucracy revolves around the development, coordination, approval and implementation of a set of interlinked routine planning and execution documents[25]. The most comprehensive description, analysis and critique available for the author was that of the PPBS version of 1989. The following paragraphs are primarily based on this version, some later changes and amendments are pointed out separately.

Planning in the 1989 version of PPBS

"The first step in the DoD resource allocation process is the planning phase, whose product is the *Defense Guidance*. This document is prepared annually and covers a five year period…" (Puritano 1989, 45) In other words, Planning in PPBS is the recurring process of the development of a guidance that addresses national security and defense concerns in medium-term (five

[25] Many sources containing the current U.S. PPBS documents and procedures are restricted for public access. The author tried to use the most recent documents where possible, in the same time admitting that parts of this chapter are still based on information which may not be in full compliance with the current regulations. However, for the purposes of this chapter — to derive key components and major steps of the PPBS process and develop later an alternative PPBS mechanism based on the same principles — this information could be considered sufficient.

years) framework. "…the [*Defense Guidance*] constitutes the Secretary of Defense's guidance to the DoD regarding both policies he wishes to pursue and the capabilities he wishes to see in place during the five-year period that the document addresses…" (Zakheim 1989, 60) With the latter clause an important feature of the document has been defined. It is not just a planning guidance, but a political guidance approved — and in that sense 'owned' — by the Secretary of Defense, the highest-ranking civilian decision-maker in national defense realm who acts on behalf of the President and carries the political responsibility.

Now let us have a look at the broad structure and contents of this key document. "The *Defense Guidance*, through the inputs of the JCS, begins by defining the threat against which DoD programs are measured. It further states national defense policy, objectives, and strategy; provides resource and forces guidance to achieve those objectives; and establishes the fiscal guidelines for the upcoming programming phase." (Puritano 1989, 45) Another important feature of the guidance to pick from here is the fact that political guidance regarding national defense policy and resource allocation is developed through the inputs from the senior military leaders — the Joint Chiefs of Staff, thus incorporating professional military expertise early in the process. It should be underscored here that the issue of institutionalized seeking of military advice by civilian leaders is one of the crucial components of healthy civil-military relations in a democracy.

Integrating military-professional expertise into the development of political guidance, however, is by no means a one-way street, for "The *DG* is the plan against which the military services organize their resource priorities in developing their five-year program… These programs form the basis for programmatic decisions by the Secretary and the Deputy Secretary that in turn govern development of the defense budget." (Zakheim 1989, 60) In other words, the military contribute their proficiency to the guidance that, taking into account broader national interests and political considerations, will drive future resource allocations, and by that, the development of military organization.

Naturally, every recurrent process should have a feedback loop built in. For the original U.S. process, the loop closes in to the planning phase: "The planning phase begins…with a review of previous year's guidance… This review reflects major changes in policy, strategy, and the global situation; the results of the just-completed programming phase; and the actions to date of the Congress on the previously submitted budget." (Puritano 1989, 45) Or otherwise, each annual PPBS cycle starts from the examination of the current state of component processes of the PPBS loop — alterations in planning assumptions and policy guidance, outcomes of the complex process of concerted resource allocation, and decided budget allocations — looking

for changes that need to be reflected and addressed in the next cycle. These alterations will be further addressed in respective parts of the document. "The DG consists of three operative sections: "Policy Guidance," "Strategy Guidance," and "Force and Resources Planning Guidance." A final section outlines study requirements for addressing major unresolved issues that require additional information." (Zakheim 1989, 60) Hence, the policy and strategy, allocation of human resources and materiel, financial means, and pending issues are handled in separate sections, with different degree of constraints and restrictions.

Let us examine these sections one by one. "The "Policy Guidance" section outlines national security and derivative DoD objectives, general and regional defense policies, and guidance regarding competing with adversaries in peacetime. National security objectives are contained in the President's national security strategy… DoD then develops military objectives and policies to realize national objectives and strategy, in light of potential threats, which are projected in joint intelligence estimates… The guidance that is drafted in this section tends to be unconstrained by resource factors." (Zakheim 1989, 61) In short, the policy section of the document outlines broad national and derivative military security objectives and policies to attain these objectives in resource-wise unconstrained manner.

The next section, 'Strategy Guidance', "…is based primarily on recommendations by the Chairman of the Joint Chiefs of Staff (JCS) to the Secretary of Defense regarding the military strategy required to meet the objectives set forth in the national security strategy and the *DG*'s "Policy Guidance" section. The "Strategy Guidance" outlines priorities for peacetime, crisis, and war and addresses regional priorities as well as functional matters." (Zakheim 1989, 61) In short, the strategy section deals primarily with projected military responses to identified security challenges.

These two first sections — Policy and Strategy guidance — combined "provide the general planning priorities for major mission areas within the overall DoD program. These priorities are intended as a guide for military and civilian planners and programmers… In general terms, these priorities address choices between strategic and conventional forces; choices regarding the allocation of resources to specific overseas regions; choices among specific defense programs; and the division of resources among so-called four pillars of national defense — readiness, sustainability, modernization, and force structure." (Zakheim 1989, 62) To put it otherwise, combined policy and strategy guidance addresses outlines and priorities of national military organization tailored to meet national military security objectives.

Policy and strategy defined, it is time to look at what resources are required and available to implement them. "The "Force and Resources Planning Guidance" is, in many ways, the most critical of the *DG* in that it serves

as a bridge between the unconstrained "Policy Guidance," the "Strategy Guidance," and the fiscally constrained programs. It is the section that sets forth specific goals and midterm objectives to be met by the service programs." (Zakheim 1989, 63) In other words, the third section of the guidance seeks to translate unconstrained policy and strategy objectives into a flow of milestone activities that will be conducted in order to develop or sustain military capabilities required to implement established policy and carry out strategy.

Up to this point, the process dealt with 'certainties', courses of action for what there is sufficient data to make informed decisions. The fourth section of the guidance, in turn, addresses 'uncertainties.' "The "Major Issues" or "Study Program" section of the Defense Guidance addresses…those areas of concern that cannot be resolved during the current planning cycle. These areas may be those addressing new concerns or involving extremely complex issues for which there are insufficient data to support an immediate decision. This section specifies a set of studies to be completed in time for the next planning cycle or, if necessary, somewhat earlier." (Zakheim 1989, 64) Or otherwise, this section deals with concerns that will need additional study to reach an informed decision during the next cycle.

Before wrapping up the first component of the PPBS — planning — it is important to underscore the technique of management of the process: "The planning process, like the entire Planning, Programming, and Budgeting System, is noteworthy for the emphasis on participatory management with centralized decisionmaking." (Zakheim 1989, 67) Indeed, we have seen the requirement for participatory management stemming from the six ideas PPBS is based upon. Hence, the conduct of the planning process, according to Zakheim, is essentially "Centralized management, with service participation... Civilians and military interact at all levels… Ultimate policy direction remains centralized since the Secretary and Deputy Secretary retain final approval authority." (Zakheim 1989, 67)

1990–2005 Changes to the Planning system

By 1990 there was a realization that the existing strategic planning system "…was not accomplishing its purpose to enable the Chairman to execute fully his increased …responsibilities." (Meinhart 2006, 6) Exceptionally, the Joint Staff's Director of Strategy and planning was tasked in 1989 to conduct a comprehensive evaluation. This complete system overhaul "…streamlined the system by adding front-end leader's guidance and eliminating or combining many other documents into more concise products, as ten products were

reduced to four." (ibid., 6–7) These four key planning documents were Chairman's Guidance, the National Military Strategy Document, Joint Strategic Capabilities Plan, and the Chairman's Program Assessment. [26] Although streamlined, the system remained rigid and "…only the *Joint Strategic Capabilities Plan* was produced as specified in the memorandum; the other three documents were changed significantly during execution." (ibid., 7)

The next change took place in 1993 and essentially codified what have been executed in last years[27]. Major revisions "…included placing more focus on long-range planning overall by requiring formal environmental scanning; issuing the *National Military Strategy* as an unclassified document designed to communicate with the American people rather than providing internal military direction; and establishing a *Joint Planning Document* to sharpen Chairman's advice the Secretary of Defense on budget issues." (ibid., 7–8) The planning process itself, and its product — JSCP that provided guidance to strategic commanders — remained largely unchanged.

The next major revision to the strategic planning system occurred in 1997. It reflected execution changes the Chairman instituted over previous years to "…provide better resource advice and long-range direction to enable defense leaders to make needed mission or weapon system trade-offs required by fiscally constrained defense budgets." (ibid., 8) Two new planning documents — *Chairman's Program Recommendation* and *Joint Vision*[28] — were added formally and Memoranda of Policies were phased out.

The last formal change in 1999 did not change any formal processes or products[29], but focused on Theater Engagement Plans "to integrate the strategy's "shape" component and to implement the 1996 Joint Vision." (ibid., 8–9) Through these incremental changes, the U.S. strategic planning system evolved from "a rigid, Cold War focus at the decade's start to a more flexible, vision oriented, and resource focused system at the decade's end." (ibid., 9) Although not formalized, there have been some changes in the strategic planning system: by 2005 three documents have been added, two deleted, and four retained. "The three new products added from the 1999 revision were: *National Military Strategic Plan for the War on Terrorism*, *Chairman's Risk Assessment*, and the *Joint Operations Concepts* (changed to *Capstone Concept for Joint Operations* in August 2005). The two strategic planning products deleted were the joint vision (vision is now embedded in

[26] For details, see CJCS 1990.
[27] For details, see CJCS 1993.
[28] First published in 1996, this document was designed "to provide the conceptual template to channel the vitality of people and leverage technology to achieve more effective joint warfighting." (Shalikashvili 1996, 1)
[29] For details, see CJCS 1999.

the strategy) and the *Joint Planning Document* (staff resource advice). The unclassified strategy, two leader-focused resource documents, and the war planning guidance remained the same." (ibid., 9–10)

To sum up

The planning component of the PPBS encompasses the recurring process of the development of a political guidance that addresses national security and defense concerns in a medium-term framework, and that is handled through participatory management and centralized decision-making. Components of the guidance address broad national and derivative military security objectives and policies to attain these objectives in resource-wise unconstrained manner; projected military strategic responses to identified security challenges; outlines and priorities of national military organization tailored to meet national military security objectives; milestone activities that will be conducted in order to develop or sustain military capabilities required to implement established policy and carry out strategy; and concerns that will need additional study to reach an informed decision during the next cycle. Ultimate approval authority for the political guidance resides with the Secretary of Defense.

Programming

Now it is time to have a glance at the next phase of the PPBS — programming. One can do it from two perspectives: first, to discuss the scope and objectives of the process, and then address structure and content of key documents of programming phase. The primary source for this section is 1989 version of the PPBS.

The objective and scope of programming is well captured as follows: "The programming phase of the Planning, Programming, and Budgeting System (PPBS) translates approved objectives into definitive, time-phased resource requirements to include manpower, material, and services. This is accomplished through systematic procedures that project defense requirements five years into the future. In addition, the programming phase serves to organize DoD goals and expectations, under financial categories that are parts of the annual budget. Programming specifically relates to matching available resources to the approved force objectives." (White, Hendrix and Roll 1989, 71) In other words, programming is the recurrent process that develops the concerted timeline of activities to be conducted by the military

organization to meet established objectives within existing resource constraints. It is achieved through the framework of defense programs.

Regarding the process, in the programming phase, "the services and defense agencies propose programs that are designed to meet the mid-term (five year) objectives of the *Defense Guidance* and to fit within the fiscal constraints of the projected DoD budgets." Submitted programs are examined "for compliance with the *Defense Guidance* and fiscal guidelines… Attention is also directed to the duplications, overlaps and missed opportunities for economies and efficiencies." (Puritano 1989, 45) Puritano brings here forward two layers of the process: the services develop, first, their respective medium-term programs linking resources to objectives in a form of Program Objective Memorandum (POM); then a cross-program analysis is undertaken in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output — developed or sustained military capability. Final decisions on the allocation of financial resources amongst defense programs are formalized in a form of Program Decision Memorandum.

One could, then, agree with White et al., that "With the establishment of PPBS in 1961, programming became the bridge between an extended planning horizon and the annual budget submission. Planning emphasizes the force structure and weapon systems needed to address specific threats and achieve national security objectives. Programming sets the time phasing for force development and weapon system procurement to meet the midterm objectives of the *Defense Guidance* and maintain force levels. Additionally, programming consolidates service plans and sets priorities for forces, weapon systems and service activities." (White, Hendrix and Roll 1989, 71–72)

As a side remark, it is particularly important to underscore the effects of procurement and acquisition decisions in programming, for "…the decisions made in a particular evolution in DoD have profound long-term implications. For example, a surface ship funded in the FY 1976 defense budget will go to sea in 1983 and will remain operational until 2013." (Korb 1989, 21–22)

To summarize the scope and objectives of the programming phase, then, it is plausible to agree with White et al. in that "Programming in effect takes the alternative force structures coming from the planning cycle, reduces the alternatives, and expresses the structures in terms of time-phased resource requirements." (White, Hendrix and Roll 1989, 72)

Let us now, after examining the scope and objectives of programming, turn our attention to the process framework and key programming documents, starting with the process. "Defense programming is a formalized, continuing operation. It begins by documenting resources and defense activities under one of … Major Force Programs. These programs are listed…with

their associated supported objectives and projects, total obligational authority, and manpower." (White, Hendrix and Roll 1989, 73) The format, in which services document resources and activities, is that of Program Objective Memorandum (POM). "The *POM* documents developed by the respective services express five-year recommendations and service initiatives to carry out requirements to include those in the *Defense Guidance*… Each *POM* is fiscally constrained… The service *POM* is thus the instrument through which programming under fiscal constraints is implemented. The *POM* also serves as the primary means of requesting changes in the programs previously approved…" (White, Hendrix and Roll 1989, 76) To put it differently, a POM reflects a service's response to provided political and fiscal guidance under approved strategy, described in terms of activities detailed down to installation-level organizations, and resource requirements to sustain these activities. In more compressed fashion: "The *Program Objective Memorandum* represents a comprehensive and detailed expression of the total requirements to accomplish the service mission." (White, Hendrix and Roll 1989, 76)

We have established earlier that the aggregate building block in the overall programming process is a Major Force Program (MFP). "Within the *Five-Year Defense Program* there are eleven Major Force Programs…of which six are force-related and the remaining five are support-related. Funds are allocated by these eleven programs and a systematic means of measuring actual use of resources against planned and approved programs is provided." (White, Hendrix and Quetsch 1989, 100) In other words, the MFP provides a means and mechanism to direct resource allocation and measure performance in fiscal terms. Further, "Each Major Force Program is subdivided into more specific mission and/or support areas referred to as program elements. Program elements are the primary building blocks at installation level and they correspond very closely to installation-level organizations." (White, Hendrix and Quetsch 1989, 100) Or otherwise, "Each program element constitutes a basic building block of the five-year plan. An element is a grouping of forces, manpower, and costs constituting an identifiable military capability or support activity for a five-year period." (White, Hendrix and Roll 1989, 75–76)

In management terms, thus, we can agree with White, Hendrix and Roll in that "The Major Force Program and program element structure offers an excellent tool for managerial identification of resource expenditures. This structure provides a systematic means of measuring actual use of resources against planned or approved programs. The elements may be grouped to display specific program total assigned resources or display only identified resources. Thus the program element structure allows the manager to display resources in an analytical format for programming purposes, budget reviews,

and showing program performance on funds requests…" (White, Hendrix and Roll 1989, 76)

To sum up. The programming component of the PPBS encompasses the recurrent two-layer process of the development of a comprehensive Five-Year Defense Program (FYDP), integrating eleven MFPs and developed in conjunction with Program Decision Memorandum (PDM). The first layer in the process is the development of fiscally constrained service proposals on activities and resources required to meet the objectives set by the Defense Guidance. These proposals are developed in the form of POM and represent a comprehensive and detailed expression of the total requirements to accomplish the service mission. The second layer is a cross-program analysis in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output — developed or sustained military capability. Final decisions on the allocation of financial resources amongst defense programs are formalized in the form of a Program Decision Memorandum, approved by the Secretary of Defense.

Budgeting

Let us start the examination of the third phase of the PPBS process, based again primarily on its 1989 version, with a fundamental observation: "Budgeting and the budgetary process are critical in any organization because, to a great extent, "dollars are policy". If the funds for a particular activity cannot be acquired, planning becomes fruitless and execution impossible." (Korb 1989, 21) With this basic concern in mind, let us see by what processes and procedures — commonly labeled as budgeting — fiscal means for the defense are identified and allocated.

"In the day-to-day activities of the services, managing the defense force is achieved in terms of organizations. As we have seen in the planning and programming processes, however, the resource requirements of these organizations are translated into the common DoD language of Major Force Programs. This translation process and the PPBS events leading up to the budgeting process are designed to convert strategy and plans into approved programs and force structure." (White, Hendrix and Quetsch 1989, 90) This is to say that instead of financing organizations, PPBS seeks to develop a mechanism to relate money to military output — developed or sustained capabilities.

In a static environment, linking money to military output seems to be relatively easy: "The five-year program developed in conjunction with the *Program Decision Memoranda* becomes the baseline document for the budgeting process. Service budgets become basically a translation of five-

year resource requirements into requested obligation authority for the specific budget period." (White, Hendrix and Quetsch 1989, 90) Or otherwise, if there would not be changes and alterations in policy decisions, program decisions based on approved policy could translate easily into budget format. In real life, however, the situation is different. "In any given year, changes in resource allocation decisions are likely for various reasons. The fiscal levels prescribed at the time of the *Defense Guidance* may be changed by the President due to the international or domestic climate. The comptroller staffs may have a different view of how resources should be allocated from that of their counterparts who worked on the *POM* and *PDM* process. Also, some late-breaking policy or strategy change may cause the executive branch or Congress to alter resource priorities." (White, Hendrix and Quetsch 1989, 95) Thus, conversion of program decisions into budget submissions takes careful consideration of the political implications or strategic choices made under time pressure in nearly real time would have on allocation of financial resources between Major Force Programs, as well as within one program. A mechanism designed in PPBS to take care of this concern is a recurrent process of budget review, similar to the starting point of planning phase — review of previous year's political guidance. "The budget review is a full, thorough, and in-depth examination of the service and defense agencies' budgets. It is not selective, nor is it restricted to just incremental changes; budgets for long-standing functions are also examined… This review leads to a number of major decisions that have to be made by the Secretary…depending on the results of the congressional review of the previous year's budget and on the target topline given by the President…" (Puritano 1989, 46) As it was brought forward earlier, a critical concern in preparation of budget submissions is to accommodate changes made in policy, strategy or earlier resource allocation after the current PPBS cycle has been launched. White et al claim: "In budgeting, the realities of resource scarcity and fiscal ceilings are faced squarely. Programming, consistent with budget limits likely to be imposed, and budget guidance, coinciding with resource availability, will hopefully reduce the number of hurried changes to approved programs that will need to be made during the budget review. For this reason, resource targets or fiscal reality are introduced as early as is practical in the decisionmaking process of the PPBS to minimize traumatic program changes." (White, Hendrix and Quetsch 1989, 91) One of the focal points of PPBS, then, is to ensure that fiscal guidelines provided in the Defense Guidance are as close approximation to expected reality as possible.

Another function of the budgeting phase of PPBS, besides the fine-tuning of resource requests of program elements to fit fiscal realities, is to convert the whole structure of displaying activities and resources from program one to that of budget appropriations. As White et al. put it, "Decisions made dur-

ing the programming process are all concerned with resource requirements for specific force levels and mission entities. Documentation reflecting programming decisions is presented in terms of Major Force Programs. Congress, on the other hand, does not accept the Major Force Program as an approved budgeting entity and holds to the historical appropriation structure. Every dollar in the DoD budget must be tied to a specific congressional appropriation and associated with a title of a public law. As the PPBS progresses from planning and programming on to budgeting, resource requirements must be translated from organizational entities, to Major Force Programs, and finally to an appropriation structure." (White, Hendrix and Quetsch 1989, 91–92) It should be underscored here that although 'appropriation structure' is a uniquely U.S. feature, programs structure used by Defense Ministries in general seldom coincides with the structure of national budget developed and maintained by the Ministries of Finance. Thus, some sort of conversion of programmatic data into state budget format is required in most countries.

To sum up. "…the budget process, as the final phase in the complex and long PPBS process, translates planned resource requirements into dollar proposals." (White, Hendrix and Quetsch 1989, 98) Or, in a longer version that corresponds with summaries of previous two phases: the budgeting component of the PPBS encompasses the recurrent process of converting resource requirements of MFPs into a comprehensive defense budget for the next fiscal year, based on the information from the approved FYDP, and incorporating necessary adjustments to accommodate existing fiscal constraints and policy decisions made after the current PPBS cycle was launched.

Accounting

Although formally not a 'title component' of the PPBS process, accounting procedures cannot be overlooked, for they provide critical feedback information to adjust program proposals and decisions developed for the next cycle. "Accounting for the expenditure of funds is an integral component of the PPBS in that it closes the loop between planning and the employment of military forces. The two major purposes served by an accounting structure are to trace expenses and record the allocation of funds for service and agency programs. This accounting structure uses the fundamental building blocks of the *Five-Year Defense Program*." (White, Hendrix and Quetsch 1989, 99) Two key aspects are to be selected here. First, the accounting process closes the planning and execution loop providing necessary fiscal data for the next cycle. And second, accounting uses the same fundamental building blocks as FYDP — Major Force Programs and program elements,

thus contributing to the uniformity, transparency and manageability of the whole process.

Overview of 1995 version of PPBS

Throughout this chapter, the author used primarily the analysis of the 1989 version of the PPBS and with regard to the planning, pointed out some changes that occurred in that phase from 1990 through 2005. For the sake of completeness of an empirical basis, however, some words should be said about the 1995 version of PPBS short but still comprehensive description of which was the newest complete open-source overview of the process the author could gain access to. The 1995 version will be looked at from two perspectives: its key documents, followed by a short process description.

Key documents

Quadrennial Defense Review (QDR) Report is a collective effort of the OSD and the Joint Staff, with the participation of the Services and combatant commanders. It contains "the results of the review, including an assessment of the global security environment, the defense strategy, and alternative defense postures." (Key, Nyberg and Smith 1998, 3–9) This document is presented to the Congress, i.e. it influences the funding decisions. Through the NSC, it affects the development of the NSS.

Chairman's Program Recommendation communicates the Chairman's program recommendations to the SecDef, outlining issues the CJCS deems critical to consider when establishing priorities and goals in the DPG. This document focuses on enhancement of joint readiness, promoting joint doctrine and training, and joint warfighting requirements. (ibid.)

Defense Planning Guidance is issued by the SecDef to guide resource allocation and ensure that priority military missions outlined in the NSS, QDR and NMS are sufficiently funded. The DPG links planning goals to program objectives and sets implementation priorities that will guide program development. (ibid.)

Fiscal Guidance is issued by the SecDef in conjunction with the DPG and sent to the Services and Defense Agencies to provide topline funding for each organization over the FYDP years and highlight changes from the previous year's baseline, based on policy decisions or economic adjustments. (ibid., 3–10)

Program Objective Memoranda (POMs) are developed by each Service and Defense Agency based on the strategic concepts and planning and fiscal

guidance provided in DPG and FG. The POMs list Service objectives for their forces, weapon systems, and logistic support. The Services are required to show how their POMs respond to the needs of combatant commanders. The POMs cover a six-year period, corresponding with the FYDP. Because the DoD is on a biennial budgeting cycle, POMs are developed every even calendar year. The Congress appropriates funds only on an annual basis, which requires POM update during the odd calendar years. (ibid.)

Chairman's Program Assessment (CPA) is a product of JSPS. This document is to influence the SecDef's programming and budgetary decisions. It carries the Chairman's advice to the SecDef on how well the POMs conform to priorities established in strategic plans and to the priorities established by combatant commanders. The CPA also contains alternative recommendations to suggest greater conformance to established priorities. (ibid., 3–11)

Program Decision Memoranda (PDM) represent the SecDef's approval of the POMs as deconflicted and modified to meet established priorities and resource ceilings, and are sent back to each POM holder. PDMs mark the end of the programming phase of the PPBS. (ibid.)

Budget Estimate Submissions (BESs) are developed by the Services and Defense Agencies and submitted based on the approved POM, and PDM or separate detailed budget guidance. The BES is an accounting effort to price programs within budget baselines and translate these baselines into appropriation categories to which the Congress will appropriate funds. The BES contains budget data for the prior year, current year, budget year, and the year beyond the budget year. (ibid.)

Program Budget Decisions (PBDs) are developed during the budget review process to ensure the requests are properly priced, program schedules are appropriate, and estimates are consistent with the objectives of the SecDef. PBDs document approval of the estimates for inclusion in the President's Budget. (ibid., 3–12)

Future-Years Defense Program (FYDP) is the official database of all DoD programs developed within the PPBS and approved by the SecDef. The data is organized to reflect programs by organization, by output-oriented or mission area structure (known as Major Force Programs (MFP)), and by input-oriented or appropriation structure. The FYDP displays the total DoD resources programmed by fiscal year; it covers the prior year, current year, the biennial budget years, and the following four years. The FYDP covers an additional three years of force-structure data. The FYDP is considered an internal DoD working document and is generally closely held within the DoD. A special publication of the FYDP is provided to the Congress in conjunction with the submission of the President's Budget. (ibid., 3–12 – 3–14)

Process

The PPBS is a cyclic process containing three distinct, but interrelated phases.

> In the JSPS, the CJCS, in consultation with the NSC, OSD, JCS, Services, and CINCs, reviews the threat (current and projected), the current military strategy, and the forces already programmed to execute that strategy. This assessment is reflected in JV20xx and NMS, with specific programming recommendations provided in the JPD and CPR. This advice to the SecDef includes recommendations on force requirements in view of the risk associated with existing force structure. In the DPG, the SecDef summarizes planning considerations and establishes priorities. In their POMs, the Services articulate their decisions and propose matching dollars to programs. The DepSecDef, with the assistance of the CJCS, assesses the POMs and publishes the final decision on the programs in the PDMs. Services modify their POMs accordingly, then translate approved programs into budget data that is compiled, reviewed, and approved. The final product is DoD's portion of the President's Budget. (ibid., 3–14)

The planning phase, thus, starts with the formulation of the DPG, with the participation of virtually every organization within DoD. The purpose of the planning phase is to provide planning, programming, and fiscal guidance that will optimize resource allocation across the DoD. Issuance of the DPG closes the planning phase and initiates the programming phase. The latter focuses on the development of POMs and the integration of those POMs into a coherent defense program to support the warfighting requirements of the CINCs. The FYDP gets updated based on the data submitted in the POMs. Budgeting is the final phase of the process. During this phase, the Services and Defense Agencies prepare their Budget Estimate Submissions (BESs). These estimates are consolidated into the defense budget and reviewed to ensure consistency with fiscal guidance. Changes to the budget are documented in the PBDs. Once the final budget decisions are made, the DoD budget becomes a part of the President's Budget. The FYDP is updated twice during this phase: upon submission of the BESs and again with the submission of the DoD budget to the President. (ibid., 3-15 – 3-19)

The highlights of PPBS 1995 version could be outlined as follows:

- The CJCS uses the JSPS to develop strategic vision (JV20xx), military strategy (NMS), and requirements (JPD and CPR).

- The SecDef develops the DPG through a rigorous process that considers the direction and guidance from the NSC; documentation from the previous budget; recommendations from the JPD and CPR; inputs from the CINCs and Services; and review of the DRB.
- Based on the DPG and the Fiscal Guidance, the Services and Agencies make their resource allocation decisions, then finalize and submit their POMs. The FYDP is updated to reflect the POM data.
- The DepSecDef reviews the POMs and issues the final programming decisions in the PDMs after considering the input from the CPA, CINCs, and DRB deliberations.
- The Services and Agencies develop BESs that translate the DepSecDef's programming decisions into budgetary requirements. After OSD/OMB review and the resolution of budget issues, the DepSecDef issues the final budget decisions in the PBDs. The DoD budget is then submitted to the President. The FYDP is updated to reflect the DoD budget data included in the President's Budget. (ibid., 3–21)

In the end, it should be underscored that the U.S. version of PPBS, to include all its modifications, was designed specifically to meet the unique constitutional balance of executive and legislative power in the United States, and equally unique command and control arrangements of the U.S. military, within the entire decision-making process ranging from policy-making to operations planning and related identification of capability requirements to resource allocation. Therefore, the author maintains, it is virtually impossible to impose the PPBS in its entirety on any other constitutional or command and control arrangements. However, the principles undelying design and operating procedures of the PPBS could and should be used as a foundation of the PPBS, re-designed to meet the requirements of a small state operating under different constitutional balance of executive and legislative power, and different strategic-level command and control arrangements.

Limitations and Problem Areas

Before we can wrap-up the PPBS process and start drawing conclusions in the context of this study, some limitations to the capacity of PPBS and problem areas need to be highlighted.

The first problem area in the U.S. version of PPBS relates to the legacy of forty five years of implementation of the system under differing objectives and management styles of different administrations: "In the McNamara

years, the emphasis was on programming; the Laird era stressed participatory management; the Carter administration added zero-based budgeting (ZBB). All three of these left major and potentially conflicting characteristics embedded in the PPBS." (Puritano 1989, 48) Needless to say that the following administrations from Reagan and Bush to Clinton and George W. Bush most certainly left their own fingerprints of priorities and preferred approaches on the running PPBS machinery. Further, from a managerial point of view, "The combination of systems…led to too many data structures, so that there was no longer a common data base for the PPBS. A variety of competing formats, structures, and data banks had evolved, at both the service and OSD levels, with resulting paperwork overloads, confusion, and continuous duplication of data requests from numerous sources…Program execution functions were generally neglected, as were strategic planning functions, and only limited feedback to policymakers and programmers was built into the system." (Puritano 1989, 48) In other words, the PPBS in the United States is probably not a prototype of a perfect system to be copied in other countries, but rather a compilation of potentially conflicting management styles and ideas, although still based on a small number of ground laying principles, that does not in fact produce a single comprehensive overview of defense activity and resources involved to decision-makers and planners either within or outside the defense establishment. To compensate for these shortfalls, hence, one should ensure conceptual uniformity of the process; comprehensiveness of developed overview of defense activity and involved resources, at the same time reducing the number of used formats to absolute minimum; and sufficient feedback to planners and decision-makers.

The second problem area of the U.S. version of the PPBS relates to its linkages to other ongoing processes within the defense realm. With regard to the planning and execution calendar, Hitch noted: "Although planning and programming have been designed as continuous activities, permitting changes to be proposed, considered, and decided at any time during the year, the third phase, budgeting, is still tied to the calendar. …The annual budget cycle…does have an impact on the rest of the planning-programming-budgeting system. …the program and budget reviews have…tended to overlap in an undesirable way, making it difficult to reflect properly some of the force structure decisions in the support programs in time to assist in making budget decisions." (Hitch 1967, 63–64) Specifically, links to the acquisition process have been pointed out in this respect: "Major program decisions are made in the context of both the PPBS and the acquisition process. Under the PPBS process, the decisionmaking on individual programs is keyed to the problem of balancing all programs within DoD financial limits established for particular years… The acquisition process, however, keys decisions on individual programs to technical and business aspects. Acquisition program

decisions (milestone events) seldom coincide with PPBS events. Also, technical and business aspects of acquisitions are not adequately reviewed in the POM and service budget submittals." (White, Hendrix and Roll 1989, 85) In other words, decision points within the PPBS are not synchronized with decision points within other current processes. Consequently, uncoordinated decisions tend to have mutual unwanted implications on processes running in parallel. To compensate for this shortfall, one should ensure synchronization and coordination between PPBS and other processes running in parallel to it.

The third identifiable problem area relates to the unequal attention senior leadership pays to components of PPBS. "It has been an open secret in defense circles for the better part of two decades," Zakheim wrote, "that the planning phase of the Planning, Programming, and Budgeting System (PPBS) rarely, if ever, commanded the attention that was lavished upon the other two elements of that system. Numerous attempts to explain the anomalous position of planning in PPBS usually — and correctly — focused on the absence of any budgetary constraints on the planning process, thereby diluting its importance in a department where the critical focus was on the allocation of resources among major military service claimants and lesser Defense Agencies." (Zakheim 1989, 59) Builder and Dewar observed some years later on the same issue: "…defense planning atrophied under PPBS because the planning was substantially completed early in the Cold War; and, thereafter, programming largely supplanted planning in the making of plans. …planning was neglected because the stasis of the Cold War resolved most of the uncertainties that are properly the central occupation of planning; and since planning was thus made relatively easy, planners confused planning with programming and making plans." (Builder and Dewar 1994) As a consequence of programming being supplanting planning, "…strategic planning currently conducted by the Joint Staff, on behalf of the Chairman, does not adequately establish and specify strategic objectives nor does it integrate and establish priorities for them. …Equally disturbing, it does not provide sufficient underlying rationale for the review of service functions nor does it provide unequivocal and compelling basis for the development and implementation of joint doctrine." (Lovelace and Young 1995, 2) In the end, "…DoD develops defense programs based on an incomplete set of capability determinants that do not presume to predict future conflicts and do not necessarily reflect current policy," Lovelace and Young stated (ibid., 8) The remedy Lovelace and Young suggested was a comprehensive strategic plan, that "…would derive from an actual assessment of the strategic environment over the Future Years Defense Program, establish a priority for specific strategic objectives achievable within that time frame, describe an executable strategy for achieving those objectives, and define the military capability

required to effect the strategy. Rather than basing program planning on hypothetical scenarios, it should be based on tangible requirements distilled from the actual strategic plan DoD intends to implement…" (ibid.) In short, according to Lovelace and Young, "[Strategic plan] is a plan that specifies, in military terms, the national strategic objectives for the defense planning period under consideration…and describes a strategy that rationalizes the resources expected to be available…with the strategic objectives described in the plan." (ibid., 4) As such, this plan should be the vital component of PPBS process.

To close the planning process-related line of inquiry within the PPBS, it is worth pointing out some ways planning could fail:

> If the purpose of planning is to inform and facilitate the decision as to what, if anything, should be programmed, how can planning fail? Any observer of planning should be able to name quite a few ways:
>
> - by failing to decide what should be programmed (e.g., the planning process results in descriptions of the environment or the future, but does not identify the actions to be taken)
> - by refusing to confront (not necessarily resolve) important uncertainties or changed circumstances (e.g., the end of the Cold War and declining budgets) in identifying what actions ought to be taken
> - by failing to communicate effectively to leadership the circumstances and rationale for the programming actions that ought to be taken
> - by failing to follow planning through into conformable programming and allowing the programmers to continue to do their "thing" because they don't understand or like the planning decisions
> - by failing to identify appropriate actions in the light of the evident circumstances (e.g., when wishing substitutes for planning)
> - by confusing whom the planning is for (e.g., the Army planning for "national security" instead of the Army), thereby confusing interests, objectives, and even responsibilities and authorities
>
> Note that this list of failures does not include the failure of leaderships to adopt the actions identified by the planning process. If planning has identified and clearly communicated appropriate actions and the leadership rejects them, that is a leadership failure, not a planning failure. (Builder and Dewar 1994)

Indeed, if 'dollars are policy', as we have noted above, then why should decision-makers waste their time debating something that seemingly does not

have immediate fiscal implications? In most bureaucracies, the value of a top manager is judged not by professional competency but rather by the share of a budget he or she is able cut for the department. From the broader perspective, however, underestimating the importance of planning phase will lead to poor analysis and consequently to ill-informed decisions. These, in turn, will most certainly have intimate implications on resource — and particularly financial — allocations further down the line. To compensate for this shortfall, one should ensure, probably by institutional means, due attention of top decision makers to all components of the PPBS process.

The latter passage brought forward another deficiency in the U.S. PPBS implementation practice one would qualify a limitation, rather than a problem area — namely, the issue of shortfalls in decision-making process. Enthoven noted that "No large organization — military or civilian, public or private — is likely to pursue automatically the broader national interest, as distinct from its own institutional and parochial interests, without external forces and leadership in that direction." (Enthoven 1989, 17) To underscore the importance of firm and consistent leadership, Korb wrote: "If PPBS to be effective, it is not enough merely to establish programs and to use analytical tools. Someone outside of the agency must have jurisdiction over programs that transcend that particular agency or department, and the group of people who perform the analysis must be responsive to that individual." (Korb 1989, 30–31) As far as the entire PPBS is based on participatory management and centralized decision-making, the quality of decisions made becomes a major concern. Thus, there is a limit to what PPBS as a system can potentially achieve. "It can't turn poor judgment — or judgments it happens to disagree with — into good, agreeable decisions. It can't prevent poor or haphazard analysis. It can't guarantee leadership, initiative, imagination, or wisdom." (Enthoven 1989, 17) Or, in more concentrated way, as Thomas Schelling wrote in 1968, "PPBS can be a splendid tool to help top management make decisions; but there has to be a top management that wants to make decisions." (quoted by Enthoven 1989, 17) The bottom line here is obvious — no management system, to include the PPBS, can replace firm and consistent leadership.

And last but not least, the problem areas mentioned above were systemic problems that could be resolved by essentially procedural means. Quite different is the problem area that is heavily dependent on quality and format of the input data. As Hitch noted already in 1967: "…at the highest level of government, there remains the problem of optimizing the allocation of resources across the entire spectrum of our national needs, and this means exercising choice among many desirable objectives." (Hitch 1967, 52) These critical decisions depend upon two types of input: estimation of the lifecycle cost of a system or platform, and measures of military effectiveness of given

system or platform. With regard to the machinery for measuring and estimating costs, Hitch concluded: "There is first the problem of estimating the development and production costs of new weapon systems. …There is secondly the unsatisfactory state of operating costs in many areas." (ibid., 64–65) Despite attempts of generations of defense economists to develop and improve viable costing methodologies, unpredictability of all markets (from raw materials to industry to labor) — and thus impossibility to project materiel, production or labor costs over sufficiently long time period — have effectively prevented emergence of fully reliable costing formulas. The information on military effectiveness, in turn, is heavily dependent on methods and concepts of operations analysis that attempt to estimate effectiveness in relation to achieving desired objectives; and ultimately on quality and adequacy of policy guidance and decisions determining and prioritizing these objectives. Both aspects of this problem area, the current author claims, can objectively be managed to a certain extent, but not solved in the definite meaning of the word. In short, "…we must recognize that if the objectives or the costs or the measurements of military effectiveness are wrong, the answers will also be wrong." (ibid., 55)

To Sum Up

The **purpose** of PPBS is to support informed and responsible decision-making about allocation of resources to meet crucial security challenges, i.e. to ensure that the Secretary of Defense could consider several alternatives in which costs, forces, and strategies had been considered together; and to promote consensus on strategic objectives and priorities.

The **instrument of choice** to pursue these goals is program budgeting that ensures orientation of the defense organization to quantifiable outputs projected over extended time horizon.

PPBS — in order to support informed decision making at the top levels of defense management — is **based on** the following central ideas:

- It seeks to develop a framework of defense programs that should guide, based on explicit criteria, the identification, modification, development and sustainment of alternative ways and means to meet national objectives.
- PPBS should ensure credible analytical support for top-level decision makers to choose among balanced and feasible solutions. This analysis should look several years into the future and be focused on potentially multi-service force package output capabilities across broader mission areas instead of service-centered, and consequently environment-limited, options.

- The backbone of the process is a comprehensive plan that looks several years into the future, incorporates key activities and milestones from the established program framework, and provides, based on output-focused analytical support, a blueprint dynamics of the outcomes of current decisions.
- Management of the PPBS is based on participatory management and centralized decision-making.

PPBS consist of three components. **The planning component** of the PPBS encompasses the recurring process of the development of a political guidance that addresses national security and defense concerns in a medium-term framework, and that is handled through participatory management and centralized decision-making. Sections of the document address broad national and derivative military security objectives and policies to attain these objectives in resource-wise unconstrained manner; projected military strategic responses to identified security challenges; outlines and priorities of national military organization tailored to meet national military security objectives; milestone activities that will be conducted in order to develop or sustain military capabilities required to implement established policy and carry out strategy; and concerns that will need additional study to reach an informed decision during the next cycle. Approval authority for the guidance resides with the Secretary of Defense.

The **programming component** of the PPBS encompasses the recurrent two-layer process of the development of a comprehensive Five-Year Defense Program (FYDP) integrating eleven MFPs[30] and developed in conjunction with Program Decision Memorandum (PDM). The first layer in the process is the development of fiscally-constrained service proposals on activities and resources required to meet the objectives set by the Defense Guidance. These proposals are developed in the form of POMs and represent a comprehensive and detailed expression of the total requirements to accomplish the service mission. The second layer is a cross-program analysis in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output — developed or sustained military capability. Final decisions on the allocation of financial resources amongst defense programs are formalized in a form of Program Decision Memorandum, approved by the Secretary of Defense.

[30] In the 1989 version of the PPBS, the title was Five-Year Defense Program. From the 1995 version onwards, the title of the document is Future-Years Defense Program and it covers six years instead of five in 1989 version. The number of MFPs remained unchanged.

The **budgeting component** of the PPBS encompasses the recurrent process of converting resource requirements of MFPs into a comprehensive defense budget for the next fiscal year, based on the information from the approved FYDP, and incorporating necessary adjustments to accommodate existing fiscal constraints and policy decisions made after the current PPBS cycle was launched.

In addition, the **accounting component** of the PPBS closes the planning and execution loop providing necessary fiscal data for the next cycle, using the same fundamental building blocks as FYDP — Major Force Programs and program elements, thus contributing to the uniformity, transparency and manageability of the whole process.

Implementation experience of the PPBS in the U.S. has outlined some areas of concern to be carefully addressed while considering import of this methodology to other state apparatuses:

- To ensure conceptual uniformity of the process; the comprehensiveness of a developed overview of defense activity and involved resources, at the same time reducing the number of formats to an absolute minimum; and the need for sufficient and immediate feedback to planners and decision-makers.
- To ensure synchronization and coordination between PPBS and other processes (e.g., acquisition) running parallel to it.
- To ensure by institutional means due attention by top decision-makers to all components of the PPBS process, particularly — the planning phase.
- To bear in mind that no management system, to include the PPBS, can replace firm and consistent leadership.

Conclusions

For the purposes of this study, and for the validation of the hypothesis, some key features and concepts step out.

"The PPB system is a **set of rules, procedures, and techniques** introduced for the specific purpose of **improving high-level planning**. Its product is a multi-year budget, which lists the programs and/or major activities of an organization, and assigns all costs associated with each. **The system enables the decision-maker to see the future implications of today's choices and to evaluate the organization's progress toward its stated objectives**. PPBS combines systems analysis and program budgeting. Two imperatives should be always followed: in planning, look broadly at the costs and benefits of alternative plans, measurable and immeasurable; and link planning and budgeting, so that planning is realistic and effective and leads, rather

than follows the budget." (CCMR 2005a) In other words, the PPB system is developed to support informed decision-making about allocation of resources to meet crucial security challenges based on explicit criteria, and to promote consensus on strategic objectives and priorities, by means of program budgeting that ensures orientation of the defense organization to quantifiable outputs projected over extended time horizon.

The PPB system consists of three phases. The planning phase addresses national security and defense concerns in a medium-term framework. In particular, broad national and derivative military security objectives and policies to attain these objectives are defined, military responses to identified security challenges are developed, outlines and priorities of military organization tailored to meet set objectives are established, and milestone activities to develop or sustain military capabilities required to implement established policy and carry out strategy are identified.

The programming phase encompasses, first, the development of fiscally constrained service program proposals, representing a comprehensive and detailed expression of the total requirements to accomplish the service mission set in planning phase. Secondly, the programming phase encompasses cross-program analysis in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output.

The budgeting phase encompasses converting resource requirements into a comprehensive defense budget, based on the information from the approved medium-term plan and incorporating the latest fiscal and policy decisions.

Chapter 7.
RENEWED SYSTEM: FRAME OF REFERENCE AND HYPOTHESIS

■

This chapter starts from formulating the problem: how to develop a responsive and feasible national defense organization, capable of tackling most, though likely not all, of probable crisis situations, and utilizing the available resources of the society in the most efficient ways while providing maximum security for the society.

In this chapter, the current writer will compile characteristics and requirements suggested by theory and derived from the 'operational environment', as well as institutional components and general processes, previously defined in Chapters 2 through 6 into a comprehensive frame of reference or benchmark to validate the hypothesis.

Further, the writer will formulate the hypothesis — the basic principles of a methodology that consists of one alternative of several possible approaches to the design and modus operandi of a national defense organization.

In the end of this chapter, a blueprint of a suggested system will be outlined, which will be discussed in greater detail in the following chapters.

Findings

In chapter 2, one has derived focal points and formulated root challenges for each of the security sectors under the concept of multisectoral security from the perspective of state executive apparatus.

In the **military security** sector, the root challenge is to secure territorial integrity of the state and the coherence of the state's superstructure vis-à-vis challengers from both inside and outside of the state under conditions of use, or threat of use, of military force.

In the **political security** sector, the root challenge is to secure integrity of legitimacy of the state both from outside (denial or withdrawal of diplomatic recognition by other states and/or international bodies) and inside (denial of recognition of governing authority by the society or faction(s) of it).

In the **societal security** sector, the root challenge is to secure sustainable self-identification of the society against threats from outside (infiltration of

societal identificators alien to local descriptors of identity) as well as from inside (desires of sufficiently large societal groups to adopt some other identity, wider or smaller than that of the society in question).

In the **economic security** sector, the root challenge is to achieve an always-dynamic balance between mercantilist / neomercantilist policies of self-sustainment, and liberal policies of division of labor based on efficiency, in order to ensure the resources, finance and markets necessary to sustain acceptable levels of welfare and state power, under necessary condition of undisrupted functioning of global market.

And finally, in the **environmental security** sector, the root challenge is to maintain stable and sustainable relationships between humankind and the rest of biosphere without risking a collapse of the achieved levels of civilization, a wholesale disruption of the planet's biological legacy, or both.

In chapter 3, we have examined the contemporary security environment, and established that there is a tendency towards spillover effects between security sectors; i.e. through escalation, a seemingly minor challenge in one sector may rapidly develop into a full-blown crisis in another. Moreover, the dynamics of many recent international crises has shown that sooner or later most of the security challenges end up in the military sector, regardless of in which sector the challenge initially occurred or what other sectors it embraces.

In chapter 3, we have also established three key features that portray this security and political environment: complexity, rapid changes (unexpected emergence of crises and spill-over effects), and resource constraints. Therefore, in order to handle security challenges under the circumstances of complexity of security challenges within a rapidly changing environment and under resource constraints, a national defense planning and management system should be established to provide for comprehensive solutions to complex problems. The necessary requirements for such a system are **built-in mechanisms for inter-agency co-ordination and co-operation, national and international inter-agency interoperability, as well as careful allocation of resources to meet the most high priority challenges.**

In chapter 4, we have discussed two key concepts of statehood — that of the minimal and maximal state, and that of the strong and weak state — whilst defining the notion of a state in the context of a multisectoral approach to security. Further analysis of the principal roles of a state, and major instruments to fulfill these roles for each sector of security led us to the conclusion that, at a minimum, the state has responsibilities to provide for military and limited political security, with the focus on development and sustainment of the strong idea of state. To that end, the executive apparatus of the state should be developed and maintained in a way that **ensures ability to act within military and political sectors, and provide professional**

expertise for legislation in all sectors, whilst operating on shared doctrinal basis.

In chapter 5 we defined a generic seven-point sequence of the Capabilities-Based Planning process:

- Development of policy guidance
- Development of scenarios to guide Contingency Planning
- Identification of Missions
- Development of Capability Requirements
- Identification of Capability Gaps
- Development of Solutions to bridge Capability Gaps
- Selection and Approval of Solutions that will guide further resource allocation.

We also identified **Capabilities-Based Planning as the most suitable approach to handle modern security challenges where specific threats can be vague and are not quantifiable, and which can be addressed within the framework of constrained resources**.

In chapter 6 we defined Planning, Programming and Budgeting System (PPBS) as a means developed to support informed decision-making about allocation of resources to meet crucial security challenges based on explicit criteria, and to promote consensus on strategic objectives and priorities, by means of **program budgeting that ensures orientation of the defense organization to quantifiable outputs projected over extended time horizon**.

We also outlined three component processes or phases of the PPBS. The planning phase addresses national security and defense concerns in the medium-term's framework. In particular, within the planning phase, broad national and derivative military security objectives and policies to attain these objectives are defined, military responses to identified security challenges are developed, outlines and priorities of military organization tailored to meet set objectives are established, and milestone activities to develop or sustain military capabilities required to implement established policy and carry out strategy are identified. The programming phase encompasses, first, the development of fiscally constrained service program proposals, representing a comprehensive and detailed expression of the total requirements to accomplish the service mission set in planning phase. Secondly, the programming phase encompasses a cross-program analysis in order to ensure compliance with political guidance, as well as effectiveness of utilization of resources, measured against military output. And finally, the budgeting phase encompasses converting resource requirements into a comprehensive defense budget, based on the information from the approved medium-term plan and incorporating the latest fiscal and policy decisions.

Frame of Reference

In a broader sense, then, the key criteria, as derived from chapters 2 thru 4, a coherent and efficient National Defense Organization needs to meet are:

- **uniformity** of conceptual basis of all security-providing agencies;
- **responsiveness** of the whole organization, and all its components, to rapidly changing situation;
- **feasibility** of the organization under increasing constrains in all major types of resources – time, money and people.

In chapters 5 and 6, we discussed two methodologies of defense planning — Capabilities-Based Planning (CBP) and Planning, Programming and Budgeting System (PPBS) — and derived their key features. The current writer would argue that these two methodologies complement each other. The CBP is developed specifically to operate under conditions of uncertainty, i.e. under the characteristic feature of modern security environment. PPBS, in turn, does not specify the requirements for the methodology used in planning phase of the process. Instead, PPBS focuses on the execution of the priorities and findings of the CBP through the allocation of resources to meet crucial security challenges. Hence, the utilization of CBP methodology would provide for the identification of security challenges and the development of military responses to them; whereas the utilization of PPBS would limit itself to effecting the optimal allocation of resources[31].

Based on the above-outlined criteria, the specific ('benchmark') questions to validate the hypothesis should be as follows:

- does the system ensure the ability of the state to tackle challenges within the military and political sectors of security, i.e. securing the territorial integrity and coherence of state's superstructure under conditions of use, or threat of use, the military force, and secure intactness of legitimacy of the state;
- does the system ensure the availability of professional expertise to support the development of national legislation and inform political guidance;
- does the system ensure a uniform doctrinal basis for all security-providing agencies;
- does the system ensure the responsiveness to rapidly changing situation, to include providing for inter-agency coordination, cooperation, and interoperability; and,

[31] In defense, resources, by definition, are always finite. No country has ever enough resources for defense. One of the major shortfalls of the U.S. version of PPBS was substituting what is essentially a long-term programming for proper planning by arguing the limitation card.

- does the system ensure the allocation of resources to meet the most high priority challenges within existing constraints?

Hypothesis

At this point, the present writer will combine the findings from previous chapters and formulate the hypothesis. In essence: the **national defense organization which operates as Planning, Programming, Budgeting and Execution System (PPBES), utilizing capability-based approach for the analysis of current security environment and planning relevant response activities, and program-based approach for identifying and managing necessary resources to develop and sustain required capabilities** would meet the 'benchmark' criteria established above.

Outlines of suggested system

Principles

The suggested defense planning system is military capabilities-based. The Operational Planning and associated force development processes should look towards the development of those military capabilities necessary to meet a range of operational requirements and tasks, specified through political guidance. This system is suited to today's security environment where specific threats are unclear, clear-cut military responses are inevitably rare, and the range of potential military tasks is determined more by security commitments, rather than threats alone.

In the context of this system, military capability is defined as the quantitatively measurable capacity of each structural element of the defense force to perform a given task under specified conditions up to established standards. Each structural element may have more than one capability and each capability may be carried by more than one structural element. For the purposes of this study, it is important to bear in mind that "No capability exists independently from the structure — organization, people, platforms, systems and procedures — actually carrying that capability!" (CCMR 2005a)

Within this system, the Operational Planning Process (OPP) is the key method to determine capability requirements for the various force elements. Operational planning is carried out within a strategic framework and seeks to translate strategic guidance and direction into a scheduled series of integrated military actions that are to be carried out by forces to achieve strategic objectives efficiently and with acceptable risks. At the strategic level, operational planning involves the identification of strategic military objectives and

tasks in support of the National Security Concept (and National Military Strategy) through the development of formal national-level operation plans, and the development of the force and materiel requirements necessary to accomplish those tasks.

Based on the planning timeframe, the suggested defense planning system is divided into long-term (10–15 years), medium-term (5–7 years), and short-term or annual planning. Based on the objective of planning, the system is divided into capability-based and resource-based planning cycles. Functionally, this planning system is composed of planning, programming, and budgeting. The fourth basic component — reporting — should ensure adequate feedback to both capability-based and resource-based planning cycles (see figure below).

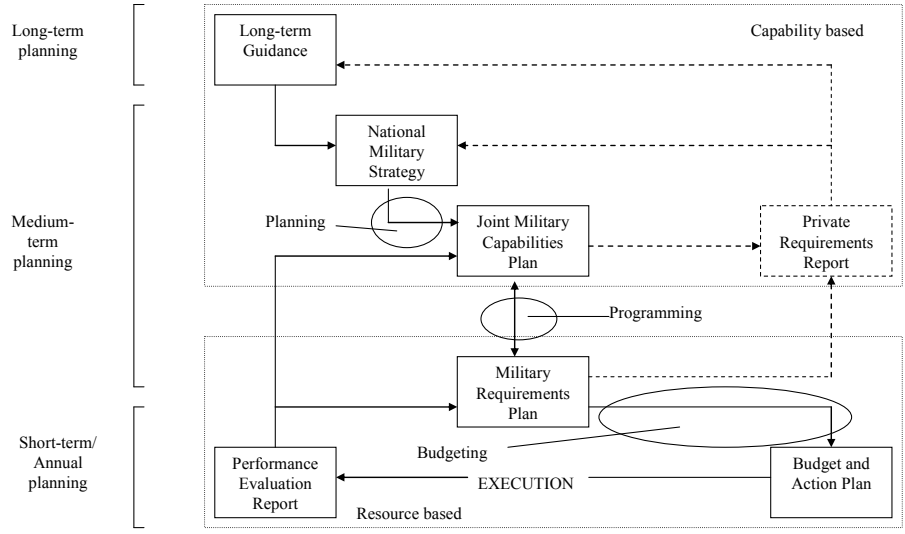

Figure 1. Outlines of suggested Planning, Programming, Budgeting and Execution System

Key Documents

The whole planning system (with the exception of formal military operational planning[32], not to be addressed in detail within this study) is based on seven major guiding, planning, and reporting documents:

[32] The military operational planning is a sequential process performed simultaneously at the strategic, operational and tactical levels, and it is conducted across the

1) National Security Concept;
2) National Military Strategy;
3) Chief of Defense's (CHOD's) Private Requirements Report;
4) Joint Military Capabilities Plan (JMCP);
5) Military Requirements Plan (MRP), that includes relevant Planning Guidance and future year programs for five years after the next;
6) next year's Annual Budget and Action Plan (ABAP), to include relevant Planning Guidance;
7) Annual Report (AR).

The National Security Concept and National Military Strategy should constitute, in combination, a strategic-political level direction that describes national perception of security environment, identifying security risks and challenges, and providing guidance for the development of responses to identified security challenges (strategy), as well as for the development of national defense organization streamlined to implement developed response options. These strategic-political level guidelines, approved at the level of political leadership of the country, are not themselves part of the routine defense planning and execution process in the meaning of this study, but establish broad policy and resource objectives and priorities to guide the national defense organization to achieve a government's policy aims.

The 5-year Military Requirements Plan (MRP), Annual Budget and Action Plan (ABAP), and Annual Report (AR) constitute the core of the annual planning and management system, with these living documents updated annually. Detailed guidance for the preparation of both the MRP and ABAP is provided through the Minister's and CHOD's annual Planning Guidance documents. These documents incorporate the results of what was and was not accomplished out of the requirements established by the analysis of previous year's Report, as well as other relevant decisions and priorities.

The Joint Military Capabilities Plan (JMCP), which is based on the National Security Concept (NSC) and National Military Strategy (NMS), does not need to be updated annually and remains generally unchanged for a longer period, until changes in NSC and/or NMS require its revision. Updates to the JMCP, which do not alter the ground laying political guidance provided by the NSC and/or NMS, are made by reviewing and revising select parts of the JMCP (e.g., ministerial level planning guidance, Contingency Plans) as required.

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range of military operations. For NATO and Partnership for Peace nations, this process is codified in *Guidelines for Operational Planning (GOP)*, Allied Command Operations, 1100/SHOPJ/0400-1-1321, June 2004. Elements of this formal process are used in the early steps of planning phase of the suggested PPBES to support the development of planning scenarios.

Phases of the Process

The first phase of this suggested system is national-level defense planning. The purpose of planning is to identify, based on principles specified in NSC and NMS, the tasks and mission requirements for the defense forces, and, critically, the specific capabilities that need to be developed within it. The primary outcome of the planning phase is the Joint Military Capabilities Plan (JMCP), which includes identified shortfalls in capabilities of the existing force structure, organized into Mission Areas. These identified shortfalls or capability gaps will be the primary inputs for future programming. The JMCP integrates into a comprehensive framework the contingency planning guidance, key planning tools, as well as outcomes of the planning process.

Based on the JMCP, the resource, training, and readiness requirements, as well as development priorities of the armed forces, can then be specified as part of the programming phase of the medium-term planning cycle. The development of the entire JMCP is not a part of annual routine. However, certain parts of the JMCP (e.g., Capability Profiles, identified shortfalls in capabilities, the development of a family of operation plans based on the current force structure) need to be reviewed annually and updated as necessary.

The second main phase of this planning system is programming. It is based on the outcomes of planning, which should emphasize addressing capability gaps — i.e., recognized differences between required and existing capability — identified during the planning phase. A key output of the programming phase is the production of Military Requirements Plan (MRP). The MRP addresses capability gaps in the current force structure and describes, in a phased and sequenced manner, the ways and means to overcome these deficiencies. In so doing, the MRP outlines a proposed force structure, which is designed to meet the operational requirements outlined in the NMS and further defined in much greater detail in the JMCP.

The MRP serves as a basis for annual defense budgets. The MRP is an integral part of annual planning and execution routine and covers years 2–6 of the medium-term planning cycle. Every year, the first year of approved MRP will serve as a foundation for next year's Annual Budget and Action Plan, with the time period covered by the new, revised MRP, sliding one year into the future.

The third phase of the planning system is budgeting, which is based primarily on the outcome of the programming phase, i.e., the MRP. The principal outcome of this phase — the Annual Budget and Action Plan — is developed based on the first year's development plan of the approved MRP and follows the same format. In order to link the Action Plan with finances, Major Defense Programs in the format of state budget are used. Annual

Budget and Action Plan constitutes an integral part of the annual planning and execution routine.

The fourth phase of the planning system is reporting. Reporting is conducted in two major areas: financial reporting in accordance with the relevant Ministry of Finance's regulations (not to be further addressed within this study) and activities' reporting. The Annual Activity Reports should provide adequate feedback for both the Capability-based and Resource-based planning cycles.

The main difference between the U.S. and the author's suggested versions of the PPBS is delineation of planning and programming phases. In the author's suggested system, the planning phase ends with identification and formal endorsement of quantified capability gaps. The focus of the following programming phase in the suggested system is on the development of ways and means to bridge these identified capability gaps. Outlines of the national military organization tailored to meet national military security objectives and milestone activities that will be conducted in order to develop or sustain required military capabilities are the key outcomes of the programming phase.

In the U.S. system, the development of outlines of national military organization and milestone activities that will be conducted in order to develop or sustain military capabilities required to implement established policy and carry out strategy constitute final part of the planning phase. The entire programming phase of the U.S. version is included in the author's suggested system's programming phase as its last step.

This delineation is chosen based on two assumptions. First, conceivable policy objectives, and means to achieve these, of a small country are limited and not global as is the case with the United States. And second, the size of a civil and military planning staff is relatively small and most likely involved in both medium- and short-term planning activity. The author's suggested approach, therefore, is designed to provide a mechanism to focus planning and programming efforts on addressing a relatively small number of security policy objectives via minimizing the number of planning documents and routines in order to increase efficiency of a small planning staff.

In the following chapters, the details of each component process, along with key concepts, and planning and supporting tools, will be discussed in greater detail.

Chapter 8.
RENEWED SYSTEM:
KEY CONCEPTS AND TOOLS

■

In this chapter, the author will identify and discuss key concepts and tools of suggested PPBES. The writer will begin with outlining the concept of Mission Areas that constitutes the foundation of the whole process. Further, concepts and tools related to specific phases of the PPBES will be addressed. Illustrative examples of some tools are attached to this study as Annexes.

Before starting the discussion of the phases and steps in suggested Planning, Programming, Budgeting and Execution System — the main focus of the following chapters — it is necessary to discuss the key tools and concepts that are employed throughout the whole process.

Basis of the PPBE System

Mission Areas

Like military capabilities were the founding idea of a suggested system, utilization of the concept of Mission Areas is the primary means of organizing the identification, development and sustainment of military capabilities required to meet critical security challenges.

Mission Areas are the categories that ensure continuity of planning through all phases of the process — from planning to programming to budgeting. Mission Areas link the missions specified under the NSC and/or NMS guidance (planning phase) with the Force Building Programs, which are developed as a part of the programming phase. These programs direct the development of the capabilities required to perform each of the missions. Mission Areas also link Force Building Programs (programming phase) to the defense budget's Major Defense Programs (MDP) that is subsequently developed within the budgeting phase. MDPs, in turn, constitute the budget framework through which the Force Building Programs are financed.

Mission Areas group together in the form of Capability Areas similar or interlinked missions assigned to the Services and other organizations under the purview of the Ministry of Defense (MOD). These missions are either specifically military or derived from legal acts, and may be performed in

peace- and in wartime, i.e., in defending national territory against a hostile force, in fulfilling country's international military obligations, or in assisting civil authorities. One possible array of Mission Areas, illustrating the sample provided in Annex H, is shown below.

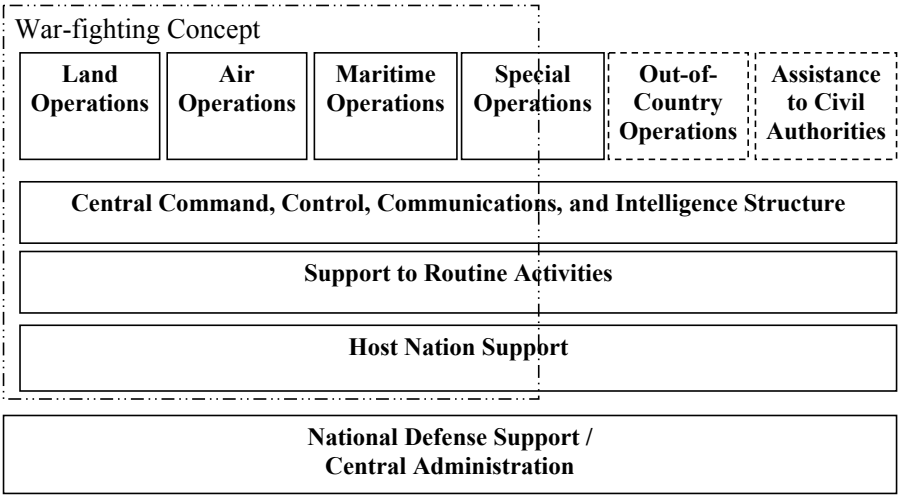

Figure 2. Illustrative example of Mission Areas

This graphic clearly delineates Mission Areas directly supporting national war-fighting concept (within dotted line), those in support of national crisis management effort (dotted boxes), as well as Mission Areas that ensure command and control of the Forces and support activity to sustain warfighting capabilities.

Within these Mission Areas, a number of missions (and/or tasks) are specified that require, alone or in combination, the development of detailed planning documents. The latter are to define what, how, under what conditions, and to what standards these specified tasks must be performed. The supporting tasks logically derived from the specific missions outlined in each Mission Area (e.g., conducting training in order to achieve established performance standards) should not be included into the list, unless it is a primary function of a structural element.

In strategic level operational planning, Mission Areas serve as additional guidance for the development of planning scenarios. In programming, the existing and future standing and reserve units, according to their primary mission and regardless of their Service or peacetime subordination, are grouped into one of the development programs that bear the same titles as Mission Areas. In budgeting, the mirror image of a Mission Area will be a

Major Defense Program (MDP) that bears the same title. The development and sustainment of units and structural elements grouped into a certain development program is financed through the corresponding MDP.

For each Mission Area, a Lead Agent should be specified — Service Command or strategic level command structure (MOD, General Staff) — that is responsible for the development of conceptual/doctrinal basis of respective Capability Area (planning phase), managing respective Force Building Program (programming phase), and supervising financing and implementation of respective Major Defense Program (budgeting and execution phases). In programming, budgeting, and execution, planning and management responsibilities for sub-programs and program elements are partially delegated to respective structural elements down to the lowest level where independent budget lines and spending authorities exist in given country (e.g., single battalion).

Key Concepts and Tools of the planning phase

Political Guidance

Let us, first, determine what we mean by political guidance. In the context of this study, political guidance is understood as certain broad policy, e.g., defense policy, that is established at the strategic-political level by the political leadership of the country — e.g., President, Parliament, Cabinet of Ministers, or Minister of Defense. In this sense, then, defense policy of a country is "Government-level statement of national security concerns, interests and objectives." (CCMR 2006a) Determinants of national-level defense policy are, for example, Foreign Affairs or Defense White Paper, a National Security Concept, a National Military Strategy, and international commitments of the country. In practice, however, there is no established 'nomenclature' or typology of policy documents, and each country has its own set of political guidelines. Hence, from the perspective of a defense planner — potential user of suggested system — the political guidance usually is not to be found in a single package, nor can it always be easily obtained. "Defense officials must, therefore, be prepared to "extract" guidance and priorities from a wide array of official documents." (ibid.) However, regardless of the way of 'packaging' political guidance, in democracies there are certain decisions that must be made exclusively at the political level.

With that in mind, let us now look at two key political guidance documents, specifically mentioned in the suggested PPBES.

National Security Concept

The document that guides strategic level long-term policy and capability-based military planning is the National Security Concept (NSC) that — in the case of Estonia — is developed under Cabinet supervision, coordinated by the Ministry of Foreign Affaires, and approved by the Parliament. Other countries, according to their constitutional arrangements, may have different supervising and approving authorities. "The NSC analyses the security environment, assesses risks, outlines the country's security commitments, and describes the readiness of the state and its people to defend the country and meet its international obligations. As politically sanctioned long-term planning guidance, the NSC defines, along with the security environment and risks, Anticipated Missions and Required Capabilities for the next 10–15 years." (Kask, Murumets and Young 2003, 14) Most importantly, NSC should not be limited to challenges in military security sector only, but should address challenges in all security sectors. Specific decisions concerning national defense that need to be taken at the highest level of political leadership and included into the NSC should address "projected availability of financial resources throughout the planning horizon (e.g., 2% of GDP), major Roles of National Defense (to include Military Roles), and outlines of National Defense Organization." (Estonia, 2006)

National Military Strategy

Based on the principles outlined in the NSC, the National Military Strategy (NMS) is developed that distills the government's political guidance into strategic-military and military-technical terms. In the case of Estonia, lead responsibility in this process belongs to the Ministry of Defense, working under the guidance of the Minister of Defense and in cooperation with Headquarters of the Estonian Defense Forces. Again, in different countries, depending on their constitutional arrangements, specific authorities to deal with national defense issues may be differently assigned. However, it is reasonable to retain close responsibility for this document with the Ministry of Defense.

The NMS is approved by the government upon the submission of the Minister of Defense for five years and covers a medium-term planning horizon (7–10 years). In the case of Estonia, the entire NMS will be revised every fourth year to ensure linkage to NATO Force Planning cycle; its select parts (e.g., planning assumptions, required military capabilities, development priorities) may be revised as required. (Estonia 2006)

The NMS provides the principal guidance supporting the medium-term capability-based and resource-based planning. The NMS addresses the issues of national military strategy "to counter perceived external military threats, resources allocated for defense, the peacetime and wartime structures of the defense forces, and national defense priorities. The NMS also outlines the country's security commitments and the military capabilities necessary to fulfill these." (Kask, Murumets and Young 2003, 14) Specific decisions to be made at the Cabinet level and included as integral parts of the NMS document should establish:

- Explanations of Major Roles;
- Policy priorities;
- Broad planning scenarios;
- Military Missions;
- Mission Areas;
- Financial framework (e.g., defense expenditures at 2% of GDP);
- Level of Ambition.

In addition, a classified Threat Assessment should be annexed to the NMS document. (Estonia, 2006)

Ministerial Initiating Directive

As a derivative of a NATO-compatible Operational Planning Process (OPP), a generic Initiating Directive "is an instrument to start and guide operational planning ... It provides the situation, political and/or military objectives, tasks and the desired political and military end states." (Estonia 2002, 195) In the context of the suggested system, the Ministerial Initiating Directive is drafted by the planning staff of the Ministry in cooperation with military planners from the Headquarters, is signed by the Minister of Defense, and provides political level guidance for the conduct of operational planning at strategic-military level.

Concept of Roles and Missions, and its supporting tools

It has been mentioned above, that defense planners should often "extract" guidance and priorities from a wide array of official documents. In order to support national-level defense planning, provisions of the NSC, NMS and other relevant guidelines should be translated into a more suitable format of Roles and Missions Matrix. Main focus of this process is to identify 'Who does what'. Which agency has the lead in writing the plan? Which agency coordinates the plan? Which agency is responsible to execute the plan? Which agency has the re-

sources to implement the plan? Development of the matrix helps to dissimilate various roles and missions of all government agencies and voluntary organizations that participate in the defense of the country; 'integrate' the efforts performed by non-defense organizations with those of the Armed Forces; address the issues of the 'transfer of authority' in crisis and transition to war; and finally, determine who establishes training standards and logistic priorities. Responsibilities for the missions are developed in the matrix in three grades: lead, support, and coordination responsibility. (CCMR 2006b)

Before moving any further with this concept, three key definitions should be established. For the purposes of this study, 'Role' is understood as "A specific responsibility designated to a Service or defense organization for which they prepare in anticipation of executing an order by national authorities." (ibid) In the same context, 'mission' is "clearly stated result or desired end state, achievable by military action, and its purpose", whereas 'task' should be read as "military action or actions executed by an individual or a unit in order to accomplish a mission assigned by higher commander." (ibid.) As a side remark: additional term 'task' has been introduced to underscore dynamic relationship between 'missions' and 'tasks', where, for example, a 'mission' given to a brigade commander transforms after analysis into several 'tasks' to his subordinate battalion commanders. From the perspective of a battalion commander, in turn, this 'task' is received as a 'mission' and will be distilled into several 'tasks' for his company commanders.

Before the matrix itself could be developed, three supporting tools are needed: the *list of Agencies and Institutions* with specific role or authority in National Defense, based on legislation and other relevant regulations; consolidated *list of Missions of National Defense*, derived or "extracted" from legislation and political guidance; and endorsed *four-tier concept of escalation*: peacetime -> tension -> crisis -> war. The first two documents are relatively easy to derive from the existing base of laws and other legal acts, and illustrative examples of a List of Agencies and List of Missions can be seen in annexes A and B to this study. With regard to the concept of escalation, first, the tiers need to be defined. In the context of this study, then, the following definitions are used:

- Peacetime: regular activities are carried by the peacetime defense structures, at a regular pace to ensure readiness and the maintenance of capabilities.
- Tension: the activities of the peacetime structures are intensified. The pace of activities is raised and capabilities to gather and disseminate information are enhanced.

- Crisis: A state of higher readiness is declared. Key facilities are provided with additional security measures, the reserves are activated selectively or partially and interagency co-ordination is strengthened.
- Wartime: the application of all national resources for wartime needs. (Estonia 2005)

An example of escalation matrix completed with relevant national level activities is attached as Annex C.

In the end, then, the four-layer (peacetime, tension, crisis, and war) *Roles and Missions matrix* is developed, where the left column of the matrix consists of Missions appropriate to a given phase of escalation, and the upper row consists of agencies with responsibilities in National Defense. The intersection of the Mission row and the Agency column is color-coded, if appropriate, indicating the nature of responsibility of a given agency for a given mission. For instance, the lead responsibility could be color-coded in red, support in yellow, and coordination or liaison responsibility in green. An illustrative sample of completed Roles and Missions Matrix is attached as Annex D.

In sum, the Roles and Missions matrix presents a model of National defense activity, linking Missions and Agencies through all four stages of escalation, essentially constituting the backbone of national crisis management effort[33]. The developed matrix helps to identify gaps and overlaps in assigned responsibilities; critical points of the Transfer of Authority through escalation; and structural, personnel, and resource requirements for participating agencies. In a broader context of defense planning and management, the matrix supports transparency in defense matters, supports budget justifications, ensures responsiveness of executive apparatus to government policy, fosters inter-agency coordination and cooperation, and provides a benchmark to update and refine existing operating procedures. It should be underscored here, that the development of Roles and Missions matrix is not part of the annual planning and execution routine. However, this analysis should be undertaken any time there is major change in:

[33] A crisis management system / structure is essential for any democracy if elected senior political leadership is to be capable of reacting effectively to the full spectrum of national security challenges, to include transition to war. This notion is particularly the case for a country that adheres to a Total Defense concept, whereby civil assets will be made available to national authorities in periods of crisis and war. It should be stressed throughout the process that taking National Defense Organization form one state to another through the escalation is always a matter of political decision.

- Policy Guidance (e.g., approval of new National Security Concept, National Military Strategy, or alike)
- Legislation (e.g., abolishment of conscription or major structural changes in state apparatus)
- International obligations of the country (e.g., joining a defense alliance) (CCMR 2006b)

Conceptually, development of comprehensive overview of Roles and Missions answers the question 'What to Do?' in the context of security and defense policy of the country in terms of end states.

Levels of Command

The next important concept that provides for clarity and consistency in the defense planning and management process is that of Levels of Command, corresponding to respective level of war. In the Western military community, three levels of war — strategic, operational, and tactical — are commonly accepted. Each of the corresponding command levels has its own scope and specific problems to deal with. As defined within the NATO community, the levels of war encompass the following activities:

> *Strategic Level*. The level of war at which a nation or group of nations determines national or multinational security objectives and deploys national, including military, resources to achieve them.
> *Operational Level.* The level of war at which campaigns and major operations are planned, conducted and sustained to accomplish strategic objectives within theatres of operation.
> *Tactical Level.* The level of war at which engagements are executed to accomplish military objectives assigned to tactical formations and units. (NATO 2001)

For the sake of clarity and consistency in defense planning and management process, it is crucial to recognize to which level of command, and with what particular authority, existing command and control structures, to include top civilian leaders, belong. Even more important is the issue of levels of command for national defense organizations in transition, when division lines between authority and responsibility of different agencies tend to distort. An illustrative example of linking organizations and decision authorities to levels of command is provided in Annex E.

Tasks Lists

The Tasks List is one of a planner's primary tools. It is a common lexicon for the broader planning process, providing a common language and enhancing a common understanding. The Tasks List ensures completeness and linkage across the force, and provides flexibility for adjustments and a change in planning or during conduct of operations.

"Tasks Lists, in their different forms, are employed in all sub-sets of the planning process from Force Development to Crisis Response Planning. In its generic form, the Tasks List appears as a list of organized and grouped main- and subtasks to be executed by organizations, staffs, or units at all levels while conducting an operation (campaign) in completing assigned mission requirements. Tasks List does not include limiting factors like Task Conditions and Performance Standards." (Kask, Murumets and Young, 25) The latter two concepts — Conditions and Standards — will be addressed in greater detail further below.

The National Tasks List is a list of all envisaged tasks for the entire military, regardless of the Service, that it should execute in the framework of provided political guidance. National Tasks Lists are developed as required for strategic, operational, as well as for tactical level, for the purpose of clearly delineating specific tasks to be performed at respective level of command.

Organizations of central and regional command and control, to include the Ministry of Defense, will derive from the relevant National Tasks List their specific Tasks Lists. These Service- and Command-specific Tasks Lists are to clarify and clearly delineate specific tasks to be performed at respective service or command level. With regard to the MOD Tasks List, it should be underscored, that the MOD Strategic Tasks List covers only the functions of the MOD in its capacity of directing authority at strategic-political level of the chain of command, and not the whole spectrum of MOD responsibilities, e.g., in executing procurement or establishing standards for military education programs at high schools.

For the purposes of enhancing operational planning and command, Mission-Essential Tasks Lists (METLs) will be derived from relevant Service- and/or Command-specific Tasks List for planned mission or task requirements under anticipated conditions. E.g., in the context of strategic level contingency planning, the planned operation could be homeland defense within three scenarios — Intimidation, *Coup de Main*, Full-Scale Military Attack; in the context of crisis response planning, planned operation could be of whatever scale based on any actual crisis situation. The METLs are also used for specifying training and readiness requirements for units.

The Tasks Lists for all three levels — strategic, operational, and tactical — are structured similarly, using the same subcategories (chapters), addressing all major areas of military activities:

1. Command and Control
2. Intelligence
3. Conduct Operations
4. Mobility
5. Force Protection
6. Sustainment
7. Force Generation
8. Coordination

The Tasks List format consists of Chapter, Tasks and Sub-tasks, and brief statements describing the activity to be undertaken in fulfilling this task (task descriptors). Illustrative sample Tasks List is provided as Annex F.

In sum, a Tasks List translates guidance into roles, missions and in turn, tasks across all levels of the organization. It represents a single, integrated and sanctioned product documenting required capabilities of the entire organization. As such, the Tasks List provides leverage in the political arena, negotiating capabilities to perform assigned mission requirements. In particular, it helps to assess what can and cannot be accomplished, and what are possible tradeoffs and impact on mission requirements. A Tasks List establishes a common lexicon for mission analysis and operational planning. It also provides a basis for identifying task responsibility and command relationships, thus being a vehicle for identifying subtasks (specified and inferred) and related responsibilities across organizations. Further, a Tasks List establishes a basis for determining capability requirements and assessing profile status, drives training and readiness requirements, facilitates accurate budgeting processes, and provides a basis from which to do crisis planning. And last but not least: conceptually, Tasks Lists answer the question ‘What to Do?’ in the context of security and defense policy of the country in technical terms of envisaged military activity, regardless of its political or military objective.

Task Conditions

Task Conditions describe the parameters of the environment, in which an operation is planned to be conducted. Task Conditions are divided into Civil, Physical, and Military conditions. Civil conditions describe factors related to a people, their government, politics, culture, and economy that affect mili-

tary operations. Physical conditions include factors of natural environment and other factors, within the natural realm, as modified by civilization. Military conditions describe factors related to the mission, command structure, and forces. These factors can apply to allied, neutral, and enemy forces. (Kask, Murumets and Young 2003, 26–27)

Conditions Database

A Conditions Database consists of details on the range of possible physical, civil, and military Task Conditions across conceivable areas of operation, developed and updated by Intelligence Board, Military Intelligence (J2) and other appropriate authorities. (CCMR 2002) This database supports contingency planning and crisis response planning branches of the OPP, thus contributing to the planning phase of suggested PPBES. It also supports analysis of identified Capability Gaps, thus contributing to programming phase of the PPBES.

Performance Standards

Performance standards are descriptions of activities and required levels of performance, defined through operational planning for the successful completion of specific operation requirements. Wherever possible, performance standards should be metric-based, employing objective criteria, derived from operational analysis.[34]

Examples of performance standards are: accuracy, range/radius, probability of hit/kill, detection range, speed over distance, rates of fire, target acquisition time, speed over time, load capacity, sustainment periods, and availability rates. Operational performance standards constitute an essential input into the force development and national programming systems, as well as the Operational Planning Process (OPP). (ibid., 27)

[34] One possible approach to the identification of these criteria is developed at RAND Corporation by Charles Kelley and his colleagues in 2003. For details, see Kelley, C., P. Davis, B. Bennett, E. Harris, R. Hundley, E. Larson, R. Mesic, M. Miller. *Metrics for the Quadrennial Defense Review's Operational Goals*. Santa Monica [etc.]: RAND, 2003.

Capability Profile

A Capability Profile for an existing or planned unit or Force Package having a given task requirement is based on a unit's Mission-Essential Tasks List, amended with Task Conditions and Performance Standards. Capability Profiles are used to describe both a unit or Force Package's existing capabilities, as well as the required capabilities that a unit or Force Package must have if it is to fulfill a given task in its complexity. For existing line and reserve units, developed Capability Profiles must be updated annually. These updates must be based on Annual Report's information of actually achieved capability and readiness levels as certified through exercises or testing.

Capability Profiles are used to support all fields of defense planning and management: contingency- and crisis response branches of operational planning, resource planning, and establishing training and readiness requirements (see Fig.3 below). The role and function of a Capability Profile in PPBES will be discussed in greater detail while addressing the planning phase of the process. The generic Capability Profile format is provided at Annex G.

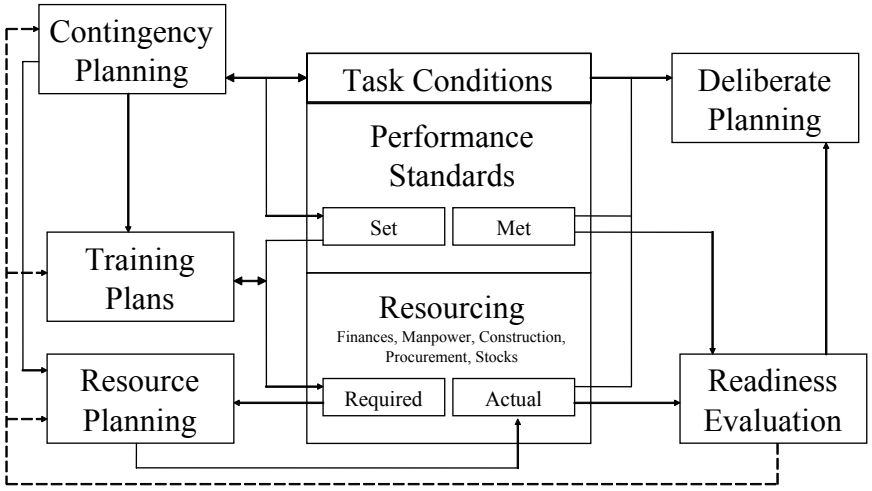

Figure 3. Applications of Capability Profile

Planning Scenarios

Planning scenarios should be derived from, or be consistent with, political guidance on the circumstances, under what conditions and where the government would employ military forces. Scenarios should include 'real-world' high probability events, as well as 'future-world' less probable, but

still plausible events. It is important to underscore, that scenario development should involve a wide range of participants from both the military and civilian side of the defense community, as well as representatives from strategic and operational levels of command, and the Services. Key to understanding the purpose of the process is that the government would expect to be able to respond militarily should the security event actually occur, and therefore sees the necessity of having a set of military capabilities with which to respond, and with which to deter/shape pre-crisis security situation. In the end, it is important to get high-level sign-off on scenario events. In the suggested system, this linkage is established through the Ministerial Initiating Directive.

During the development process, many different scenarios can be identified, and it is actually useful to simply identify as many possible scenarios, and then sort, discard and select. Some criteria for sorting, discarding and selecting scenarios are:

- Many scenarios can lead to very similar conclusions about required capabilities; only need to select one of these types
- Some scenarios may be less appealing but do have capability ramifications; do not discard these because there does not always appear to be a constituency supporting them
- A sensible range of scenarios is about 5–8. More — and it becomes difficult to prioritize capabilities required for each; less — and the platform for justifying capability choices can become too narrow. (CCMR 2005c)

While developing the family of scenarios, it is important not to name scenarios after a particular type of response rather than the event – there may be many ways of responding to the same event. A hypothetical example of a 'manageable-size' family of planning scenarios could look like the following list:

- Incursions in Exclusive Economic Zone
- Terrorism and acts of sabotage
- Mining of ports and sea approaches
- Illegal exploitation of natural resources
- Smuggling/Illegal entry
- Natural disasters
- Missing or threatened Nationals
- Civil disturbances/Industrial actions affecting national services
- Intra-state conflict
- Full-scale invasion of National Territory
- Limited-objective invasion of National Territory (CCMR 2005c)

Content of a scenario is important; therefore, it is essential to spend sufficient time on making sure of accurate and comprehensive content in each scenario. Scenarios have multiple uses in supporting capability-, contingency-, as well as deliberate planning and so content needs to reflect the information needs of these processes. For that reason, a critical minimum of information to be contained in a generic planning scenario is:

- Event description (story of a security crisis prompting Government response, what has happened, timings)
- Planning assumptions for military responses
- National political / military objectives to be achieved
- Physical, Military and Civil Conditions
- Sustainment assumptions (how long will military forces be required; how far away is event from home base; what Host Nation Support can be expected)
- Broad outline of a Concept of Operations for any response (CCMR 2005c)

In the development of this type of scenario content, in fact, some of the above-mentioned documents — NSC, NMS, Ministerial Initiating Directive, for instance — serve as direct inputs into the process. Each scenario, in turn, serves as input into the development of respective Capability Profile. It should be noted also, that the process of developing this type of scenario content has considerable resemblance with, or in fact is overlapping with, first three stages of Operational Planning Process — Initiation, Orientation, and Concept Development.

Capability Areas

As a derivative of the Mission Areas concept, Capability Areas are to group together similar or interlinked missions assigned to the Services and other organizations that require, alone or in combination, the development of detailed planning documents. These missions are either specifically military or derived from legal acts, and may be performed in peace- and in wartime, i.e., defending national territory against a hostile force, in fulfilling country's international military obligations, or assisting civil authorities. For each Capability Area a Lead Agent should be specified from strategic level command structures or Service Commands to be responsible for the development of conceptual/doctrinal basis of respective Capability Area. An illustrative sample of Capability Areas document is provided in Annex H.

Assignment of Units/Organizations to Mission Areas

In the previous chapter, we have established that "No capability does exist independently from the structure — organization, people, platforms, systems and procedures — actually carrying that capability!" (CCMR 2005a) Hence, in order to ensure continuity, clarity and transparency of planning as well as programming, all structures of National Defense Organization — Defense Force units and agencies under the purview of the MOD, both existing and planned — are assigned to one and only one Mission Area (Capability Area and Force Building Program) according to their primary mission. Clear linkage between structural elements, operational or supporting missions, and programs simplifies identification of Capability Gaps, cost allocations between Mission Areas (FBPs) and avoids double counting. As a result, the costs of a unit, i.e. development or sustainment of a package of capabilities, are allocated to the same Mission Area (FBP) that the unit belongs to.

Joint Military Capabilities Plan

As was mentioned in the outlines of the suggested system at the end of the previous chapter, the Joint Military Capabilities Plan (JMCP) is the primary outcome of the planning phase. The JMCP integrates into a comprehensive framework the planning guidance, key planning tools, as well as outcomes of the planning process.

The generic JMCP contains:

– Identified Missions and Tasks for the defense forces, grouped into Mission Areas;
– Strategic, Operational, and Tactical level National Tasks Lists further detailing Mission Area tasks;
– The Ministerial Initiating Directive;
– Concepts of Operations for homeland defence as well as for other envisaged contingencies, derived either from country's international obligations or national legislation and based on the Minister's Initiating Directive;
– Capability Profiles and Requirements derived from these Concepts of Operations, grouped into Mission Areas;
– Two sets of Contingency Plans, Functional Plans, Standing Defence Plans, and Supporting Plans developed under that directive. One set of plans will be developed immediately based on the Current Force Structure, another — based on the Target Force Structure — when the latter is developed through the Programming phase;

– Identified shortfalls in capabilities of the existing Force Structure, organized into Mission Areas (Capability Areas). These identified shortfalls or capability gaps will be primary input for future Programming. (Kask, Murumets and Young 2003, 15–17)

Chief of Defense's Private Requirements Report (PRR)

This classified report, signed by the Chief of Defense (CHOD), is addressed personally to the Minister of Defense. In this document, the CHOD, in his capacity of Senior Military Adviser, provides to the Minister — and through the Minister, to the Government — feedback on Missions, derived from the NSC and/or NMS, that he assesses are infeasible within existing or developing Military Capabilities or allocated resources, and suggests changes in resource allocations and/or policy guidance. The PRR is not a routine document, but will be developed if the CHOD considers it necessary. (ibid., 17)

Operational Planning Documents

Without the intent to address subtle issues of military operational planning in depth in this study, for the sake of understanding the complexity of modern planning challenges and interaction of force planning, resource planning and operational planning, it is still relevant to provide generic definitions of these operational planning documents that are mentioned in suggested PPBE system.

Operational planning can be divided into two categories: deliberate (advance) or contingency planning and crisis response planning.

Deliberate planning consists of initiating and developing scenario-based plans in anticipation of a future event or circumstance that a country might face. The final outcome of deliberate (advanced) planning will be one of three types of plans: a Contingency Plan (COP), Functional Plan (FP), or Standing Defense Plan (SDP).

Crisis response planning consists of initiating and developing plans in response to a current or developing crisis that has not escalated to the point or in the direction anticipated by any SDP. It requires expeditious preparation, co-ordination, and approval of operational plans. Crisis response planning may use an existing COP, if available, to guide the development of an operation plan (OPLAN). An OPLAN is the end product of crisis response planning.

Contingency plans (COPs) are prepared for potential future events or circumstances and are based on known or assumed planning factors. COPs are to be based on planning guidance, in the form of an Initiating Directive, and may be developed at any command level. Contingency plans are the normal final outcome of contingency planning. These plans, produced in as much detail as possible, enhance the approved Concepts of Operations (CONOPS) and serve as a basis for subsequent detailed operational planning. COPs are developed in co-ordination and consultation with relevant commanders and civil authorities, to include international security organizations or friendly nations if applicable.

Functional plans (FPs) involve the conduct of military operations in a peacetime or permissive environment. These plans are traditionally developed for specific functions or discrete tasks (e.g., nuclear accident or evacuation, logistics, communications, or continuity of operations) but also may be developed to address functional peacetime operations such as disaster relief, humanitarian assistance or peacekeeping operations. Functional plans are written using the procedures and formats specified for a COP.

Standing defense plans (SDPs) are designed to support the response to short/no-notice potential risks when the Forces are in a peacetime posture. The requirement for an SDP will be included in a commander's Terms of Reference (TOR). Approval of the TOR constitutes the necessary authority for the Commander to initiate planning. Development of SDP requires co-ordination with concerned commanders and civil authorities, to include friendly nations if applicable. A complete SDP will be a fully developed plan that can be readily executed, with forces assigned and execution authority delegated to the appropriate level of command.

Operation plans (OPLANs) are plans developed in response to a current or developing crisis. They are based on an Initiating Directive, and may be developed at any command level. OPLANs are produced in sufficient detail for execution, may enhance a CONOPS previously submitted for approval to the Initiating Authority, and are developed in co-ordination and consultation, at the appropriate level, with relevant commanders and civil authorities, to include friendly nations if applicable. Finalized strategic level OPLANs include all appropriate supporting annexes as well as force requirements. OPLANs are approved by the Initiating Authority. (Estonia 2002, 191–193)

Concept of Operations (CONOPS). The completion of a CONOPS document is a preliminary step in the development of an operational plan. The CONOPS expresses the military commander's intentions on the use of forces, time and space to achieve his mission, objectives, and end state. It includes how the capabilities of the available resources are to be synchronized towards this goal. A CONOPS document usually consists of a situation overview, mission statement, commander's intent, outline concept for

execution, force capability requirements, outline logistic support concept, key command and control arrangements, and other resource requirements. The CONOPS does not include any of the detailed annexes found within a fully developed plan or any supporting plans.

Supporting Plans (SUPLANs) provide detailed amplification for particular functional planning areas and must be directly linked to a specified COP, SDP, or OPLAN. A SUPLAN can be a stand-alone document or can be incorporated as an annex within the supported main plan. The agency providing the support develops the SUPLAN, which must be endorsed by the supported commander and approved by the next higher commander. The full range of SUPLANs includes but is not limited to the mobilization, deployment, sustainment, and redeployment of forces. (Estonia 2002, 195)

Key Concepts and Tools of the Programming and Budgeting phases

As it has been underscored above, the concept of Mission Areas is the primary means of organizing the identification, development and sustainment of military capabilities required to meet critical security challenges. If in the planning phase, Mission Areas (Capability Areas) group together similar or interlinked missions assigned to the Services and other organizations, then in programming they group units and organizations according to their primary mission and regardless of their Service or peacetime subordination, into one of the development programs (Force Building Programs) that bear the same titles as Mission Areas. In the budgeting phase, Mission Areas appear in the form of Major Defense Programs (MDPs) that bear the same title and constitute the budget framework through which the Force Building Programs (FBPs) are financed.

Force Building Program

Force Building Programs, which are developed as a part of the programming phase, direct the development of the capabilities required to perform each of missions identified through Capability Areas, thus guiding resource planning and management of Defense Forces. FBPs should be developed following unified format of Military Requirements Plan (see Annex L), addressing the same *problematique* and providing component data for compiling the MRP. Each of FBPs has similar structure of sub-programs and program elements reflecting organizational structure of National Defense Organization with

planning and management responsibilities for sub-programs and program elements assigned to respective structures of National Defense Organization.

An illustrative sample of a programs structure that embraces in collectively exhaustive and mutually exclusive manner a continuum of Force Building Programs, sub-programs, and program elements is attached to this study as Annex J.

Programs to Missions Crosswalk

As a derivative from Capability Profiles, a comprehensive Programs to Missions Crosswalk table could be developed that links Program Elements (units or organizations under the purview of the MOD) to their Mission Requirements, identifying Core Mission for given unit as well as possible Additional Missions, if assigned to the unit or organization. At the strategic level, this table gives to decision makers and planners an overview of existing or developing capabilities across all programs down to program element level. At the Program level, the same approach could be modified to accommodate specific Missions within a given Capability Area, thus providing to Program managers and planners similar overview. Illustrative samples of Programs to Missions Crosswalk tables are provided at Annex K.

Systems Database

A systems database, developed and maintained by General Staff J-8 department with inputs from MOD Logistics Department, the Services, and possible other sources (e.g., partner countries, commercial consulting agencies), should contain regularly updated information and data about all relevant parameters of existing and future systems, to include performance standards, life-cycle and life-cycle costs, upgrade availabilities, etc. (CCMR 2002) This database supports the development of options to close Capability Gaps identified within the programming phase of the PPBES.

Military Requirements Plan

The Military Requirements Plan (MRP) is a key output of the programming phase. The MRP addresses capability gaps in the current force structure and describes in phased and sequenced manner the ways and means to overcome these deficiencies. In so doing, the MRP outlines a proposed force structure that is designed to meet the operational requirements outlined in the NMS

and further specified in the JMCP. (Kask, Murumets and Young 2003, 18) The MRP includes those and only those items, activities, plans, units that were part of the approved options to overcome identified capability gaps, which guarantees that there are resources available for them within given timeframe. (ibid., 40)

A generic MRP consists of:

– Major changes in the force structure (e.g., formation, re-subordination, re-formation, and disbanding of units, to include reserve units);
– Major personnel movements within the Defense Force (e.g., number of conscripts taken in for training and sent to reserve, etc.);
– Major construction projects;
– Major procurement;
– Research and development;
– Financial resources grouped into Major Defense Programs;
– Special classified annex that addresses un-financed requirements and associated risks, thus providing for feedback mechanism.

The MRP serves as a basis for annual defense budgets. The MRP is an integral part of annual planning and execution routine and covers years 2–6 of the medium-term planning cycle. Every year, the first year of approved MRP will serve as a foundation for next year's Annual Budget and Action Plan, with the time period covered by the new, revised, MRP sliding one year into the future. The MRP is reviewed by the CHOD and submitted to the Minister for approval. (ibid., 19) Commented sample format of Military Requirements Plan is provided in Annex L.

Major Defense Program

In budgeting, the development and sustainment of units and structural elements grouped into a certain development program (Force Building Program) is financed through the corresponding Major Defense Program (MDP). As MDP is the cornerstone of financial management of the National Defense Organization, and thus should be directly linked with annual state budget, it is impossible to provide any generic examples of an MDP structure. It is necessary to underscore, that the family of MDPs should be a mirror image of the family of FBPs, i.e., consisting of the same programs, subprograms, and program elements. Internal structure of an MDP, however, is depending on the structure of national budget and should follow the requirements set by the Ministry of Finances.

Annual Ministerial Budget and Planning Guidance

The ministerial guidance is composed on the basis of MRP and specifies the development priorities for the next year. Although the guidance is based on the approved MRP, some adjustments may be necessary due to changes that have occurred in the international security environment since the programming was completed. Additionally, adjustments may be necessary to address unforeseen deficiencies that emerge from the reporting cycle. On the basis of the MRP and the above-mentioned other factors, the budget guidance then specifies the priorities for each of the Major Defense Programs. It generally includes resource ceilings as represented in the format of the state budget classifications that are submitted at the level of detail deemed necessary by the MOD, and may additionally include resource ceilings for each of the Major Defense Programs. Finally, the guidance may include a section describing the current security situation and the general priorities that apply to all Major Defense Programs and an assessment of the developments since the last annual report. The latter provides the basis for the guidance to follow. (ibid., 41–42)

Annual Budget and Action Plan

The Annual Budget and Action Plan is developed to execute the MOD annual budget and planning guidance, and is structured along Major Defense Programs. It is developed on the basis of the first year of the approved MRP and follows the same format (see Annex L). In order to link the Action Plan with finances, Major Defense Programs in the format of state budget are used. A Major Defense Program (MDP) incorporates the same Defense Force units and organizations as its respective MRP Mission Area (Force Building Program). The MDP includes the FBP's annual costs (now specified to the detail necessary to be composed in the budget) together with a description of the activities that will be accomplished in the individual units and in the Major Defense Program as a whole during the next budget cycle. (ibid., 42)

Annual Report

Annual Activity Reports are prepared by all units, staffs, and other structural elements within the purview of the MOD. These reports are developed using Capability Profile and MRP formats, and should provide adequate feedback for both the Capability-based and Resource-based planning cycles. This

paragraph describes the composition of annual reports of the Mission Area and up. Individual units modify this format as applicable.

Annual Activity Reports are used to provide:

1) Feedback to JMCP – actually achieved capability and readiness levels of units as certified through exercises or testing, using simplified[35] Capability Profile format;
2) Feedback to MRP – using the MRP format, outlining in particular
    a. Executed changes in the force structure (formation, re-subordination, re-formation, and disbanding of units, to include reserve units),
    b. Actual personnel movements (active duty professionals, conscripts, and reservists),
    c. Actual construction,
    d. Actual procurement,
    a. Actual research and development.

In order to maintain integrity of coding through the entire family of planning and reporting documents, this order will be reversed in Annual Report, i.e. Parts A and B of the report will provide feedback to MRP, and Part C – to JMCP.

The development of a unit's annual report is the responsibility of its Staff. When completed, this report will be submitted to the next higher command (ultimately – to the Mission Area lead agent) for integration into a Mission Area annual report. General Staff retains responsibility for the integration of annual reports within the Defense Forces, and MOD – for the entire defense community under its purview. Based on these integrated reports, the MOD may develop a consolidated report to be submitted annually to the Government by the Minister of Defense, if required by legislation. (CCMR 2002) Commented sample Annual Report format is attached to this study as Annex M.

Planning Calendar

In order to support the complex and often time-sensitive process of managing the PPBES, a Planning Calendar is developed that depicts the time-phased sequence of Planning, Programming, Budgeting and Reporting activity, its key milestones and deadlines. This calendar should definitely outline

[35] In this case, 'simplified' means presenting only the comparative list of required and actually acquired performance, readiness, and stock levels, as certified through relevant procedures.

the next year activity. It is advisable also to extend the horizon even further to cover key activities that occur regularly but less than once in a year. In its simplest form, a Planning Calendar could appear as a text document establishing milestone events and dates when key documents are due. In order to visualize the complex process of PPBES management, an Excel spreadsheet or more sophisticated project management software could be utilized. In support of macro-level management, color-coding may be introduced to identify agency that has lead responsibility in the conduct of given activity. Illustrative sample of a long-term Planning Calendar is provided at Annex N.

Processes that need to be taken into account in the development of a Calendar template include, but are not limited to, annual state budget development and approval routine, planning and reporting routines within the purview of the Ministry of Defense, any relevant Government-level or interagency routines (e.g., the development of new NSC or NMS), and applicable international obligations (e.g., CSBM reporting under the Vienna Document, or NATO milestone events).

Every year, as part of annual management routine and in conjunction with the issuance of Minister's Annual Budget and Planning Guidance, Planning Calendar for given year is approved, linking milestone events and deadlines with real-time actual dates.

Chapter 9.
RENEWED SYSTEM:
THE PLANNING PHASE

■

In this chapter, the author will, first, establish the purpose and scope of the first main phase of suggested PPBE system — Planning. After that, the current writer will describe the sequence of the process through its major steps, referring to key concepts and planning tools identified in previous chapter, applicable to particular step, and drawing examples where appropriate. In order to better demonstrate internal logic and relevance of the suggested PPBES, a hypothetical example of a country undergoing major reform to its defense sector will be employed where appropriate.

Let us start the discussion of the first phase of renewed planning, programming, budgeting and execution system with presenting the whole process in graphic.

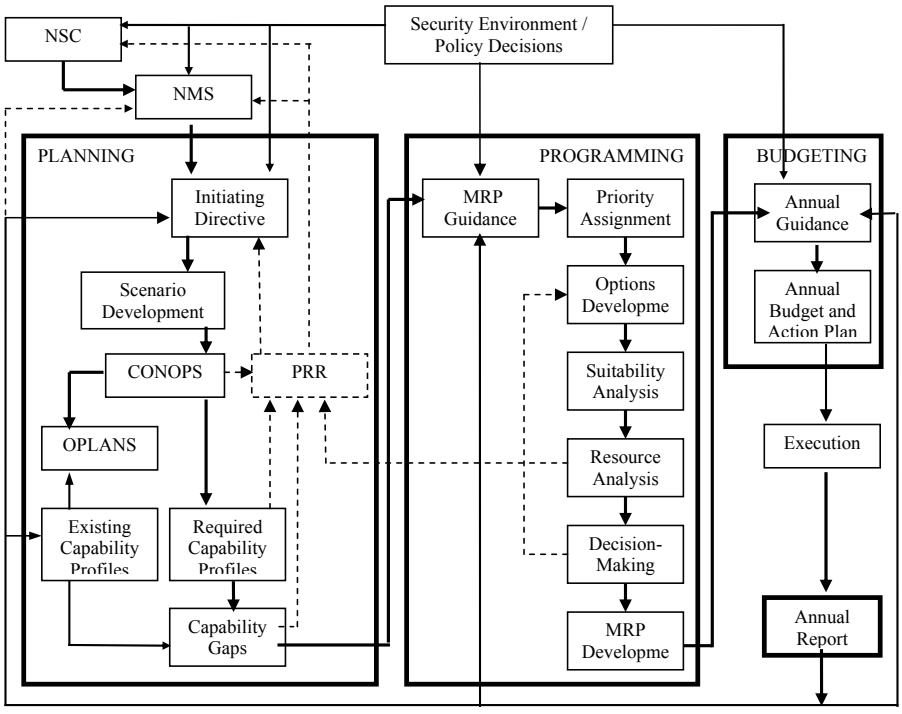

Figure 4. PPBES process chart

On this graphic, bold arrows depict the main stream of the process, from policy guidance (NSC, NMS) through phases and steps of the process to the feedback based on Annual Report. Regular arrows show additional inputs to the process, whereas dotted arrows demonstrate additional (optional) feedback loops.

Purpose and Scope of Planning phase

The purpose of planning is to identify, based on available political guidance — for instance, principles specified in National Security Concept and National Military Strategy — the tasks and mission requirements for the defense forces, and the capabilities that need to be developed within it. The main difference from programming or budgeting is that the latter two are tied to the annual budgeting process of the state, thus in most cases coinciding with fiscal year running from 1 January to 31 December. Capability planning, in turn, should be tied to changes in security environment and subsequent political decisions.

Planning encompasses:

1) Analysis of security environment and country's international security obligations;
2) Development of a Threat Assessment;
3) Development and approval of political guidance;
4) Development of planning scenarios
5) Development of strategic level CONOPS and subsequent Contingency Plans, Functional Plans, Standing Defense Plans, and Supporting Plans that will determine the defense force capability and resource requirements;
6) Assessment of the operational capabilities of the existing force and identifying if and where any shortfalls (capability gaps) may exist;
7) Linking capability requirements, defined through Mission Areas, with development- and Major Defense Programs. (Kask, Murumets and Young 2003, 15)

By and large, the planning cycle of suggested PPBES covers two somewhat separate realms — policy planning and defense planning. Organizations under the purview of the Ministry of Defense have responsibilities for both: as contributors to policy planning with the lead responsibility residing with some other government body, and as lead agents in defense planning process. Based on this differentiation of lead/support responsibilities, the author would qualify the analysis of security environment and country's international security obligations, development and approval of political guidance, and — somewhat arbitrarily — development of a Threat Assessment to the realm of policy planning; whereas the development of strategic level

CONOPS and subsequent Plans, assessment of the operational capabilities of the existing force, identifying capability gaps, and linking capability requirements with Force Building and Major Defense Programs definitely belong to the realm of defense planning.

The suggested methodology fulfils two important functions:

1) To optimize the structure and capability requirements of a Force Package assembled/developed to accomplish a given mission or task under assumed physical and military conditions;

2) To assess conformance of military capabilities currently existing within the defense forces with capability requirements derived from operational planning.

The same methodology is applicable to the entire defense force, as well as to the Services, units, staffs of all levels, and to the Ministry of Defense and civil organizations in its purview, in order to develop capability requirements and assess the conformance of currently existing capabilities with required capabilities. Outside the purview of the Ministry of Defense, the same methodology is applicable to the development of defense-related capability requirements for specialized units and structures, e.g. Border Guard, Coast Guard, Rescue Service, and alike. (ibid., 20–21)

PPBES Planning Process

As it was said in the lead of this chapter, in order to explain phases, steps and related concepts and documents the best, the author chooses a hypothetical example — a country undergoing major reform of its defense sector.

A closer look at the graphic of the PPBES process presented above reveals that the suggested system encompasses two components: development of broad strategic-level policy guidance in the form of National Security Concept and National Military Strategy remaining ground laying documents for medium- to long-term timeframe, a Step Zero; and recurrent process of planning, programming and budgeting (‘PPBES proper’) that is repeated every year. Additionally, evolving security environment and current policy decisions — purely national, as well as those stemming from the membership in collective security and/or collective defense organizations — are depicted on the graphic as supplementary real-time inputs affecting the process.

Step 0: Development of long-term and medium-term policy guidance

The process of defense sector reform logically starts with the *development of National Security Concept*, long-term strategic-level political guidance that should address challenges in all security sectors. Naturally, development or review of NSC should be undertaken regularly, even without the intention to reform the whole defense sector. The NSC document, as was established earlier, analyses the security environment, assesses risks, outlines the country's security commitments, describes the readiness of the state and its people to defend the country and meet its international obligations, and defines anticipated missions and required capabilities for the next 10–15 years. (ibid., 14) It also addresses the projected availability of financial resources throughout the planning horizon, major Roles of National Defense, and outlines of National Defense Organization. (Estonia, 2006)

Besides assessment of security environment and outlines of National Security Policy — natural components of any NSC document and thus not specifically quoted here — some examples of specific decisions concerning national defense that need to be taken at the highest level of political leadership, and that serve as an input to PPBES, could be found in the most recent National Security Concept of Estonia. "Estonia is maintaining its defense expenditures at the level of 2% of the GDP." (Estonia 2004, 14) This statement establishes basis for long-term resource planning.

More importantly, for the purposes of the PPBES, the Concept defines Roles for defense structures: "The Defense Forces …, together with the Ministry of Defense, ensure the readiness to fulfill the following basic military defense tasks:

- Collective defense and the management of international crises directly threatening the security of Estonia and/or other NATO Member States;
- Demonstration of national sovereignty for the purpose of ensuring control over Estonia's territory, territorial waters, and airspace;
- Participation in international crisis management and peace operations, including EU operations;
- International defense cooperation;
- Assistance to civilian structures in the solving of emergency situations." (ibid., 15)

Based on the provisions of the NSC, the next step in our hypothetical reform process is the *development of National Military Strategy*. By generic definition from the previous chapter, NMS addresses national military strategy "to

counter perceived external military threats, resources allocated for defense, the peacetime and wartime structures of the defense forces, and national defense priorities. The NMS also outlines the country's security commitments and the military capabilities necessary to fulfill these." (Kask, Murumets and Young 2003, 14) Specific decisions to be made at the Cabinet level and included as integral parts of the NMS document should establish: explanations of Major Roles, policy priorities, broad planning scenarios, Mission Areas, projected financial framework, and Level of Ambition. In addition, a classified Threat Assessment should be annexed to the NMS document. (Estonia, 2006) Examples of some of these decisions could be found in the current National Military Strategy of Estonia.

For instance, regarding Major Roles established in NSC, the NMS specifies the meaning and related broad capability requirements for each[36]:

> 18.1. **Collective defence and response to military crises that directly threaten the security of NATO member states.** This role is executed by the implementation of Articles 4 and 5 of the North Atlantic Treaty by the member states. The collective defence system ensures deterrence, appropriate management of military crises, and successful defence of the Estonian state and of NATO Allies.
>
> It is essential to prevent the irreversible escalation of military crises to direct military threats to national security. Management of a military crisis must ensure control over its escalation and reduce its negative political and military impact. In the case of a military attack, Estonia's military defence model envisages the co-ordinated use of national means, and the means of NATO Allies, to carry out military operations aimed at preserving the country's territorial integrity.
>
> For this key role, the defence structures must ensure the country's initial self defence capability and readiness:
>
> - to react immediately to a military crisis or coup attack;
> - to receive allied forces that arrive in Estonia by air, by sea, by land, or transit through Estonian territory, and to support their activities on Estonian territory;
> - to defend strategically important areas and facilities;
> - to conduct limited air defence;
> - to conduct mine clearance and mine countermeasures operations in Estonian territorial waters;

[36] In fact, the last Role established in NSC — assistance to civilian structures in the solving of emergency situations — is not elaborated in the NMS due to internal political reasons irrelevant to this study. Definitions and broad requirements established for remaining Roles provide sufficient example.

- to conduct mobilisation.

In addition, Estonia must be ready:

- to deploy forces as part of NATO forces for Article 5 operations and other Crisis Response Operations (including participation in anti-terrorism operations).

18.2. **Demonstration of the sovereignty of the state.** The primary objective of the demonstration of sovereignty is to gain control over activities that are taking place on Estonian territory, and in its territorial waters and airspace. The state must be ready to detect any violation of the integrity of its airspace and territorial waters and, if necessary, respond. The defence structures will, if necessary and in accordance with international law, ensure the protection of the interests of the Republic of Estonia abroad. In all of the above areas, active co-operation will be carried out with state civil structures and with NATO Allies and neighbouring countries.

For this role, the defence structures must ensure their readiness in peacetime:

- to conduct air surveillance and to support maritime surveillance;
- to conduct air policing in the framework of the *NATO Integrated Extended Air Defence System*.

18.3. **Participation in international crisis management and peace operations, including European Union operations.** The objective of international crisis management and peace operations is to support international peace, stability and security by military means.

Such operations are undertaken to resolve crises or conflicts that could otherwise affect the security of Estonia, NATO Allies, or members of the European Union, or could destabilize the international security situation and in extreme cases weaken the Euro-Atlantic and global security environments.

European Union member countries have agreed to develop their crisis management capabilities. As a result, the European Union will acquire a crisis management capability that is independent of, but compatible with NATO activities and planning, for use in cases where not all NATO Allies are ready to participate in managing an international crisis that is important to the European Union.

Estonia will fulfill this key role using the same units that are intended for co-operation with NATO outside Estonian territory.

For this role, the defence structures must ensure their readiness for sustainable participation in crisis management and peace operations, including humanitarian operations.

18.4. **International defence co-operation**. The objective of co-operation is to increase confidence, stability and transparency between countries in the field of military security in order to prevent the occurrence and escalation of military crises and the use of military force.

International and, in particular, regional defense co-operation contributes to the acquisition of resources and the development of military capabilities that would otherwise be beyond Estonia's limited national means. For this role, the defence structures must ensure their readiness:

- to participate continuously in the NATO Partnership for Peace programme;
- to develop military and defence co-operation between Estonia, Latvia and Lithuania;
- to promote bilateral and multilateral defence co-operation;
- to participate in implementing Confidence and Security Building Measures (CSBM) and in the arms control process. (Estonia 2005)

Estonian NMS also establishes broad planning scenarios: "Military capability requirements necessary for national defense should be established with the following broad contingencies (scenarios), either independently or in concert with allies:

- protection of sovereignty, including collective defense;
- collective defense outside Estonia;
- military operations other than war outside Estonia." (ibid.)

Regarding Mission Areas, the NMS of Estonia states: "Mission Areas establish a common framework for the definition and development of military capabilities necessary to undertake and support the key defense roles. The military capabilities required are defined and developed in the following Mission Areas:

- land operations;
- air operations;
- maritime operations;
- host nation support (HNS);
- operations outside Estonia;
- command and control, communication and information;
- logistics and combat service support;
- defense support and central administration." (ibid.)

Vital component of any NMS-like document is establishment of clear priorities of development. Estonian NMS defines these as follows:

> 50. During the period of operation of this regulation, the main priority for defence development will be its integration into NATO's collective defence system.
>
> The defence structures must, independently or in co-operation with allies, ensure the availability and quality of the following key capabilities:
>
> - Air defence capability (including air surveillance and air policing) to demonstrate the integrity of Estonia's airspace;
> - The capability to conduct military operations outside Estonian territory (including participation in anti-terrorism operations);
> - The capability to conduct defence operations on Estonian territory, together with allied forces:
>   - initial self defence capability (including the capability to receive Allied forces),
>   - capability to provide host nation support, including Defence Forces' activities to provide support to arriving forces,
>   - interoperability with allied forces;
> - The capability to exchange security and defence-related information with NATO and NATO member states;
> - The capability to carry out mine clearing and mine countermeasures operations in Estonian territorial waters.
>
> 51. By 2008 Estonia will be capable of participating in a long-term international operation by simultaneously providing one unit with up to 250 members and one mine countermeasures vessel. By 2007, Estonia will also be capable of participating in a one-off international operation, for up to six months with rotation, with a tactical group of the battalion, smaller specialist units and one mine countermeasures vessel simultaneously. (ibid.)

The last decision — and essential planning assumption for PPBES — that should be made at Cabinet level is to establish Level of Ambition (LOA) for guiding the medium-term development of Defense Forces. Plausible examples of such LOAs for a NATO member-country could be:

- Externally
  - Participation in deployment operations with the personnel 8% of peacetime strength of standing Land Component
  - Participation in NATO Article 5 operations outside the country with the personnel 40% of peacetime strength of standing Land Component

- Internally
  - Wartime strength of the defense force
  - Sustainability
  - Level of sovereignty demonstration
  - Identification of strategically important areas and facilities to be protected at all costs
  - Identification of Points of Debarkation to be secured in order to enable the reception of reinforcements (Estonia, 2006)

Step 1: Development and Issuance of Ministerial Initiating Directive (MID)

This directive is the first step of a recurring process of the planning phase of PPBES. In particular, the Ministerial Initiating Directive should approve typology of planning scenarios; and establish for each approved type of scenario desired political end state, applicable restraints and constraints, and planning assumptions. This directive also details the strategic military missions outlined in the NMS, establishes cooperation requirements with other government agencies, and provides estimation of available financial framework. (Estonia 2006)

With regard to typology of planning scenarios, a comprehensive set of scenarios addressing major types of plausible contingencies could be as follows:

- Military Assistance to Civil Authorities
  - Natural disaster
  - an-made catastrophe
- Attacks against constitutional order of the state, to include terrorism
- External political pressure by military means, to include special operations
- Coup attack
- Invasion with limited ends
- Full-scale invasion
- International crisis response operation
  - Humanitarian operation
  - Stabilization operation
  - High-intensity conflict

With the exception of the last scenario that addresses alternative out-of-country deployment operations, all other scenarios take place in-country. (ibid.)

Source and support documents for developing the Ministerial Initiating Directive should include, but are not limited to, the NSC, NMS, Threat As-

sessment, relevant legislation, applicable international agreements, List of Missions in National Defense, List of Agencies, Roles and Missions Matrix, and Ministry of Finance's medium-term budget projections.

Steps 2 and 3: Scenario Development and Development of CONOPS

As it was mentioned in the previous chapter, the process of developing sufficiently detailed planning scenarios in response to Ministerial Initiating Directive to support identification of capability requirements and subsequent decision-making on resource allocations overlaps with the first three stages of NATO-compatible Operational Planning Process. Hence, in the case of a small state with limited resources, taking into account expectedly small number of planners in both the MOD and General Staff, and in order to avoid duplications, the author would argue that the development of planning scenarios and subsequent development of Concepts of Operations should be conducted in combination and following the three-step procedure of the OPP. As properly modified from OPP, to accommodate specifics of strategic-level planning in the context of suggested PPBES, Steps 2 and 3 should be carried out for each type of scenario established in the Ministerial Initiating Directive, and consist of the following activity:

Initiation encompasses recognition of tasks and formulation of military assessments. Specific tasks under this step include:

- Form the Planning Group (PG) mainly consisting of planners from the MOD and General Staff, with the participation of representatives from Ministry of Foreign Affairs, Ministry of Interior, and wider Intelligence Community as necessary
- Collect information/data related to potential area of operations
- Identify external Headquarters and/or international agencies for coordination and/or liaison
- Provide Military Assessment

The output of Initiation is identification of Possible Military Options. (Estonia 2002, 215)

Orientation encompasses conduct of Mission Analysis, development of opposing forces Courses of Action (COAs), and development of CHOD's Initiating Directive (Planning Guidance). Specific tasks under this step include:

- Estimate of the situation (geography, environmental conditions and background)
- Analysis of the Opposing Force:
  - Review Order of Battle and disposition
  - Determine Objectives and desired end-state

  - Identify Capabilities, strengths and weaknesses
  - Identify/determine the Centres of Gravity (COGs)
  - Identify/determine decisive points
  - Determine likely intentions
  - Develop potential COAs (including concept, sketch, task organisation, and timeline)
- Review Minister's mission, political Objectives, end-state, criteria for success, assumptions, limitations (constraints and restraints), and preconditions for success
- Analyse/identify/determine your command's tasks (assigned and implied)
- Determine desired military end-state, criteria for success and military Objectives
- Analyse/identify/determine factors and assumptions
- Identify the strengths and weaknesses
- Identify/determine own COGs
- Identify/determine own decisive points
- Determine the approach, line of operation and sequencing/phasing
- Update tasks
- Develop Mission Statement
- Conduct Initial Force Structure Analysis
- Develop the CHOD's Planning Guidance. (ibid.)

The output of Orientation is CHOD's Planning Guidance — a form of Initiating Directive that provides for further detailed planning the situation, military objectives, tasks and the desired military end states. (ibid., 191)

Concept Development encompasses Staff Analysis, development of own COAs, development of a CONOPS and submitting it for approval to CHOD[37]. Specific tasks under this step include:

- Expand the PG as appropriate to include representatives from Joint Operations and Service Commands
- Review the CHOD's Planning Guidance with focus on the operational design
- Update the situation to include refined opposing forces COAs
- Analyse situation and make deductions (theatre situation, time and space, assessment of tasks, Command and Control, CIS)
- Develop own tentative COAs

[37] This is the phase within the PPBES process where changes in the nature of warfare, and concepts reflecting these changes, some of which were briefly mentioned in chapter 3 — for instance: asymmetric warfare, effects-based warfare, network-centric warfare — need to be carefully considered and applied as appropriate by military operational planners.

- Analyse tentative COAs (test, refinement, war game, compare)
- Select Preferred COA
- Develop CONOPS and forward for approval
- Develop Force Statement of Requirements (SOR)

The outputs of Concept Development are CONOPS and Force SOR. (ibid., 216) These CONOPS and related SORs in their entirety present a comprehensive picture of planned military activity and related resource requirements of all Defense Force (in essence — joint operations) organized along all envisaged contingencies.

Source and support documents for developing the planning scenarios and CONOPS should include, but are not limited to, the NSC, NMS, Threat Assessment, relevant legislation, applicable international agreements, Ministerial Initiating Directive, Levels of Command, and Conditions Database.

From this point on, the process will continue in two branches (see graphic in the beginning of this chapter): development of approved CONOPS into detailed Contingency Plans for identified scenarios (contingencies) utilizing resident capabilities of the current Defense Forces (the process not to be further addressed in this study), and development of planning and support documents with the aim to identify gaps and shortfalls in existing capability compared to capability requirements derived from developed CONOPS.

Step 4: Development or Review and Update of Capability Areas and Generic Tasks Lists

Before moving any further to the development of the key tool for identifying Capability Gaps — Capability Profile — two supporting tools need to be developed if they do not exist already, or — based on data from CONOPS and SORs — reviewed and updated as necessary.

It has been said above that the set of CONOPS and related SORs present a comprehensive picture of planned military activity and related resource requirements organized along envisaged contingencies. It has been also said earlier that military capability does not exist separately from the structure — organization, people, platforms, systems and procedures — actually carrying that capability. Hence, the planned military activity needs to be 'translated' from the language of joint operations to achieve specified objectives into the language of 'What to Do?' in technical terms of envisaged military activity, regardless of its political or military objective. This process concerns two complementary tools — Capability Areas and Tasks Lists.

The first approximation of this 'translation' requires dissecting joint operations into environment components, e.g. Land, Maritime and Air Operations, and identification of support activity that enables National Defense

Organization to meet established goals; and — derived from the array of CONOPS — identify the scope of environment or support operations and establish linkage to relevant doctrinal basis. The target format of this 'translation' is that of a Capability Area, a manifestation of Mission Areas concept specific to the planning phase of PPBES. Suitable example here could be drawn from Annex H, where Capability Area 'Land Operations' defines in its descriptor the scope and purpose of this type of operations, and identified generic missions could be linked to relevant doctrinal documents, in given case, for instance, to NATO Allied Tactical Publication ATP-3.2 'Land Operations' of 2001.

Source and support documents for developing the Capability Areas should include, but are not limited to, the NSC, NMS, Ministerial Initiating Directive, approved CONOPS, relevant legislation, national and where applicable, NATO doctrines.

One could rightfully ask here: if Capability Areas are to be identified based on developed CONOPS and SORs only, then how could they be established by the NMS three steps earlier? The answer is simple. It is plausible to assume that some form of security and defense policy, structured Defense Force, and operation plans do exist in any country. Hence, there should be sufficient information to establish first-cut Mission Areas before detailed operational planning and analysis commences. Since the purpose of concept of Mission Areas is to link capabilities to resources, and it therefore has clear resource — most notably financial — ramifications in programming and budgeting phases of the process, it makes all sense to have the nomenclature of Force Building and Major Defense Programs (reflections of Mission Areas into programming and budgeting phases respectively) endorsed at Cabinet level. In the end, if PPBES' built-in feedback mechanism provides such an indication, the nomenclature of Mission Areas could easily be modified in the next update of the NMS.

The second approximation of the 'translation' of operations language into 'What to Do?' language entails development, or review and necessary update, of the family of generic Tasks Lists. In other words, generic lists of organized and grouped main- and subtasks should be developed, or reviewed and updated as necessary, for strategic, operational and tactical levels of command, as well as for the Services and stand-alone command and control elements such as General Staff, Joint Operations Command or Regional Commands, to address all major areas of military activity in the conduct of envisaged operations (approved CONOPS).

Source and support documents for developing the Generic Tasks Lists should include, but are not limited to, the NMS, Ministerial Initiating Directive, approved CONOPS, and relevant doctrines.

Step 5: Assignment of existing units, formations and organizations to Mission Areas

Capabilities are inseparable from structures that carry them. Therefore, to support the identification of Capability Gaps in existing force structure, all elements of the latter should be clearly linked with Capability Areas.

In most cases, establishment of this linkage is straightforward — army units have their primary mission as conducting operations on the ground and therefore should be assigned to Capability Area 'Land Operations'. Likewise, a single transport battalion has its primary mission as providing service support and consequently should be assigned to Capability Area 'Logistics and Service Support'. In rare cases, however, this assignment is more difficult. For instance, should a Marine Battalion be part of Land or Maritime Operations? Or likewise, should an Airborne Battalion go under Land or Air Operations? The primary mission of both units is to conduct operations on the ground, regardless of the means to take them there. Therefore, the author would argue that conceptually they should belong to the Land Operations Capability Area, with the reservation that airborne and amphibious operations are joint operations in nature and consequently should embrace also select capabilities from Maritime or Air Operations realm. That said, the organizing principle of assigning units to Mission Areas is that of their primary mission, regardless of Service or operational subordination.

One example to demonstrate the logic of assigning units and organizations to Mission Areas could be as follows:

1. **Land Operations**: Army Training Centers, Scouts Battalion, Infantry Brigade, and all reserve battalions outside the brigade structure.
2. **Air Operations**: Air Base, Air Sovereignty Operations Center.
3. **Maritime Operations**: Naval Base, Mine Countermeasures Division, Coastal Defense units.
4. **Non-organic Host Nation Support**: none. This Mission Area is designed to accommodate development of plans and procedures for HNS, as well as for acquiring required stock levels, and technical support from civilian sector (e.g., cargo handling equipment).
5. **Out-of-Country Deployment Operations**: permanently none. Temporarily, units will be allocated to this Mission Area for the period of pre-mission training, being on deployment, and post-mission recuperation. This Mission Area accommodates also entire planning for particular mission and acquiring of missing support capabilities (e.g., airlift, medical support) for that mission either from the Host Nation or any coalition partner.

6. **Military Assistance to Civil Authorities:** permanently none. This Mission Area accommodates planning, training, and acquisition necessary to meet requirements set by the Minister of Defense upon request from the Minister of Interior.

7. **Central Command, Control, Communications and Intelligence Structure:** from the Defense Forces structure – General Staff, Operational Command, Joint Operational Command Center, Service Staffs, Regional Commands, Reconnaissance Battalion, Signals Battalion; from civil agencies – Intelligence Board.

8. **National Defense Support / Central Administration:** from the Defense Forces structure – Logistics Center, logistics battalions, Logistics Training Center, Medical Service, Central Hospital, National Defense College, Non-Commissioned Officers School; from civil agencies – Ministry of Defense, War History Museum. (Estonia 2002, 60–61)

Source and support documents for assigning existing units, formations and organizations to Mission Areas should include, but are not limited to, the NMS, endorsed Capability Areas, approved CONOPS, relevant doctrines, and approved Force Structure of the Defense Forces.

Step 6: Development of Capability Profiles

In the context of PPBES, three sets of Capability Profiles should be developed. The first set to cover approved CONOPS, the second — derived from CONOPS profiles — for Capability Areas, and the third for all existing line and reserve units. The first set of profiles will support, besides PPBES, further contingency planning and eventual crisis response planning processes. The second set of profiles is a key tool to identify Capability Gaps that serve as primary input to the next phase of PPBES — programming. The third set of profiles supports contingency- and crisis response planning, as well as identification of capability gaps. The sample format of a Capability Profile is provided in Annex G.

CONOPS profiles are developed in three steps: 1) statement of tasks, 2) the conditions under which tasks must be performed and, 3) performance standards to which the tasks must be executed.

Tasks: mission-area lead agents must examine the generic Tasks Lists and extract those key tasks they must accomplish in order to meet their responsibilities under the approved CONOPS. For the first three Mission Areas – Land Operations, Maritime Operations, and Air Operations – the generic Tasks Lists are essentially the tactical tasks lists of respective Service. Lead agents should begin their respective tasks lists develop-

ment using the 2-digit tasks outlined in the National Tasks List. Lead agents would then present their proposed mission-essential tasks lists to the CHOD for review, coordination and approval. The Service tasks lists should include a comprehensive description of each task and its associated sub-tasks.

Conditions: Once approved, lead agents will use the physical and operational conditions associated with likely courses of action, operational requirements, or missions, as a basis for refining their tactical tasks list. This refined task list will help better identify the types and scale of capabilities needed to support specific operational requirements.

Task Performance Standards: Standards specify the degree of effectiveness to be achieved in performing a task under a given set of conditions in order to assure mission success. These standards will be proposed by the lead agents, reviewed by the General Staff and approved by the CHOD. Performance standards need to be derived from, and tested in, operational analysis studies. Where it is appropriate, metrics should be quantified. If quantified standards could not be established, qualitative standards need to be incorporated where appropriate, although they are more difficult to measure. (Estonia 2002, 57)

Capability Area profiles are developed in the same format by rearranging and transferring data from CONOPS profiles to relevant Area profile. Performance requirements set for Force Components are likely different in most of CONOPS profiles. Of all applicable requirements only the most demanding should be transferred to the Area profile.

Unit profiles/Mission Area profiles are developed for all existing standing and reserve units from single battalion level up to formation level, based on missions and tasks assigned to these units or formations by approved COP, FP or SDP. These profiles must be updated annually based on an Annual Report's information of actually achieved capability and readiness levels as certified through exercises or testing. Based on unit and formation profiles, Mission Area lead agents — Service Commands or General Staff — develop an integrated Capability Profile for respective Mission Area, thus providing for planners a snapshot of actually existing capability across the entire Defense Force.

The first two sets of Capability Profiles, hence, focus on identifying Capability Requirements to either conduct a specified operation or to be carried by units and formations assigned to a particular Capability Area. The third set of profiles focuses on measuring capabilities actually existing within current force structure.

In sum, this Capability Profile development process serves three different objectives: first, to assess current force structure against operational re-

quirements as defined by contingency planning. Second, to develop a force structure (force package) designed to meet specific operational requirements. Third, to serve as a basis for identifying gaps between required and existing capabilities.

Source and support documents for developing different Capability Profiles should include, but are not limited to, approved CONOPS, Contingency Plans, Functional Plans, Standing Defense Plans, relevant doctrines, established performance standards and Annual Reports.

Step 7: Gaps Analysis

The General Staff regularly compares Capability Area Profiles (required capabilities) with the Unit/Mission Area Profiles (existing capabilities) to ensure that the latter are being met by the Services, and assesses the capabilities of the current force structure to determine gaps and shortfalls between what is currently available and what is required in endorsed Capability Area Profiles.

A cross-examination of the data will produce two key findings. First, gaps in required capabilities will be made obvious. Second, areas are identified where existing capabilities are insufficient to support the Plan requirements. The output of this analysis, which is also a major input for the programming phase, is a sized Capability Gap that is defined in performance terms, and endorsed by the CHOD.

Source and support documents for analyzing Capability Gaps should include, but are not limited to, Capability Area Profiles and Capability profiles of existing units and formations.

Step 8: Development of Private Requirements Report

This step is not a routine part of the planning phase and may not be ever actually undertaken. However, based on available information and analysis, the Chief of Defense may opt for this feedback tool. In this classified document addressed personally to the Minister, CHOD in his capacity of Senior Military Adviser, provides to the Minister — and through the Minister, to the Government — feedback on missions that he assesses are infeasible within existing or developing military capabilities or allocated resources, and suggests changes in resource allocations and/or policy guidance. Upon the Minister's discretion, CHOD's considerations may be taken into account while developing new MID, NMS or even NSC.

Source and support documents for the development of CHOD's Private Requirements Report should include, but are not limited to, developed CONOPS, Capability Area descriptions and profiles, and identified Capability Gaps.

Joint Military Capabilities Plan

The end product of the Planning phase of PPBES is Joint Military Capabilities Plan. Critical minimum of information a JMCP should include consists of

– applicable Ministerial Initiating Directives from Step 1;
– Planning Scenarios (CONOPS) from Steps 2 and 3;
– approved COPs;
– approved generic National and Service- and Command-specific Tasks Lists from Step 4;
– descriptors of Capability Areas and allocation of existing Force Structure units and organizations to Areas from Steps 4 and 5;
– All three sets of Capability Profiles from Step 6;
– CHOD-endorsed Capability Gaps from Step 7.

This compendium of planning guidance, key planning tools, and outcomes of the planning process serves as main reference for strategic-level decision-makers and planners of the Ministry of Defense and General Staff.

Timeline of the Planning Process

So far, we have discussed the purpose and scope of planning within PPBES, and its major steps. The last aspect to address is the timeline of the process. In other words: when in a year this process should start. Since capability planning should be tied to changes in security environment and subsequent political decisions, the Minister of Defense could order drafting a new Initiating Directive whenever he deems it necessary. In management terms, it means that from this perspective there could logically be no fixed point in time, when the planning should start on a routine basis. However, the recurrent planning process is largely conducted as a strategic-level operational planning resulting, besides identified Capability Gaps as an input to programming, in a family of approved CONOPS, COPs, FPs, and SDPs developed to employ resident capabilities of existing Defense Force. From the

perspective of OPP, the periodic review, revision, and/or cancellation of standing operation plans is necessary to ensure their long-term credibility and utility. Plans must be reviewed when:

1. There is a significant alteration to the situation.
2. A period of 24 months has elapsed since initial approval or the last comprehensive review. (Estonia 2002, 197–198)

The former condition for reviewing the plans is addressed under the Defense Minister's prerogative to issue a new Initiating Directive and order development of a CONOPS to address any specific contingency emerging from changing security environment whenever necessary. The latter condition establishes routine sequence of MID issuance.

In short, the full planning cycle is undertaken every second year, reviewing all approved Contingency Plans, and consequently CONOPS- and Capability Area profiles. Every year, a shorter loop of planning is conducted within the PPBES context: unit profiles are updated, compared to Capability Area requirement profiles, and sized Capability Gaps identified. A particular point in time when this process should start depends on the timing of the programming and budgeting phases of the PPBES that, in turn, are linked to timelines of state budget development and approval. Since every country has its own procedures and timelines, no fixed dates can be suggested in this study. The starting point for planning should, therefore, be established by reverse engineering departing from state budget process timelines to find the latest moment when Capability Gaps must be identified in order to feed into the next programming and budgeting cycle. To manage this process in real time, a Planning Calendar becomes a useful tool. Further details regarding the utilization of a Planning Calendar will be addressed in the next chapter.

Chapter 10.
RENEWED SYSTEM: PROGRAMMING AND BUDGETING PHASES

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In this chapter, the author will establish the purpose and scope of the second and third main phases of the suggested PPBE system — programming and budgeting. After that, the writer will describe the sequence of the process through its major steps, referring to key concepts and planning tools identified in Chapter 8, applicable to particular step, and drawing examples where appropriate. In the end of this chapter, an annual sample timeline is developed to demonstrate the dynamics of the suggested PPBES within one calendar year.

Purpose and scope of programming phase

The programming phase of this defense planning system draws upon the outcomes of the planning phase: developed Capability Gaps that must be addressed to enable the Defense Forces to execute endorsed Concepts of Operations. Programming is a recurrent (cyclical) process in nature, incorporating the development of new units envisaged for the Defense Force's future force structure and upgrading/maintaining existing units. In other words, programming integrates new inputs from the long-term planning cycle into the recurrent process of maintaining the existing force structure. The most important function of the programming phase is decision-making that balances resource requirements from the endorsed JMCP with estimated resource availability. (Kask, Murumets and Young 2003, 32)

Programming is based on the outcomes of planning, with an emphasis on the capability gaps identified during the planning phase. It encompasses the following main elements:

1) *Priority assignment* — assigning priority codes to each Mission Area and the individual capability gaps identified within each Mission Area.
2) *Developing options* — on the basis of the results of the capability gap analysis identified through Mission Areas, defining options for eliminating those gaps: both for each Mission area as a whole and for individual capability gaps within Mission Areas.

3) *Suitability analysis* — analyzing how well these individual options will eliminate an identified capability gap in question. Eliminating ineffective or unsupportable options.
4) *Resource analysis* — making a detailed assessment as to the resource requirement of the options that passed the suitability analysis during Step 3 and identifying available resources.
5) *Decision-making* — based on the assigned priorities, suitability analysis and available resources, choosing those options that eliminate the best combination of prioritized capability gaps in priority Mission Areas within the framework of available resources.
6) *Composition of MRP* — including the developed options that were approved during the Decision-making phase into the MRP.
7) *Developing master plans*: within the framework of MRP, developing detailed plans for each structural element of the Defense Forces. (Kask, Murumets and Young 2003, 17–18)

PPBES programming process

Although conducted recurrently every year, programming constitutes the essence of medium-term activity- and resource planning loop. Directed by long- and medium-term political guidance (NSS and NMS), and taking sized and endorsed capability gaps as its primary input, programming seeks to address capability gaps in the current force structure and describe in a phased and sequenced manner the ways and means to overcome these deficiencies. The outcome format of programming is an MRP that is an integral part of the annual planning and execution routine, covers years 2–6 of the medium-term planning cycle and serves as a basis for annual defense budgets. Every year, the first year of the approved MRP will serve as a foundation for next year's Annual Budget and Action Plan, with the time period covered by the new, revised, MRP sliding one year into the future.[38]

[38] Estonia is currently considering shortening of medium-term planning cycle to 5 years, i.e. adopting a 1+4 planning model in order to better concert national planning routines with those of NATO. In the same time, an additional programming document looking 10 years into the future and being developed and revised every fourth year is under consideration in Estonia to provide better projections of resource implications in support to major capability and resource allocation decisions. (Estonia 2006)

Step 0: Establishment of Force Building Programs and Assignment of Units to FBPs

Before routine planning activities could start, a preparatory step should be undertaken that formally establishes a nomenclature of Force Building Programs — reflection of Mission Areas concept into programming — and approves for the purposes of programming assignment of all existing units, formations and organizations within the purview of the Ministry of Defense into one and only one FBP. This document is not part of an annual routine and while approved, it should be revised only when there is a change in the nomenclature of programs (i.e., a FBP to be launched or cancelled), or sub-programs or program elements (i.e., establishment of a new unit or organization, re-assignment of a unit or organization from a FBP to another, or disbanding a unit or organization).

The first part of this step — establishment of nomenclature — could from certain viewpoint be considered a mere formality, for in the planning phase of the PPBES Capability Areas were already defined. For management purposes, however, it is recommended to have the list of Force Building Programs and their internal structure consisting of sub-programs and program elements formally approved. The internal structure of each FBP, with its sub-programs and program elements, in turn, is derived from Step 5 of the planning phase where, based on the required Capabilities, all existing units, formations and organizations within the purview of the MOD were assigned to Capability Areas. This capability-based assignment should now be reviewed from resource management perspective, and formally approved thus providing a solid basis for further planning and management of resource allocations. Also, if the planning phase indicates the need to establish new structural elements carrying capabilities not inherent in existing force structure, this is the document that effectively inserts new structural elements into programming process, regardless of what is the formal procedure to establish these entities themselves in a given country. (See also Annexes J and L).

Although some vested authorities of senior defense leaders — both civilian and military — differ from country to country, due to financial ramifications the document establishing FBPs and assigning structural elements to programs should be signed by the Minister of Defense.

Source and support documents for establishing FBS and assigning units, formations and organizations to programs should include, but are not limited to, the NMS, endorsed Capability Areas, and approved assignment of units, formations and organizations to Capability Areas.

Step 1: Development of Ministerial Medium-term Planning Guidance / Priority Assignment

This guidance is the first step in annual medium-term planning sequence. Organized along Mission Areas (Capability Areas and Force Building Programs), this essentially narrative text should provide assessment and projections of security situation, analyze and draw conclusions from reports on the previous cycle, and most importantly, establish development priorities and applicable resource ceilings between FBPs as well as within a FBP.

The main focus of this guidance is, thus, assigning priorities to each Mission Area (Force Building Program) and individual Capability Gaps within a mission area. The need for identification of priorities is obvious: there are never enough resources. This means priorities need to be established that guide decision-making regarding which Capability Gaps will get required funding and other resources and which will not.

It is recommended that some sort of coding system be established. For example, the coding system could use three different priority categories: Code One (or priority 1 or P1) would indicate highest priority, Code Two priority and Code Three secondary and third priority. Assigning a priority Code One to a Capability Gap would mean that this Capability Gap must be eliminated at the expense of lower coded items. Code Two would mean average importance and Code Three would mean that no or only limited resources will be allocated to eliminate this Gap unless all Gaps with higher priority codes have received adequate resources[39]. By definition, only a handful of Capability Gaps should have Code One; otherwise, everything becomes priority, which makes this coding system useless. Assigning priorities is a joint military and civilian activity. In the military, the ultimate decision-making authority is the CHOD, on the civilian side — the Minister of Defense. In case of a conflict of opinions, the Minister will have a final say.

After all mission areas and Capability Gaps have been prioritized, resource ceilings for individual mission areas and/or Capability Gaps may be specified in advance, if there is enough experience available about the nature and resource requirements of certain mission area and/or Capability Gap. However, if being employed for the first time, it is recommended to postpone this until the decision-making phase; otherwise, a lot of unwanted and possibly ill-informed decision-making is done before analysis. The impor-

[39] Of course, the resource requirements of individual Capability Gaps identified during later programming steps must remain realistic and focus on reasonable minimum with small safety margin. If this principle is not followed, then practically all resources could be used up to eliminate just Code One priority Gaps, because adding more resources to a Gap would almost always facilitate eliminating the Capability Gap in question.

tance of this step cannot be underestimated: it is the basis of all the remaining steps.

After priorities have been specified, it is time to start developing options to eliminate identified Capability Gaps. (Kask, Murumets and Young 2003, 32–33)

Source and support documents for the development of this planning guidance should include, but are not limited to, the NSC, NMS, Threat Assessment, relevant international commitments (e.g., in the framework of NATO), endorsed Capability Gaps, Annual Reports, official resource availability projections, and any relevant Parliament's, Cabinet's or Minister's policy decisions.

Step 2: Developing Options

This process identifies, analyzes, and compares the performance of suitable options for addressing the Capability Gap identified in the first stage. Of course, high priority Capability Gaps should be considered first whereas it could be sufficient to develop only one option for Code Three Capability Gaps. Consideration should be given to non-equipment, as well as equipment, options (e.g. changes in doctrine, training, organization, materiel and stocks, education, etc.). The objective criteria for analysis and comparison include measures of operational effectiveness (MOE), NATO-interoperability, policy implications, resource costs, feasibility of fielding an option within required time, and expected effective life of an option. First the options are considered at a generic level, using typical examples. After generic options have been identified, their suitability is assessed and potentially acceptable options are specified: i.e. associated with concrete actions that will be taken within the Defense Force existing and planned units (if the options describe an action that can easily be associated with concrete units).

By developing options, common sense should be used regarding what is feasible within available resources, e.g. it does not make sense to operate with nuclear weapons and aircraft carriers by the year 200X. However, detailed resource requirements of the individual options will not be developed during step two. This is because making detailed resource assessments would require developing *all* options to a very detailed level that would put too heavy a burden on the analysts and extend the processing time. Options will be developed for every Capability Gap and mission area as a whole[40].

[40] Options for the entire mission area are basically the sum of the options developed for the Gaps in this area.

Developing options is mainly the task of military planners. However, civilian experts from the MOD need to be involved early on with this process to provide their expertise and to keep the military proposals in line with MOD guidance.

After a list of possible options has been determined, their suitability will be assessed during Step Three. (ibid., 34–35)

Source and support documents for the development of options should include, but are not limited to, Ministerial Guidance, endorsed Capability Gaps, Programs to Missions Crosswalk, and Systems Database.

Step 3: Suitability Analysis

The purpose of this step is to determine how well the options identified during Step Two will redress the Capability Gap in question. It is based on the logic, that there can be different *degrees* of suitability, i.e. although there could be several options that can eliminate a Capability Gap, one of these options is doing this better than the other.

To display the results of the analysis, there is a need for another set of codes. The suitability codes then reflect *how well* an option eliminates the Capability Gap in question. There should be at least four suitability codes; Code One (or suitability 1 or S1) would mean that the option is excellent at eliminating a Capability Gap, Code Two means acceptable suitability, Code Three partial suitability and Code Four unacceptable suitability. Of course, a much more detailed coding system could be used (like ten or five digit systems). After the suitability codes have been assigned, it is possible to eliminate those options that are useless because they cannot eliminate their Capability Gaps to any acceptable degree (Code Four options). Assigning suitability codes and eliminating less suitable options should mainly be the responsibility of military planners and CHOD, although MOD experts can also participate.

In doing suitability analysis, two things must be stressed. First, eliminating less suitable options does not imply that this analysis should restrict the number of plausible options to redress each Capability Gap to only one. On the contrary, this should not be done, because an important part of the analysis — resource assessment — has yet to be made. Second, no decisions should be made at this stage on actual selection of options to be implemented.

The results of the suitability analysis — ranked options with their associated codes (both P and S-codes) — will then become inputs for the next step: resource analysis. (ibid., 35–36)

Source and support documents for suitability analysis should include, but are not limited to, Ministerial Guidance, endorsed Capability Gaps, Programs to Missions Crosswalk, Systems Database and Developed Options.

Step 4: Resource Analysis

Within this step, there are two separate activities that must to be accomplished. First, there is a need to estimate available resources within the timeframe in question (by default it is 5-year period, beginning from the year after next) and second, the resource requirement of each of the options identified during Step Three.

While assessing the availability of resources, the most important categories are personnel and financial resources. This is based on the assumption that all material resources can easily be translated into money, e.g. if more rifles or ammunition are needed, they can be procured provided there is money to do that. On the other hand, more trained personnel cannot just be "bought," if needed. Of course, a more detailed analysis should also include a number of non-financial factors like availability of storage space, trainers, and time, as applicable[41]. (ibid., 36)

If the assessment of resource availability indicates a considerable shortage in one or many resource categories, CHOD may consider the development of Private Requirements Report (PRR) in order to draw a Minister's attention to identified deficiencies.[42]

After the general availability of resources has been determined, the resource requirement of identified options can more reasonably be assessed. For the analysis to be effective, the options need to be further specified than was necessary during Step Three. The description of these "enhanced" options must be explicit enough that a detailed and realistic resource requirement can be derived. At a minimum, this description must answer the following questions: personnel requirements both in terms of numbers and personnel cost, necessary equipment and procurement and O&M costs, necessary construction and construction costs. For all cost and requirement types, there must also be an approximate timeline as to when an activity (and the associated resource requirement) takes place.

At this point, it becomes clear why all units and agencies under the purview of the MOD should belong to one Mission Area only. Most impor-

[41] Alternatively the general resource availability assessment could also become the background for all programming, i.e. this information is given to the military planners by MoD.

[42] On the graphic in the beginning of Chapter 9 this option is depicted by dotted line; for the details regarding the PRR see relevant paragpraph in Chapter 8.

tantly, this simplifies cost allocations between Mission Areas and avoids double counting. As a result, the costs of a unit are allocated to the same Mission Area that the unit belongs to. In exceptional cases where a unit contributes to several Mission Areas, most of its costs are still allocated to only one Mission Area. Only that portion of the resources allocated to cover costs that are deemed unnecessary by the principal Mission would then be allocated to the other Mission Area(s).

Resource assessment is both a military and civilian activity, although the military should have the lead in this.

When all options together with P- and S-codes have been costed out in terms of necessary resources, they will become the input for the most important step — decision-making. (ibid., 36–37)

Source and support documents for suitability analysis should include, but are not limited to, Ministerial Guidance, endorsed Capability Gaps, Programs to Missions Crosswalk, Systems Database, official resource availability projections, Developed Options, and Suitability Assessments.

Step 5: Decision Making

The decision-making step is the most important step in programming, because during this phase judgments will be made as to which options will be implemented (i.e. which options will receive the necessary resources) and which will not. The only purpose of all preceding steps was to support Step Five with the best available information. In other words, the goal is to select for implementation the combination of options that will eliminate the largest number of the high-priority Capability Gaps to at least a satisfactory degree within the framework (constraints) of available resources.

The decision-making process can proceed by using different approaches. First, one approach would be selecting a highest S-code option for every P1 code Capability Gap until all available resources have been used up and then turn the attention to P2 and then to P3 Gaps. The problem for this method is that, although some highest priority Capability Gaps will be addressed, the cost can be very high. As a result, a number of Capability Caps with average priority (not to mention P3 codes) could too easily remain without any resources. This approach can only be recommended if there are a few extremely important Gaps whose elimination at the highest possible degree and at practically any cost is required.

For more likely situations, a better approach would be to make a reasonable compromise between the degree of suitability, cost and priority. Although it would be mathematically possible to include suitability and priority codes, the cost, and their relative importance into a formula, and then calcu-

late the best combination of options, this is not the way the decisions are usually made in real life. This approach would not take away the need to make decisions about priorities, suitability and the relative importance of them, but only includes the need to translate these relations into a mathematical language and then make calculations.

Therefore, it is recommended that some common sense be used instead of formal calculations. Under this approach the first step would still be analyzing options, cost, priority and suitability. However, the most suitable option would not be automatically selected even not for P1 coded gaps, but attention would also be paid to costs and the relative suitability of different options. The key difference here is attention to the relative importance of cost and suitability differences of options developed for the same Gap. As an example let us consider a situation, where there are two options for eliminating a P1 Gap: option one requires 100 million dollars and 1000 men annually and provides excellent suitability (S1); option two provides acceptable suitability (S2), but requires only 10 million dollars annually and 400 men. In this case, the senior leadership needs to answer the following question: is the suitability difference (S1–S2), or relative suitability of these two options really worth an extra 90 million dollars and 600 men annually? What is the risk associated with selecting S2 over S1? Is it a risk worth taking? Can the cost saving be effectively used to close other critical gaps, possibly improving the overall capability of the Defense Force. It does not automatically follow that option two should be selected because the additional suitability (S1-S2) of option one is too expensive, but it draws attentions to this large cost difference[43]. By asking this kind of questions, better decisions would probably be made than by using any of the factors (priority, suitability and cost) alone. Of course, options can be selected only as long as they remain within the framework of available resources.

Finally, on the basis of decisions made, there may be the need to develop new options (no existing option was approved) or to adjust the existing ones (e.g. if an option is basically acceptable, but some elements are unacceptable). In this case, the programming process starts again for these options: they are developed, their suitability and affordability are assessed and the decision-making follows. On the graphic, this situation is depicted with a dotted line leading back to Options Development.

The decision-making phase is a joint responsibility of the Minister and CHOD. However, the Minister will ultimately make final decisions. (ibid., 37–39)

[43] This approach is similar to the marginal analysis concept in the field of economics.

Source and support documents for Decision-making should include, but are not limited to, Ministerial Guidance, endorsed Capability Gaps, Programs to Missions Crosswalk, Systems Database, official resource availability projections, Developed Options, Suitability Assessments and Estimated Resource Requirements.

Step 6: Development of MRP

A key output of programming phase is the Military Requirements Plan (MRP), which serves as the base document for developing the annual and longer-term budgets, as well as its annual action plans.
The MRP consists of:

– Major changes in the force structure (e.g., formation, re-subordination, re-formation, and disbanding of units, to include reserve units);
– Major personnel movements (e.g., number of conscripts taken in for training and sent to reserve, etc.)
– Major constructions projects,
– Major procurement,
– Research and development,
– Financial resources (grouped into Major Defense Programs).
– Special classified annex that addresses un-financed requirements and associated risks, thus providing for feedback mechanism.

The MRP is an integral part of annual planning and execution routine and covers years 2–6 of the medium-term planning cycle. Every year, the first year of an approved MRP will serve as a foundation for next year's Annual Budget and Action Plan, with the time period covered by the new, revised, MRP sliding one year into the future. The MRP is reviewed by the CHOD and submitted to the Minister for approval. (ibid., 39–40)

Another approach to an MRP, somewhat different from the outlines provided above, is a medium-term program package currently under consideration in Estonia. This package would consist of two complementary documents: a four-year development plan revised every year, and a 10-year plan revised every fourth year. Both plans would be derived from endorsed Capability Gaps and follow the same format (see Annex L). The level of detail is that of a single unit (e.g., infantry battalion, EOD team, ship). This approach would provide better projections of resource implications in support of major capability and resource allocation decisions. (Estonia 2006) Most importantly, under existing state budget regulations, this program information

serves as MOD input to State Budgetary Strategy, a Cabinet-endorsed document that is developed annually under the lead of Ministry of Finances and deals with non-binding[44] four-year budget projections.

It must be noted that the MRP must be composed on the basis of the results of the decision-making. In essence, the MRP is the list of approved options that passed the decision-making step and are translated into an appropriate format. Again: the MRP includes those and only those items, activities, plans, units that were part of the approved options, which guarantees that there are resources available for them within given timeframe. Ideas, units, procurement etc. that seem to be well thought out, but for which there are currently no resources can be included into the list of unapproved options that are developed during Step Two. (Kask, Murumets and Young 2003, 40)

Source and support documents for development of MRP should include, but are not limited to, Ministerial Guidance, official resource availability projections, and Approved Options.

Step 7: Developing Master Plans[45]

Through this step, all necessary details are developed based on broader guidelines provided through the MRP. Development of master plans can be combined with the development of the MRP and integrated as part of the MRP, when deemed suitable. The logic of separating the MRP and master plans of existing units comes from the notion that while the Minister approves the MRP, not every detail of programmed activities requires the Minister's approval.

The master plans will specify concrete actions for individual units to achieve the goals and plans that are outlined in MRP (i.e. this is not the place to add new functions that are not included into MRP). The development of a Mission Area Master Plan is the responsibility of the respective Lead Agents. They are also responsible for developing guidance to units and organizations allocated to their particular Mission Area on how to draft their plans.

The development of a unit's project plan is the responsibility of its Staff under the guidance provided by Mission Area Lead Agent. When completed, this project plan will be submitted to the next higher command (ultimately — to the Mission Area Lead Agent) for deconfliction and approval.

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[44] In this context, non-binding means that the Cabinet can not commit financial resources, authority to approve budgets belongs solely to the Parliament. Hence, SBS is a political rather than legally binding accord

[45] In the U.S. version of the PPBS, this step, essentially, constitutes the entire programming phase.

The master plans of individual units will not require the Minister's approval, although they may be submitted together with MRP or annual budget request to the Minister for information. Master plans are approved by CHOD.

Although programming is a recurring activity, it does not need major revision every year. Only in case of major changes in the JCMP and the resulting Capability Gaps, will there be a need to compose a completely new MRP. However, smaller adjustments, e.g., changing priorities, developing new options, or shifting plans as a result of annual activity reports, may be made, as required. Adjustments may also become necessary when one additional year is included annually to the MRP. All these aspects must then be addressed in the next annual MRP guidance and after going through programming steps, these aspects must then lead to the adjusted MRP. (ibid., 40–41)

Source and support documents for development of Master Plans should include, but are not limited to, Ministerial Guidance, official resource availability projections, Approved Options, and MRP.

Timeline of the programming process

After preparatory and recurrent steps of programming have been discussed, we need also to address the timing of this phase. By definition, programming is the process that links capability planning with resource allocations. The former, as we have established in previous chapter, should be tied to real time by reverse engineering departing from state budget process timelines to find the latest moment when Capability Gaps must be identified in order to feed into the next programming and budgeting cycle. The state budget development and approval, in turn, is usually a well established process with milestone events linked to real time via pre-set due dates (e.g., budget request submissions to the Cabinet, submission of consolidated draft annual budget to Parliament, and alike). Assuming that for small states a shortage of planners is an ever-persisting concern, and that at least part of MOD and Defense Headquarters' planning staff is involved both in medium-term and short-term planning activity (programming and budgeting in the context of this study), it is plausible to suggest another reverse engineering to be undertaken to determine the latest moment when MRP must be completed and approved in order to feed into the next budget cycle. To manage this process in real time, a Planning Calendar becomes a useful tool. Further details regarding the utilization of Planning Calendar will be addressed under the next section of this chapter.

Purpose and scope of budgeting phase

Budgeting is the third phase of the system. It builds on the decisions of priorities made in programming and further specifies and executes the activities and plans approved during the programming phase. During the development of the annual budget, actual money will be allocated to the existing force structure elements for expenditure during the year.

Budgeting encompasses:

1. The development of prioritized, detailed, phased and sequenced annual action plans for each unit/structural element within the purview of the Ministry of Defense in order to create or maintain capabilities specified within the framework of MRP;
2. The detailed allocation of financial resources to each unit/structural element, sufficient to sustain these actions.

Budgeting begins with the issuance of the ministerial guidance for the next year's planning and budgeting cycle, and ends with the approval of the next year's defense budget allocations by the Minister of Defense after Parliamentary approval of the state budget.

Provided that the programming phase has been completed with no delays and shortfalls, budgeting is rather a technical exercise during which the first year's project plan of the existing 5-year master plan is further specified for each structural element within the purview of the MOD and translated into the budget format required by the existing legislation. (Kask, Murumets and Young 2003, 41–42)

PPBES budgeting process

Of all elements of the suggested PPBES, budgeting is presumably the best-established process in any country. Therefore, this study dares not interfere with the myriad of laws, decrees and regulations guiding preparation, coordination and approval of state budget. The baseline recommendation is: whatever budgeting rules are in power — the implemented version of the PPBES should comply with them. However, from the perspective of defense planning and management, and in order to complete the planning and execution loop, there are a few principal steps to follow.

Step 1: Development of Annual Ministerial Budget and Planning Guidance

The ministerial budget guidance is composed on the basis of MRP and specifies the development priorities for the next year. Although the guidance is based on the approved MRP, some adjustments may be necessary due to changes that have occurred in the international security environment since the programming was completed. Additionally, adjustments may be necessary to address unforeseen deficiencies that emerge from the reporting cycle. On the basis of the MRP and the above-mentioned other factors, the budget guidance then specifies the priorities for each of the Major Defense Programs (mirror images of the MRP Mission Areas). It generally includes resource ceilings as represented in the format of the state budget classifications that are submitted at the level of detail deemed necessary by the MOD, and may additionally include resource ceilings for each of the Major Defense Programs. Finally, the guidance may include a section describing the current security situation and the general priorities that apply to all Major Defense Programs, and an assessment of the developments since the last annual report. The latter provides the basis for the guidance to follow. (Kask, Murumets and Young 2003, 41–42)

Source and support documents for development of Annual Ministerial Budget and Planning Guidance should include, but are not limited to, approved MRP, Annual Reports, any relevant Cabinet or Ministry of Finances' budget guidance, and any relevant Parliament's, Cabinet's or Minister's policy decisions.

Step 2: Development of Planning Calendar

Every year, as part of annual management routine and in conjunction with the issuance of the Minister's Annual Budget and Planning Guidance, Planning Calendar for given year is developed. This matrix depicts a time-phased sequence of planning, programming, budgeting and reporting activity, its key milestones, and links these to real-time due-dates. This calendar should outline all the year's key activities; it is advisable also to extend the horizon even further to cover key activities that occur regularly but less than once in a year. (See also Annex N)

Processes that need to be taken into account in the development of Planning Calendar include, but are not limited to, annual state budget development and approval routine, planning and reporting routines within the purview of the Ministry of Defense, any relevant Government-level or interagency routines (e.g., the development of new NSC or NMS), and applicable

international obligations (e.g., CSBM reporting under the Vienna Document, or NATO milestone events).

Step 3: Development of Annual Budget and Action Plan

The Annual Budget and Action Plan (ABAP) is developed to execute the MOD annual budget and planning guidance, and is structured along Major Defense Programs. It is developed on the basis of the first year of the approved MRP and follows the same format. In order to link the Action Plan with finances, Major Defense Programs in the format of state budget are used. A Major Defense Program (MDP) incorporates the same Defense Force units as its respective MRP Mission Area (Force Building Program). The MDP includes the FBP's annual costs (now specified to the detail necessary to be composed in the budget) together with a description of the activities that will be accomplished in the individual units and in the Major Defense Program as a whole during the next budget cycle. (Kask, Murumets and Young 2003, 42)

With regard to the management of ABAP development process, the budgeting part of it is presumably established by laws, decrees and other regulations that guide the annual state budget development. Hence, suggested PPBES would not alter any existing procedures. However, with regard to activities planning, it is crucial to remember one of the PPBES imperatives: planning should lead, rather than follow the budget. To put it another way, the sequence of words in the title of the key document of the budgeting phase — Annual Budget and Action Plan — may be somewhat misleading; in fact, activities for the next fiscal year to develop or sustain military capabilities should be planned first, and only after that financial resources in terms of personnel and operations and maintenance (O&M) costs, capital investments, and research and development (R&D) expenditures should be identified and linked to these activities.

If adjustments or cuts are necessary in the middle of coordination and deconfliction of budget requests, single events should be cancelled or postponed instead of cuts in one specific spending category. For instance, to trim down the Land Force budget request by 10 million dollars, a battalion field exercise should be cancelled, thus freeing up the whole budget associated with that particular event, instead of cutting the same 10 million flat from, say, fuel expenditures across the entire Service.

Source and support documents for development of the Annual Budget and Action Plan should include, but are not limited to, approved MRP, Annual Reports, Ministerial Guidance, CHOD's and Service Chiefs' guidance,

any relevant Cabinet or Ministry of Finances' budget guidance, and any relevant Parliament's, Cabinet's or Minister's policy decisions.

Step 4: Approval of budget allocations

After the consolidated budget request of the Ministry of Defense has been developed, submitted to the government and reconciled with requests of other Ministries — activities that are conducted under Step 3 — the total state budget is submitted to the Parliament, where there may still be alterations made during the debates. Hence, while the state budget for the next fiscal year is finally approved by the Parliament, there is a necessity to confirm final detailed allocations between end-users under the purview of the Ministry of Defense. In other words, after the Parliament has approved the state budget, final allocations between and within Major Defense Programs should be adjusted and approved by the Minister of Defense. This Ministerial approval closes the budgeting phase and authorizes spending.

Source and support documents for approval of Budget Allocations should include, but are not limited to, approved state budget for the next fiscal year, approved MRP, and any relevant Parliament's, Cabinet's or Minister's policy decisions.

Timeline of the budgeting process

As it has been noted already, budgeting is presumably the best-established process in any country. In most cases, the fiscal year coincides with the calendar year. Based on this assumption, the budgeting process typically starts in late January-early February with the issuance of Ministerial Budget and Planning Guidance. Approval of the Planning Calendar depends on when the Ministry of Finances establishes due dates for state budget milestones.

The consolidated budget request of the Ministry of Defense should be typically submitted to the Cabinet by the end of May. Inter-agency coordination and deconfliction at the Cabinet level runs through the summer and total state budget proposal usually goes to the Parliament in September. The state budget is generally debated and approved by early-to-mid-December. The ministerial decree approving final financial allocations between Programs should then be issued at the end of December.

PPBES Reporting

Reporting is conducted in two major areas: financial reporting in accordance with the relevant Ministry of Finances' regulations (not to be addressed within this study) and activities' reporting. Annual Activity Reports should provide adequate feedback for both the capability-based and resource-based planning cycles (see also Annex M).

Annual Activity Reports are used to provide:

1. Feedback to JMCP – actually achieved capability and readiness levels of units as certified through exercises or testing, using simplified[46] Capability Profile format;
2. Feedback to MRP – using the MRP format, outlining in particular
    a. Executed changes in the force structure (formation, re-subordination, re-formation, and disbanding of units, to include reserve units),
    b. Actual personnel movements (active duty professionals, conscripts, and reservists),
    c. Actual construction,
    d. Actual procurement,
    e. Actual research and development.

In order to maintain integrity of coding through the entire family of planning and reporting documents, this order will be reversed in Annual Report, i.e. Parts A and B of the report will provide feedback to MRP, and Part C – to JMCP.

The development of a unit's annual report is the responsibility of its Staff. When completed, this report will be submitted to the next higher command (ultimately – to the Mission Area lead agent) for integration into a Mission Area annual report. The General Staff retains responsibility for the integration of annual reports within the Defense Forces, and MOD – for the entire defense community under its purview. Based on these integrated reports, the MOD may develop a consolidated report to be submitted annually to the Government by the Minister of Defense, if required by legislation. (CCMR 2002)

[46] In this case, 'simplified' means presenting only the comparative list of required and actually acquired performance, readiness, and stock levels, as certified through relevant procedures.

Timeline of reporting

As it was said above, this study does not address financial reporting under the relevant Ministry of Finances' regulations. Annual Activity Reports should be developed by units and organizations, consolidated by Mission Area Lead Agents, and submitted to the Minister of Defense by the end of December in order to provide feedback and inputs to the development of Ministerial Budget and Planning Guidance.

General timeline of PPBES

With all phases of the suggested PPBES discussed and timelines for each phase established to the extent possible, it is time to link planning, programming, budgeting and reporting timelines together in order to develop a plausible sequence of activity in any calendar year.

We have noted earlier, that for planning and programming there is no fixed point in time when these phases should logically start. Instead, a reverse engineering was suggested departing from budgeting timelines to establish the latest moment when Capability Gaps must be identified and the MRP approved in order to provide the necessary input data for the subsequent phase. The following sample annual PPBES timeline is based on two assumptions: that fiscal year coincides with calendar year, and that due to limited number of personnel, at least part of MOD and Defense Headquarters' planning staff is involved both in medium-term and short-term planning activity (programming and budgeting in the context of this study).

This sample timeline depicts hypothetical activity taking place in year 2007 with several processes running in parallel. **Planning** activities are related to scheduled revision of earlier approved OPLANs. CONOPS and Capability Area Profiles developed in 2007 will influence programming and budgeting cycles for 2008 that will cover the 2009 budget and MRP for 2010–2014. At the same time, Unit Profiles are updated and Capability Gaps identified based on 2006 certified performance compared to Capability Area Profiles developed during the previous OPLAN revision in 2005 and will influence 2008 budget and MRP for 2009–2013. **Programming** activities are related to the development of MRP for 2009–2013. **Budgeting** activities are related to the development of the 2008 budget. **Reporting** activities relate to performance in 2007. The duration of any activity has been estimated arbitrarily, for in real life it will depend on the number and qualifications of involved personnel. However, the earlier practice of the author provides sufficient experience to consider these estimations realistic.

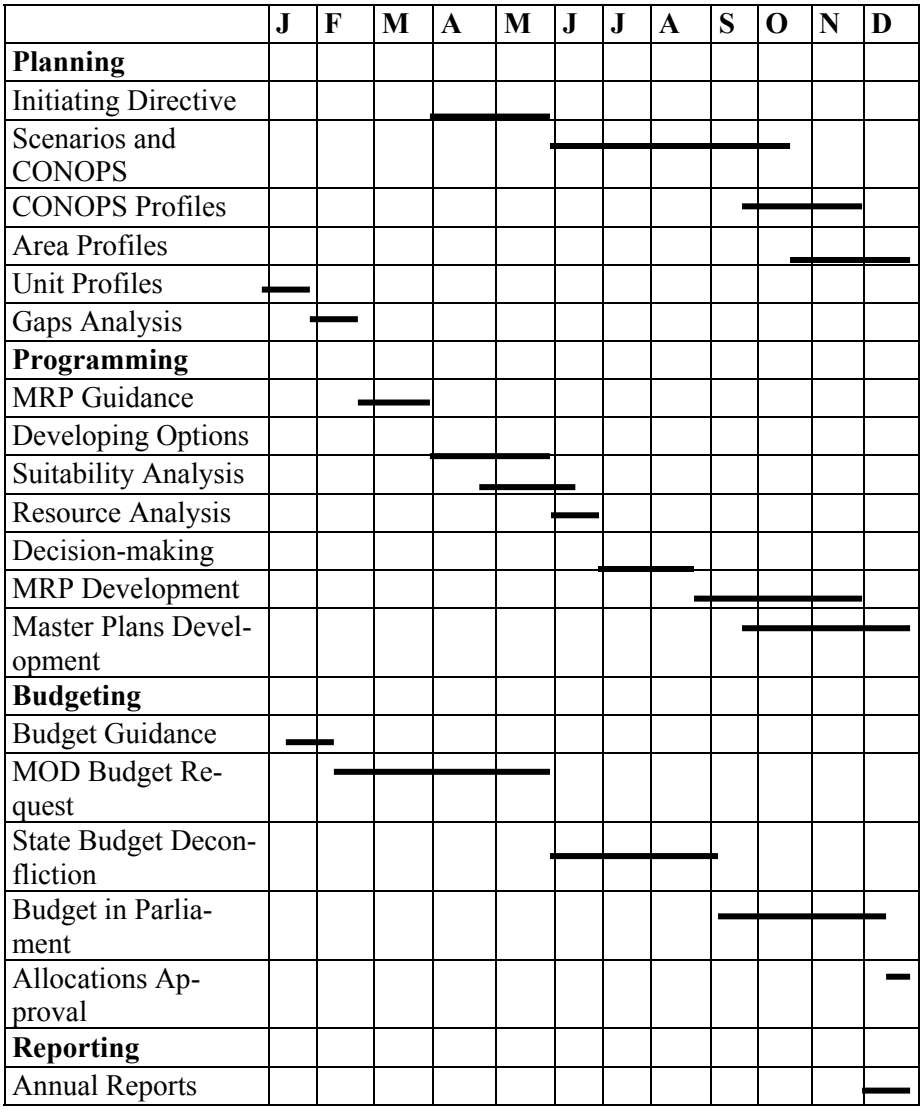

Figure 5. PPBES sample timeline

Some preparatory or supporting steps — like development of long-term and medium-term policy guidance, review and update Capability Areas and Tasks Lists, assignment of units to Capability Areas, establishment of Force Building Programs and assignment of units to FBPs, and development of Planning Calendar — are intentionally omitted from this timeline, for these activities are not time-sensitive and will thus not have major impact on the conduct of routine activities.

Chapter 11.
VALIDATION AND CONCLUSIONS

■

In this chapter, the author will validate the suggested PPBES — check its concepts and characteristics outlined in chapters 8, 9, and 10 against criteria established in chapter 7 in the form of five 'benchmark' questions. At the end of this chapter, the author will draw conclusions regarding earlier identified problem areas, and the ability of the suggested system to deal with these; 'can'-s and 'cannot'-s of the system, i.e. discuss broad requirements to make this system efficient; as well as identify limitations to the efficiency and effectiveness of suggested system.

Answering 'benchmark' questions

Does the system ensure the ability of the state to tackle challenges within military and political sectors of security, i.e. secure territorial integrity and coherence of state's superstructure under conditions of use, or threat of use, the military force, and secure intactness of legitimacy of the state?

In order to answer this question, we have, first, to establish whether within the state apparatus exists an agency primary task of which is to deal with security challenges in the military and political sectors of security.

Based on the concept of 'levels of activities' established in chapter 4, and limiting our deliberations to the state's executive apparatus, it is plausible to assume that in any country there is a strategic-level agent dealing with analysis, planning, and management in support of strategic-level decision-making process. Within the military sector of security, this agent is typically known as 'Ministry of Defense'; within the political sector of security, this agent is typically 'Ministry of Internal Affairs'. It should be underscored that in real life, any executive apparatus is neither organized along the concept of multisectoral security, nor follows the clear delineation of responsibilities in terms of levels of activity as defined in this study. Hence, actual spheres of responsibilities of different executive agencies tend to cut across levels of activity. In this context, another agent operating at strategic level within the military sector of security is typically 'General Staff' or 'Joint Staff'; within the political sector of security, this agent is typically 'Security Police'.

Further elaborating on the concept of levels of activity, it is also plausible to assume that in any country there is an operational-level agent dealing with contingency planning and planning for ongoing activities; directing training

and education of the cadre of professionals of the executive branch in question; advising the determination of response to emerging crises; and fine allocating of resources. Within the military sector of security, this agent is typically 'General Staff' or 'Joint Staff', with some of the operational-level responsibilities also carried by the Ministry of Defense and the Service Staffs. Within the political sector of security, this agent is typically 'Security Police', again with some responsibilities shared with the Ministry of Internal Affaires and any regional structures of, or directly subordinated to, the Security Police.

Finally, it is plausible to assume that at the tactical level of activity, there are agents dealing with training and educating the cadre of professionals; maintaining the required level of performance of the executive branch in question; and executing the assigned tasks as directed. Within the military sector of security, these agents range from the Service Staffs to regional headquarters to military formations and units. Within the political sector of security, these agents are regional and local structures of, or directly subordinated to, the Security Police.

That said, we can turn to the main question and see whether the suggested system ensures the ability of the state to tackle challenges in the military and political sectors of security. First of all, steps 1 to 3 of the planning phase outlined in chapter 9, and planning scenarios described in chapter 8 address the continuum of events where government would expect to be able to respond militarily should the security event actually occur. In so doing, the system deals with occasions where the objective is to secure territorial integrity and coherence of the state's superstructure under conditions of use, or threat of use, of military force.

Further, in order to timely respond to challenges in the military sector, responsible agents must maintain the required level of performance and should be able to conduct military operations. Detailed descriptions of phases of suggested PPBES show that within the military sector of security, the process is designed to conduct planning and management activities directly in support of maintaining the required level of performance and carry out military operations, and indirectly to support training and educating the cadre of professionals.

The author would also argue, this system could serve the same purpose within the political sector of security, depending on the degree key concepts and tools outlined in chapter 8 are modified to meet specific characteristics and requirements of the sector, and processes outlined in chapters 9 and 10 of this study are utilized by the executive apparatus responsible for political security sector.

In sum: suggested system ensures the ability of the state to tackle challenges within the military and political sectors of security, depending on the

degree and consistency key tools, concepts and processes are utilized by executive agents responsible for respective sector.

Does the system ensure availability of professional expertise to support the development of national legislation and political guidance?

The issue of providing professional expertise in support of the development of political guidance is addressed in chapters 8 and 9. With regard to the development of long-term strategic-level guidance — National Security Concept — participation of the Ministry of Defense is explicitly stated. It could also be reasonably assumed that professional military expertise from the General Staff is incorporated into the drafting process.

With regard to medium- and short-term political guidance — National Military Strategy, Ministerial Initiating Directive, Ministerial Medium-term Planning Guidance, and Annual Ministerial Budget and Planning Guidance — suggested system prescribes involvement of the Chief of Defense and General Staff.

Since providing professional military expertise is explicitly brought in to the procedures of development of political guidance, and this guidance itself is in most cases formally a legal act — Parliament's Decision, Cabinet or Ministerial Decree — it is plausible to assume that professional expertise is also available for the development of other national legislation. In the end, in any country seeking professional advice in legislative activities is the sole discretion of the national legislature, its written and unwritten rules. Hence, the suggested system can make professional advice available but cannot ensure the advice is actually sought.

The extent to what professional expertise is available for the development of legislation and political guidance within the political security sector will depend on the degree this system is adapted and implemented across executive agents responsible for the political security sector.

In sum: the suggested system ensures availability of professional expertise to support the development of national legislation and political guidance. In terms of procedures within the defense sector, providing this expertise is institutionalized; at the national level, expertise is made available.

Does the system ensure uniform doctrinal basis for all security-providing agencies?

In chapter 8, Mission Areas were defined as a concept for organizing the identification, development and sustainment of military capabilities required to meet critical security challenges. Mission Areas are the categories that link military missions to the development of required capabilities and to the budget framework through which this development is financed. Specific formats of Missions Areas — Capability Areas in planning, Force Building

Programs in programming, and Major Defense Programs in budgeting — provide in their entirety comprehensive doctrinal basis that ensures continuity of planning through all phases of the process.

Detailed descriptions provided in chapters 9 and 10 of this study show that executive agents within military security sector — Ministry of Defense, General Staff, Service Staffs, and formation and unit headquarters — have their specified roles in the implementation of suggested PPBES. Effective execution of these roles through the phases of the process is possible only if grounded on uniform and shared doctrinal basis: the concept of Mission Areas and supporting tools identified in chapter 8.

The same observation holds for the political security sector. If the suggested PPBES is applied to this sector — Capability Areas identified, development and budget programs established, and procedures implemented — it will, first, ensure a common doctrinal basis for all executive agents at all levels of activity within the sector; but more importantly, it will also provide a shared doctrinal basis between the military and political security sectors.

In sum: the suggested system ensures a uniform doctrinal basis for executive agents within military security sector; and potentially for all security-providing agencies, if implemented across all relevant executive agents.

Does the system ensure responsiveness to rapidly changing situation, to include providing for inter-agency coordination, cooperation, and interoperability?

This question has three aspects to address: responsiveness in terms of complexity of response, i.e., how difficult it is to assemble a multi-agency or multi-national task force to respond to change; responsiveness in terms of time, i.e., how long it takes to develop a response to the change in situation; and responsiveness in terms of flexibility, i.e., to what extent changes in the security situation influence main phases of the suggested system.

Let us address the interoperability issue first. If the concept of Mission Areas is implemented across executive agents in both the military and political security sector, missions, capability- and resource requirements, and at least part of standing operating procedures would be developed on shared doctrinal basis. Thus, when a crisis occurs, situation analysis would be conducted, required response capabilities identified, and support requested and rendered using one and the same planning and execution 'language'.

As an example, let us consider a crisis that involves terrorist activity. Countering terrorism is the primary responsibility of executive agents of the political security sector. Therefore, it is reasonable to assume that among the Mission Areas defined under the purview of the Ministry of Internal Affaires there is one named 'Counter-terrorism operations' with likely lead agent Security Police. It is also reasonable to assume that in the process of implemen-

tation of suggested system, Security Police has developed contingency plans and identified capability requirements to execute them.

From the perspective of executive agents in the military security sector, Mission Area 'Assistance to Civil Authorities' is the one that provides linkage to the political sector of security. As provided in Annex H, this Capability Area encompasses 'assistance rendered by the Defense Forces to civil authorities as directed by the law.' Of six identified missions under this Capability Area, there is one — Terrorism Response Operations — that fits our example. As was said in chapter 9, requirements for the military to conduct planning, training and acquisition under this Mission Area are identified by the executive agent of political security sector. Thus, with the concept of Mission Areas duly implemented, the military should have developed pre-identified capabilities to support the Security Police's contingency plans.

With the terrorist crisis at hand, the Security Police will conduct analysis and identify capability requirements to respond. If all required capabilities are not resident with the Security Police's own structures, it immediately turns to the military and asks not abstract 'support' but a clearly defined capability package. The military, on their side, will know exactly which unit has the required capabilities and provides support to the Security Police without any delay.

Within NATO, between militaries of its member states, a similar approach — known as 'interoperability' — has been pursued for a considerable time. In fact, interoperability has always enjoyed high political priority in NATO, for it is the core requirement for any collective action.

Another aspect of responsiveness to look at was that of time-consumption. In the context of this study, we should probably distinguish between three degrees of change in situation: minor, medium, and major. An example of a minor change is crisis that is solvable by application of resident capabilities. Medium change is, then, the one that requires development of select new capabilities within an established conceptual approach to an overall security situation. A major change, in turn, is a change that calls for reconsideration of the whole security concept, and following development of complete set of new capabilities. The author would argue the suggested system has tools to tackle each of these changes.

Response time to minor change — a security crisis — depends in a broader sense on the adequacy and reliability of analytical work that supported the development of the Ministerial Initiating Directive, subsequent identification of Capability Requirements, and resources allocated to develop these capabilities. In other words, when crisis emerges, response time would depend on whether there was considered a planning scenario close enough to the situation at hand; whether there was developed relevant CONOPS and

COP; and whether there do exist units that carry the required or nearly required capabilities to respond.

In a narrower sense, of course, response time will depend on the degree of relevant decision-making, staff and standing operating procedures are familiar to and exercised by executive agents; not to mention the most critical component of any crisis response — ability and willingness of political leaders to make a firm decision on if and how to respond. In short, the suggested system provides tools and mechanisms to timely respond to minor changes. Variables that determine actual response time, however, are mostly outside the scope of the system.

Regarding medium change — need to develop select set of new capabilities within established security concept — the process is more time-consuming. As outlined thru chapters 9 and 10, this process starts with planning and must be followed by programming. The identified timelines show, that if new capabilities could be identified under an approved operational planning framework, i.e., we speak about adjusting parameters of already fielded capabilities (short planning loop), the time from recognition of the need for change to the moment when resources are allocated and spending authorized to conduct required activities, is two years (see also Annex N).

For instance, if the need for change were identified during the update of Capability Profiles in February 2007, corrections could be made in MRP for 2009–2012 that was under revision in 2007. Consequently, based on the approved MRP 2009–2012, relevant spending could be included into 2009 budget only. Under extreme circumstances, or if the adjustment does not require major re-programming, first expenditures related to this adjustment could be included in the 2008 budget, with a subsequent re-calibration of relevant Force Development Program taking place in the next cycle.

If precise identification of characteristics of required new capabilities precludes the conduct of a full operational planning cycle (long planning loop), one extra year is added and spending to support the development of new capability could be authorized under the 2010 budget at the earliest, thus taking three years to respond.

Finally, with regard to major change in the security situation that requires re-consideration of the whole security concept of the country, response time is even longer. The process must start with revision of strategic-level political guidance, followed by a full operational planning cycle, and only then programming and budgeting activities could be commenced. Timelines from chapters 9 and 10, and Annex N, demonstrate that if revision of the National Security Concept were undertaken in 2007, the National Military Strategy could not be approved before 2008. Subsequently, Ministerial Initiating Directive could be issued in 2008, provided the new NMS enters into force not later than the first quarter of 2008; otherwise, long planning loop could not

commence before 2009. If the Ministerial Initiating Directive were issued in 2008, the full operational planning cycle could be finalized by the end of the year, and the new Capability Gaps identified early 2009 would be the baseline for MRP 2011–2014. Since the approved MRP serves as a basis for the annual budget of its first year, spending to start development of new capabilities could be authorized in the 2011 budget at the earliest. In short, response time to major change in the security situation requiring revision of all documentation within suggested PPBES would not be less than four years.

In terms of response time, then, the suggested system has the necessary tools and built-in procedures to minimize time-consumption. However, due to the extremely complex nature of the system, and linkages to agents and procedures outside the scope of this system (for instance, national Parliament, Cabinet of Ministers, and Ministry of Finance), it is plausible to conclude that the deeper the change, the more time it takes to respond.

Last but not least, the aspect of flexibility of the suggested system should be addressed in the context of responsiveness. With regard to long- and medium-term political guidance, the definitions of two key documents — National Security Concept and National Military Strategy — clearly demonstrate their main purpose to be the analysis and conceptualization of change in security situation. For the development of routine documents that direct recurrent phases of the process, besides broad policy and resource allocation guidance from political leadership, changes in security environment and resulting Threat Assessment and policy decisions are defined in chapters 9 and 10, and visualized on Figure 4, as mandatory input. In short, long-to-medium term changes are analyzed through strategic-level guidance to establish broader conceptual security framework. Incorporation of most recent changes in security environment is institutionalized through biennial and annual Ministerial guidance — Initiating Directive for planning, Medium-term Guidance for programming, and Budget and Planning Guidance for budgeting — thus ensuring responsiveness of the system to changes in environment.

In sum: the suggested system provides for in-country inter-agency coordination, cooperation, and interoperability between defense and security forces. The suggested system also provides for international inter-agency coordination, cooperation, and interoperability between defense forces or security forces of countries that have adopted this or similar methodology. The system also ensures responsiveness to a rapidly changing situation within limits set by the very nature of the functioning of state apparatus as a complex hierarchical system.

Does the system ensure allocation of resources to meet the most high priority challenges within existing constraints?
Resource dimension is brought into the system from the very beginning. As described in chapters 8 and 9, strategic-level political guidance addresses projected availability of financial resources throughout the planning horizon (NSC), and resources allocated for defense, to include a financial framework (NMS). Further, according to Step 1 in the planning process, the Ministry of Finance's medium-term budget projections are identified as one of the source documents for the development of Ministerial Initiating Directive.

Resource allocation is the main focus of the programming phase of the PPBE system. Among other source and support documents for the development of Ministerial Medium-term Planning Guidance, official resource availability projections are mentioned in Step 1 of the programming phase. Moreover, the main purpose of Step 1 is to establish priorities for identified Capability Gaps to guide decision-making regarding which Gaps will get required funding and other resources and which will not.

Resource dimension comes into the process again in Step 4 of the programming phase, where availability of resources is assessed and resource requirements for developed options identified.

The focal point of the programming phase in terms of resources is Step 5 — decision making — where judgments will be made as to which options will receive necessary resources and which will not. The goal here is to select for implementation the combination of options that will eliminate the largest number of the high-priority Capability Gaps to at least a satisfactory degree within the framework (constraints) of available resources.

The following steps in programming — development of MRP and Mission Area Master Plans — deal primarily with allocation of resources between Force Development Programs. The key feature here, in terms of resources, is that the MRP includes those and only those items, activities, plans, units that were part of the approved options, which guarantees that there are resources available for them within given timeframe.

In sum: the system does ensure allocation of resources to meet the most high priority challenges within existing constraints.

Conclusions

Validating the concepts and characteristics of suggested planning, programming, budgeting and execution system against earlier established criteria produced the following findings:

- The suggested system ensures ability of the state to tackle challenges within military and political sectors of security, depending on the

degree and consistency key tools, concepts and processes are utilized by executive agents responsible for respective sector;
- The suggested system ensures availability of professional expertise to support the development of national legislation and political guidance. In terms of procedures within the defense sector, providing this expertise is institutionalized; at the national level, expertise is made available;
- The suggested system ensures uniform doctrinal basis for executive agents within military security sector; and potentially for all security-providing agencies, if implemented across all relevant executive agents;
- The suggested system provides for in-country inter-agency coordination, cooperation, and interoperability between defense and security forces. Suggested system also provides for international inter-agency coordination, cooperation, and interoperability between defense forces or security forces of countries that have adopted this or similar methodology. The system also ensures responsiveness to rapidly changing situation within limits set by the very nature of functioning of state apparatus as complex hierarchical system;
- The suggested system does ensure allocation of resources to meet the most high priority challenges within existing constraints.

Hence, **it is credible to conclude that the hypothesis** formulated in chapter 7 of this study — National Defense Organization which operates as a planning, programming, budgeting and execution system (PPBES), utilizing capability-based approach for the analysis of current security environment and planning relevant response activities, and program-based approach for identifying and managing necessary resources to develop and sustain required capabilities — **meets all 'benchmark' criteria derived from the concept of multisectoral security, characteristics and requirements of contemporary security environment, and roles and responsibilities of state in providing security, and is therefore valid**.

The main difference between the U.S. and the author's suggested versions of the PPBS is delineation of the planning and programming phases. In the author's suggested system, the planning phase ends with identification and formal endorsement of quantified capability gaps. The focus of the following programming phase in the suggested system is on the development of ways and means to bridge these identified capability gaps. Outlines of the national military organization tailored to meet national military security objectives and milestone activities that will be conducted in order to develop or sustain required military capabilities are the key outcomes of the programming phase.

In the U.S. system, the development of outlines of national military organization and milestone activities that will be conducted in order to develop or sustain military capabilities required to implement established policy and carry out strategy constitute the final part of the planning phase. The entire programming phase of the U.S. version is included in the author's suggested system's programming phase as its last step.

This delineation is chosen based on two assumptions. First, that the conceivable policy objectives, and means to achieve these, of a small country are limited and not global as is the case with the United States. And second, that the size of the civil and military planning staff is relatively small and most likely involved in both medium- and short-term planning activity. The author's suggested approach, therefore, is designed to provide a mechanism to focus planning and programming effort on addressing a relatively small number of security policy objectives via minimizing the number of planning documents and routines in order to increase efficiency of small planning staff.

Coping with problem areas

In chapter 6, four major areas of concern within the U.S. version of the PPBS have been identified. In the following paragraphs, the author outlines means built in to the suggested system designed to cope with these.

The first problem area was described by Puritano as follows: "A variety of competing formats, structures, and data banks had evolved, at both the service and OSD levels, with resulting paperwork overloads, confusion, and continuous duplication of data requests from numerous sources…Program execution functions were generally neglected, as were strategic planning functions, and only limited feedback to policymakers and programmers was built into the system." (Puritano 1989, 48) Conceptually, then, to compensate for these shortfalls, hence, one should ensure conceptual uniformity of the process; comprehensiveness of the developed overview of defense activity and involved resources, at the same time reducing the number of used formats to an absolute minimum; and sufficient feedback to planners and decision-makers. Within the suggested system, the number of key documents is reduced to seven, of these only four are routine documents. The format of the Annual Report ensures feedback to both capabilities- and resource-based cycles, with the application of the concept of Mission Areas ensuring comprehensiveness and continuity from policy to operational planning to resource planning and allocation.

The second identified problem area is related to PPBS linkages to other ongoing processes within the defense realm. With regard to the planning and execution calendar, Hitch noted: "Although planning and programming have

been designed as continuous activities, permitting changes to be proposed, considered, and decided at any time during the year, the third phase, budgeting, is still tied to the calendar. …The annual budget cycle…does have an impact on the rest of the planning-programming-budgeting system. …the program and budget reviews have…tended to overlap in an undesirable way, making it difficult to reflect properly some of the force structure decisions in the support programs in time to assist in making budget decisions." (Hitch 1967, 63–64) In other words, decision points within the PPBS are not synchronized with decision points within other current processes. Consequently, uncoordinated decisions tend to have mutual unwanted implications on processes running in parallel. To compensate for this shortfall, one should ensure synchronization and coordination between PPBS and other processes running parallel to it. Within the suggested system, the Planning Calendar is the tool to provide for coordination of all key planning and management activity.

The third area of concern was the unequal attention senior leadership pays to components of PPBS. "It has been an open secret in defense circles for the better part of two decades," Zakheim wrote, "that the planning phase of the Planning, Programming, and Budgeting System (PPBS) rarely, if ever, commanded the attention that was lavished upon the other two elements of that system." (Zakheim 1989, 59)

The remedy Lovelace and Young suggested was a comprehensive strategic plan, that "…would derive from an actual assessment of the strategic environment over the Future Years Defense Program, establish a priority for specific strategic objectives achievable within that time frame, describe an executable strategy for achieving those objectives, and define the military capability required to effect the strategy. Rather than basing program planning on hypothetical scenarios, it should be based on tangible requirements distilled from the actual strategic plan DoD intends to implement…" (Lovelace and Young 1995, 8.) In short, according to Lovelace and Young, "[Strategic plan] is a plan that specifies, in military terms, the national strategic objectives for the defense planning period under consideration…and describes a strategy that rationalizes the resources expected to be available…with the strategic objectives described in the plan." (ibid., 4) Within the suggested system, the JMCP is designed to fulfill this role. Procedurally, defining Capability Gaps as primary input data for programming should ensure proper attention to the planning phase of the process.

And finally, the quality and format of the input data — estimation of the lifecycle cost of a system or platform, and measures of military effectiveness of a given system or platform — was said to require special attention. In real life, unpredictability of markets has effectively prevented the emergence of fully reliable costing formulas. On the other hand, the information on military effectiveness is dependent on methods and concepts of operations

analysis that attempt to estimate effectiveness in relation to achieving desired objectives; and ultimately on quality and adequacy of policy guidance and decisions determining and prioritizing these objectives. Both aspects can be managed to a certain extent, but not solved in the definite meaning of the word. However, to the extent possible, conditions and systems databases, establishment of performance standards, and concise development of planning scenarios are designed to compensate for these shortfalls within the suggested system.

"Can"-s and "cannot"-s of the renewed system

In the end, broad requirements to make this system efficient should be briefly discussed, and some limitations to the efficiency and effectiveness of the suggested system identified.

The concepts and tools defined in chapter 8, and detailed process descriptions from chapters 9 and 10 imply that there should be a relatively well-developed and sophisticated state apparatus established in order to effectively implement the suggested system. This apparatus should operate on a sufficiently developed legal basis that delineates authorities and main areas of responsibility both horizontally — between executive agents operating in different sectors of security, as well as vertically — between agents operating at different levels of activity within the same sector of security. Specific decision points and designated decision-making bodies built into the suggested system also imply that there should be some sort of delineation of authorities and responsibilities between elected or democratically appointed political leaders, civilian administrators, and professional area experts. In short, the suggested system works best if implemented in a relatively well-developed and sophisticated state apparatus operating under the conditions of democracy, rule of law, and objective civilian control. Take one of these conditions out, and the system may still be efficient, but it becomes ineffective. Without democratically elected leadership, threat perception becomes that of a small ruling elite instead of Nation's. Without rule of law, the operating framework becomes fluid and stability and predictability are lost, thus rendering long-term planning useless. Without objective civilian control, professional expertise is ignored and crucial decisions affecting national security become a whim of politicians — elected or not elected.

That said, there is still one major deficiency — the human factor. We have validated this system as the one designed to tackle the uncertainties of a security environment and produce the best possible security under existing resource constraints. However, as was brought forward in chapter 6 by Enthoven and Schelling: this system can not turn poor judgment into good; it can not

prevent poor or haphazard analysis; it can not guarantee leadership, initiative, imagination, or wisdom. It can be a splendid tool to help top management make decisions; but there has to be a top management that wants to make decisions.

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CURRICULUM VITAE

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Born: August 16, 1965 in Tallinn, Estonia

Education:

2002–2007	University of Zurich, Doctoral Studies
1998–2000	US Naval Postgraduate School, Department of National Security Affairs, M.A. in International Security and Civil-Military Relations
1987–1992	University of Tartu, Department of Philosophy, M.A. level course (5 years) in Social Studies with Major in Journalism
1983–1986	Tallinn Technical University, Department of Automatics, Command and Control Systems
1972–1983	Tallinn Secondary School No 32

Additional training:

2005	NATO Senior Officer Policy Course, Germany
2003	Future of the CFSP, Germany
2002	European Security, France
2001	Host Nation Support, NATO ACLANT/Finland
2000	Defense Resource Management, Canada
1998	Armed Forces and the Media, Germany
1997	Democratic Civil-Military Relations, Canada
1996	Armed Forces in Democratic Society, Denmark

Career:

2006–	Estonian National Defense College, Deputy Director of the Center of Applied Studies
2003–	Advisor to the Chief of Defense
2003	Special Advisor to the Chief of Joint Staff
2002–2006	Estonian National Defense College, Chair of Strategy, Associate Professor
2000–2001	Ministry of Defense, Deputy Director of Defense Policy and Planning Department
1997–1998	Ministry of Defense, Head of Foreign Affairs Office
1996–1997	Ministry of Defense, Advisor to the Minister, Acting Head of Minister's Office

Other activities:

2006–	US Naval Postgraduate School, Center for Civil-Military Relations, Assistant Program Manager
2004–	Member of the Board of the Higher National Defense Courses of the Ministry of Defense
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ANNEXES

Annex A

Illustrative List of Agencies Participating in National Defense

1. Ministry of Defense (MOD)
2. Ministry of Interior (MOI)
3. General Staff/Main Staff (GS/MS)
4. Border Troops Department (BTD)
5. Department of Emergency Situations (DES)
6. Security and Information Service (SIS)
7. State Protection Service (SPS)
8. Ministry of Foreign Affairs (MFA)
9. Ministry of Economy (MOE)
10. Ministry of Transportation and Communications (MTC)
11. Ministry of Finance (MOF)
12. Ministry of Health (MOH)
13. Department of Information Technologies (DIT)
14. Civil Aviation State Administration /Air Traffic Service Authority (CASA/ ATSA)

(CCMR 2005b)

Annex B

Illustrative List of National Defense Missions

PEACETIME

1. Interpret security strategy and associated policies of the State
2. Provide military advice to the leadership of the country
3. Develop defense legislation
4. Establish policies for the Armed Forces
5. Conduct strategic planning for National Defense
6. Determine defense resource requirements and establish priorities
7. Establish training requirements and standards for, and direct training of, Armed Forces and other militarily organized units as stipulated by legislation
8. Manage conscription (and alternative service) and the recruitment of military personnel
9. Train personnel and military formations to established standards
10. Maintain military units at designated readiness levels to meet mission requirements
11. Manage military personnel
12. Manage defense procurement and acquisition system
13. Through co-ordination with Ministry of Foreign Affairs, manage international defense-related activities
14. Manage defense-related Research and Development
15. Manage defense-related public information and publication
16. Upon approval of parliament, activate and manage Host Nation Support system
17. Organize essential military training of other militarily organized units as stipulated by legislation
18. Conduct planning for transition to wartime structure
19. Conduct Contingency Planning
20. Conduct Mobilization Planning
21. Conduct Disaster Relief planning
22. Provide assets of Armed Forces or other militarily organized units in response to natural disasters, civil unrest, or man-made catastrophes
23. Provide forces for combined operations and exercises with Partners and International Organizations
24. Provide overall financial management of the Armed Forces
25. Develop national threat assessments
26. Provide information support to MOD
27. Provide counter-intelligence
28. Provide Information Security
29. Conduct activities to counter terrorism, separatism and other forms of extremism
30. Provide Air Defense and conduct air policing
31. Conduct search and rescue operations
32. Conduct Explosive Ordinance Disposal
33. Implement restrictive measures within border area

34. Provide protection for VIPs, strategic assets and government facilities
35. Protect oilfields, pipelines and terminals
36. Maintain Public Order
37. Develop National Economy Mobilization Plan

TENSION

1. Interpret security strategy and associated policies of the State
2. Provide military advice to the civilian leadership of the country
3. Establish policies for the Armed Forces
4. Conduct strategic planning for National Defense
5. Determine defense resource requirements and establish priorities
6. Conduct Contingency Planning
7. Refine Disaster Relief plans
8. Develop national threat assessments
9. Provide information support (to MOD)
10. Provide counter-intelligence
11. Provide Information Security
12. Maintain military units at designated readiness levels to meet mission requirements
13. Provide overall financial management of the Armed Forces
14. Manage military personnel
15. Manage conscription (and alternative service) and the recruitment of military personnel
16. Manage defense procurement and acquisition system
17. Through co-ordination with Ministry of Foreign Affairs, manage international defense-related activities
18. Manage defense-related Research and Development
19. Manage defense-related public information and publication
20. Upon approval of parliament, activate and manage host nation support system
21. Implement approved contingency plans
22. Conduct activities to counter terrorism, separatism and other forms of extremism
23. Provide necessary support other state authorities
24. Provide forces for combined exercises, and operations with Partners and International Organizations
25. Implement restrictive measures in use of airspace
26. Provide Air Defense and conduct air policing
27. Conduct search and rescue operations
28. Conduct Explosive Ordinance Disposal
29. Implement restrictive measures within border area
30. Provide increased protection for VIPs, strategic assets and government facilities
31. Protect oilfields, pipelines and terminals
32. Prepare for mobilization
33. Increase civil protection
34. Maintain Public Order
35. Implement restrictions as specified by law

36. Activate relevant Crisis Management Center (CMC), and deployment of regional CMCs as required, depending upon the nature of situation.
37. Plan Information Operations
38. Increase diplomatic efforts to resolve tensions

CRISIS

1. Interpret Government national security strategy and associated policies
2. Provide military advice to the civilian leadership of the country
3. Establish policies for the Armed Forces
4. Conduct strategic planning for National Defense
5. Refine training requirements and standards, and direct training of the Armed Forces
6. Update plans to transition to wartime structure
7. Raise readiness levels of elements of the Armed Forces and other armed units as stipulated by legislation.
8. Conduct mobilization on the basis of legislation.
9. Increase diplomatic efforts to resolve the crisis.
10. Review, Update and implement Contingency Plans
11. Increase border security
12. Update defense resource requirements and establish priorities
13. Update Mobilization Plans
14. Develop national threat assessments
15. Provide information support (to MOD)
16. Enhance counter-intelligence
17. Provide Information Security
18. Manage military personnel
19. Manage defense procurement and acquisition system
20. Provide overall financial management of services of the Armed Forces
21. Through co-ordination with Ministry of Foreign Affairs, manage international defense-related activities
22. Manage defense-related public information and publication
23. Conduct Information Operations
24. Upon approval of parliament, activate host nation support system
25. Implement approved contingency plans
26. Provide necessary civilian personnel, equipment, facilities and services to support Armed Forces
27. Control the Airspace
28. Conduct search and rescue operations
29. Provide increased security awareness and protection for VIPs and government facilities
30. Protect oilfields, pipelines, and terminals
31. Transfer to wartime structure
32. Joint Command assumes control of all Armed Forces and other military units according to legislation
33. Manage necessary training of mobilized forces
34. Allocate necessary financial resources for National Defense

35. Provide transportation assets and exclusive access to necessary communication services in support of National Defense
36. Review and update Disaster Relief plans
37. Provide civil protection
38. Conduct Explosive Ordinance Disposal
39. Maintain Public Order
40. Conduct security operations in support of the armed forces
41. Implement restrictions as specified by law
42. Identify Civil Support Requirements

STATE OF WAR

1. Interpret Government national security strategy and associated policies
2. Provide military advice to the civilian leadership of the country
3. Establish policies for the Armed Forces
4. Conduct strategic planning for National Defense
5. Determine defense requirements and establish priorities
6. Conduct training to the requirements and standards for all Armed Forces
7. Conduct Operational Planning
8. Review and update Disaster Relief plans
9. Update national threat assessments
10. Provide information support (to MOD)
11. Enhance counter-intelligence according to wartime requirements
12. Provide Information Security
13. Maintain military units at designated readiness levels to meet mission requirements
14. Provide overall financial management of services of the Armed Forces
15. Manage military personnel
16. Manage defense acquisition system
17. Through co-ordination with Ministry of Foreign Affairs, manage international defense-related activities
18. Manage defense-related public information and publication
19. Conduct Information Operations
20. Upon approval of parliament, activate host nation support system
21. Implement approved contingency plans
22. Provide necessary civilian personnel, equipment, facilities and services to support Armed Forces
23. Provide Air Defense
24. Carry out Combat Search and Rescue
25. Maximize restrictive measures within border area
26. Increase security awareness and protection for VIPs and government facilities
27. Protect oilfields, pipelines, and terminals
28. Transfer economy to wartime structure
29. Joint Military Command controls all Armed Forces
30. Manage necessary combat training of mobilized forces
31. Conduct full mobilization and other measures stipulated by legislation
32. Allocate necessary financial resources for National Defense

33. Provide transportation assets and exclusive access to necessary communication services in support of National Defense
34. Provide for civil protection
35. Maintain Public Order
36. Organize and supervise civil support to the Armed Forces
37. Implement Legal acts related to war (covering domestic and international law)
38. Meet Civil Support Requirements
39. Conduct military operations
40. Refine budgetary requirements for conduct of military operations
41. Provide for orderly evacuation of civil population out of combat zone
42. Provide POW Management according to international obligations

(CCMR 2006b)

Annex C

Illustrative example of Concept of Escalation

Peacetime **Routine activities on day to day schedule**	
Routine activities using peacetime institutional arrangements.	Routine inter-ministerial relationships
Tension **Increased activities within the peacetime structure**	
Increased operational tempo Surveillance increases Increase intelligence gathering and dissemination	The President and The Cabinet authorizes increase in activities of Ministries and agencies, and changes in standing operating procedures (SOPs). Activation of relevant Crisis Management Center (CMC), and deployment of local CMCs as required, depending upon the nature of situation. Domestic and international inter-ministry co-operation increases without change in institutional relationships. Diplomatic activities increase. Select cancellation of leave/holidays.
Crisis **Emergency situation, unsolvable within peacetime institutional and procedural arrangements, may include partial activation of reserve assets**	
Increased inter-agency co-ordination Transition of leadership to a Ministry or agency in charge, depending upon the nature of the crisis	The Parliament authorizes bringing elements of the Armed Forces to the required state of readiness and partial activation of reserves, if required. Increased diplomatic efforts. Activation of specific legal arrangements (mechanisms). Changes in peacetime institutional arrangements, SOPs, and reallocation of existing assets as needed. Coordination and control of activities of designated capabilities to mitigate the crisis.
Wartime **Utilisation of all national resources to defend national sovereignty**	
Establishment of supreme national command authority for Wartime	Declaration of a state of war by Parliament Legal acts related to war to be implemented (covering domestic and international law). Full or partial mobilisation of defence assets (to include transition of designated assets from other Ministries) Command and control of designated capabilities in the defense of national sovereignty.

(CCMR 2006a)

Annex D

Illustrative Sample of Completed Roles and Missions Matrix

Peacetime

	MOD	MOI	GS/MS	BTD	DES
Interpret Government national security strategy and associated policies					
Provide military advice to the civilian leadership of the country	If the Minister is Active Duty military	Commander of Carabinieri Troops			
Develop defense legislation					
Establish policies for the Armed Forces					
Conduct strategic planning for National Defense					
Determine defense requirements and establish priorities					
Establish training requirements and standards for the Armed Forces					
Manage conscription and alternative service					
Recruit professional military personnel		For Carabinieri		For Border Troops	For their department
Direct training of National Army					
Train and educate personnel to established standards		For Carabinieri	GS has coordinating authority	For Border Troops	
Conduct training of all military formations		For Carabinieri	GS has coordinating authority	For Border Troops	
Maintain military units at designated readiness levels		For Carabinieri	GS has coordinating authority	For Border Troops	
Increase readiness levels of designated units to meet mission requirements		For Carabinieri	GS has coordinating authority	For Border Troops	
Manage military personnel policy					
Manage defense acquisition system					

(CCMR 2005b)

Annex E

Illustrative example of Levels of Command

45. Command and control of Estonia's defence structures is carried out on three levels: strategic, operational and tactical. The strategic level of command is functionally divided into the political strategic and the military strategic level (see Sections 46 and 47).

45.1. The general tasks of the strategic level of command are:

- In peacetime, to establish policies and priorities, to provide threat assessments, to direct the implementation of defence policy, to issue political and planning guidance and directives, to carry out force planning, to manage force development, and to exercise command and control over the Defence Forces and the Defence League.
- In times of military crisis and in wartime, to implement crisis response measures at the national level, to establish national objectives, and to exercise full command and control of military activities.

45.2. The general tasks of the operational level of command are:

- In peacetime, to plan military operations, to carry out training and preparation for military operations, to carry out contingency planning, to command and control ongoing operations.
- In times of military crisis and in wartime: to recommend military responses, to command subordinate units, to exercise command authority to achieve military objectives, to give operational guidance to tactical units.

45.3. The general tasks of the tactical level of command are:

- In peacetime, to raise, train and maintain units at the required level of readiness, to achieve given objectives and tasks, and to participate in peacetime operations.
- In times of military crisis and in wartime, to achieve given objectives and tasks in accordance with operational plans and directives.

46. The President of the Republic, the Government of the Republic and the Minister of Defence exercise command and control at the political-strategic level. Upon a proposal from the President of the Republic, the Parliament will declare a state of war, mobilisation, and demobilisation and take decisions on the use of the Defence Forces to fulfil Estonia's international obligations.

46.1. The President of the Republic is the Supreme Commander of the Defence Forces. In case of aggression against the Republic of Estonia, the President of the Republic will declare a state of war and mobilisation and appoint the Commander-in-Chief of the Defence Forces. The President of the Republic is advised by the National Defence Council.

46.2. The Government of the Republic exercises executive power in the command and control of the national defence. The Government of the Republic will submit the National Security Concept to the Parliament for approval and approve the strategic military defence plan. The Government of the Republic will assign national defence

tasks to state agencies and will establish the structure of the Defence Forces. The Government of the Republic will decide on the use of the Defence Forces in a collective defence operation conducted under Article 5 of the North Atlantic Treaty, and the participation of other government agencies in international military operations. If the national security situation changes, the Government of the Republic will issue an order to change the level of military readiness and will, if necessary, organise consultations with NATO and the European Union. A Security Commission has been set up within the Government of the Republic.

46.3. In the sphere of administration of the Ministry of Defence, the Minister of Defence and the Ministry of Defence are responsible for the organisation of defence.

In planning, implementing and supporting military operations, the Ministry of Defence will: draw up a strategic defence plan on the basis of guidance from the Minister of Defence (Ministerial Guidance); prepare, in co-operation with the General Staff of the Defence Forces, directives of the Minister of Defence to initiate military planning; revise operational plans developed on the basis of Ministerial Guidance; and organise financing and equipment procurement for the Defence Forces and the Defence League.

Other main tasks of the Ministry of Defence include the development and implementation of defence policy, the organisation of host nation support, the administration of the preparation for and implementation of mobilisation, and the submission of proposals to change the level of military readiness.

47. Command and control at the military strategic level is carried out by the Commander (in wartime, Commander-in-Chief) of the Defence Forces who exercises full command authority over the Defence Forces and the Defence League, and who is the senior military adviser to the Government of the Republic and the Minister of Defence. The Commander of the Defence Forces will ensure that the Defence Forces are ready to carry out the tasks assigned to them by legislation. The Commander of the Defence Force is assisted by the General Staff. In case of declaration of a state of war, the Commander-in-Chief of the Defence Forces will be appointed.

In planning military operations, the Commander of the Defence Forces will: issue initiating directives to begin operational planning; establish operational plans for defence activities; and approve other operational plans developed on the basis of his initiating directives.

In conducting and supporting military operations, and after authorisation from the political strategic level, the Commander of the Defence Forces will order to implement his approved operational plans.

48. Command at the operational level is carried out by the operational commander. In planning military operations the operational commander will, upon directives from the Commander of the Defence Forces, prepare operational plans for defence and other operations.

Operations carried out by NATO on the territory of Estonia will be led by a NATO military commander whose command authority will be determined by the operational plan.

In peacetime, the Commander of the Defence Forces may assign command of a particular operation to a Service Commander, the commander of the Defence League or the commander of the Logistic Centre whose command authority is determined by the operational plan.
(Estonia 2005)

Annex F

Illustrative sample Strategic Level Tasks List

S 1 Strategic/National Command

Develop and revise national and multinational military strategy and provide strategic direction.

S 1.1 Provide Direction to the Forces. To provide direction to supporting and subordinate commands to ensure understanding of goals and mission at each level.

S 1.1.1 Articulate Political Direction and Define End State and Objectives. Direct the commitment of Defence Forces to achieve the military strategic objectives endorsed by government.

S 1.1.2 Formulate Policy on Peace Support Operations. Creation, dissemination, and implementation of peace support operations (PSO) policy. This includes peace making, peacekeeping, peace enforcement, conflict prevention, peace building, and humanitarian operations.

S 1.1.3 Determine the Capability and Goals of the Defense Force. Determine the capabilities, doctrine, aspirations and goals of all elements of the Defense Forces in order to ensure maximum synergy and unity of purpose.

S 1.1.4 Provide contingency planning guidance and review draft operation plans. Issue contingency planning guidance in a classified annex to the National Military Strategy document. The resulting operation plans developed by the CHOD will be reviewed by the Defense Minister.

S 1.1.5 Issue International Security Estimate, Operational Priorities, Plans and CHOD Directives. Develop and issue to the Joint Commander directives and associated plans, which convey national campaign concept and intent. This includes planning guidance, policy, legal constraints, force protection, ROE, warnings, and alerts.

S 1.1.6 Plan resource requirements. The Ministry of Defence plans for and allocates resources for national defence.

S. 1.1.7 Formulate Command Arrangements. President establishes command arrangements in wartime, i.e., the appointment of the Commander-in-Chief and specifies his command authorities. In peacetime, CHOD appoints commanders for peacetime operations.

S 1.1.8 Provide guidance for the development of ROE and Targeting. Minister of Defense provides guidance for the development of Rules of Engagement (ROE) and Targeting, and reviews them.

S 1.1.9 Plan and Execute National Mobilization. The Minister of Defense prepares, validates and executes mobilization plans.

S 2 Strategic/National Information and Intelligence

Provide Intelligence, Surveillance and Reconnaissance as required by national organizations for formulating National Level Policy, Strategy, Military Plans and Operations.

S 2.1 Plan and Direct Intelligence Activities. Assist strategic users to determine intelligence requirements, plan collection effort, and issue requests to intelligence organizations; includes reviewing, validating and prioritizing requirements.

S 2.1.1 Develop Strategic Intelligence Policy. Assist and advise intelligence authorities on developing policy for strategic intelligence operations; includes planning guidance, identifying intelligence gaps, establishing goals and objectives to overcome deficiencies, and identifying resource requirements.

S 2.1.2 Determine Strategic Defense Intelligence Requirements and Priorities. Determine and prioritize strategic defense intelligence requirements.

S 2.1.3 Prepare Strategic Collection Plan. Develop strategic collection plan to satisfy strategic Defense Intelligence Requirements; includes assigning collection capabilities.

S 2.1.4 Allocate Intelligence Resources. Assign Intelligence Resources and request support from friendly sources, when required.

S 2.2 Manage and Exploit Information, Communication Information Systems and Procedures. Convert strategic information into form required for analysis.

S 2.2.1 Provide Scientific and Technical Intelligence. Provide Scientific and Technical (S&T) Intelligence. Respond to *ad hoc* S&T operational requirements. Exploit captured adversary weapons and equipments as required.

S 2.2.2 Collate National Information. Identify and group related items of information for comparison.

S 2.2.3 Direct and Co-ordinate Strategic Communications. Prioritize, endorse and co-ordinate strategic communications requirements and transportable resources.

S 2.2.4 Provide and Manage Strategic Defense Information Services. Establish and manage the means of transmitting data to meet the Information Exchange Requirements. This includes the interaction with networks and nodes to support information transfer.

S 2.2.5 Develop IT Interoperability Policy. Develop procedures, equipment and systems to provide IT services to, or accept IT services from, friendly forces and, as far as possible, to achieve compatibility with other Agencies.

S 2.3 Direct the Production of Strategic Intelligence. Convert processed and exploited information into intelligence that satisfies the user's requirements.

S 2.3.1 Analyze All Situational Information. Evaluate, integrate, analyze and interpret all situational information in order to identify global and regional factors, adversary capabilities, likely courses of action and adversary centers of gravity.

S 2.3.2 Produce Intelligence Products. Includes providing indications and warning, current and targeting intelligence briefs to planners and decision makers. It also includes scientific and technical intelligence papers on foreign weapon systems.

S 2.3.3 Direct Joint Intelligence Preparation of Battlefield (JIPB). Directs the JOC to prepare and maintain JIPB to support possible contingencies. Facilitates coordination of the JIPB with other governmental agencies, as required.

S 2.4 Disseminate and Integrate National Intelligence. Provide Strategic Intelligence to those who require it, in an appropriate form and by suitable means.

S 2.4.1 Prepare Indications and Warnings. Determine changes in a potential enemy's military, political, economic, social, and diplomatic behaviour that could lead to hostile activity. Emphasis is on precluding strategic surprise.

S 2.4.2 Provide Defense Intelligence Products to National Planners. Provide Defense Intelligence Information to Planners and Decision Makers in appropriate format.

S 2.4.3 Respond to National Requests for Information (RFIs). Provide Intelligence / Information in response to requests.

S 2.5 Evaluate Intelligence Effectiveness. Determine effectiveness of intelligence process.

S 2.5.1 Determine Effectiveness of Defence Intelligence Process. Assess the collection plan. Review information requests to ensure that information / intelligence has been provided to meet customer requirements; this includes undertaking any required improvements.

S 3 Conduct Strategic/National Operations

Conduct operations at the national level requiring coordination of high level issues across multiple boundaries of responsibility, both within Ministry of Defense and HQ Defense Forces and throughout all government institutions.

S 3.1 Shape the international environment that affects the country. Create the perception in the mind of the adversary that the achievement of his objectives can only be accomplished with significant loss of political credibility and resources.

S 3.1.1 Demonstrate Military Intent. Deploy Forces, in either an operational or exercise context, in order to influence perception of national potential or resolve. This task could involve independent Defense Force assets or in concert with friendly forces.

S 3.1.2 Define Policy and Initiate Information Operations. Develop policies regarding actions to influence decision makers (and neutral, hostile and friendly perceptions) in support of political and military objectives by affecting other's information and/ or information systems whilst exploiting or protecting one's own information and / or information systems. This will include continuous assessment.

S 3.1.3 Determine and Direct Media Operations. Promote and encourage informed comment and accurate reporting of the purpose, role and status of the force and the professional achievements of personnel under command. Using the news media, reach as wide an international public as possible, within the host nation and within Estonia.

S 3.2 Coordinate use of Defense Force for Crisis Response Operations.

Co-ordinate the provision of military resources in support of national and international crisis response operations.

S 3.2.1 Orchestrate Operations to Provide Assistance for Disaster Relief and Humanitarian Aid inside the country. Provide service personnel and equipment both in emergencies, such as natural disasters, and in routine situations to assist the community at large.

S 3.2.2 Establish liaison arrangements with ministries and organizations. Set up liaison procedures with organizations to ensure coordination and cooperation among government departments.

S 3.2.3 Perform Crisis Management. The prevention, containment or resolution of crises (and potential crises). It includes managing an orderly transition to war.

S 3.2.4 Assist in Coordinating Civil Defense. Mobilization, organization, and direction of the civil population, designed to minimize by passive measures the effects of enemy action against all aspects of civil life.

S 3.2.5 Assist in Countering Weapon and Technology Proliferation. Assist civil authorities that support arms control and non-proliferation with allies and foreign nations.

S 3.2.6 Assist in Counter-Drug Operations. Assist civil authorities in counter-drug operations includes military planning, intelligence gathering, use of facilities and other assistance, as requested and authorized.

S 3.2.7 Advise and Support in Combating Terrorism. Provide security advice and support in countering espionage, subversion, terrorism and sabotage against traditional and non-traditional threats.

S 4 Strategic Mobility

Manage the deployment of the generated Defense Force and friendly forces and cargo to the theatre of operations, re-deployment within theatre, or to another theatre, to meet new objectives. Once the purpose is achieved, recover the force to its home base.

S 4.1 Determine the Requirement for Deployment and Recovery Support. Identify lift requirements and en route support required to deploy forces. Plan the deployment and contribute to the estimate process.

S 4.1.1 Examine Strategic Movement Options. Carry out movements estimates as part of the iterative planning process.

S 4.1.2 Produce a Phased Deployment Plan. From the Force Commander's Campaign Plan and operational estimate, create a Phased Deployment Plan.

S 4.1.3 Determine Line(s) of Communication (LOC). Determine and establish the Secure Lines of Communication (LOC) in accordance with friendly forces. May include staging facilities.

S 4.1.4 Construct movement plan and obtain transportation assets. Draft the movement plan. Secure funding for and obtain strategic lift assets. Allocate assets in accordance with the JOC's plans.

S 4.1.5 Organise the Reception, Staging, Onward Movement and Integration (RSOI). Plan and provide for effective reception, staging, onward movement and integration for friendly forces deploying into the country and for Defense Force elements deploying outside the country.

S 4.1.6 Organize Route Clearance and Support. Develop and Confirm MOUs / agreements with other nations / agencies regarding establishing the Line(s) of Communication (LOC), en route requirements and strategic assets. Arrange for diplomatic clearances to support the operation of the LOC.

S 4.2 Initiate Deployment and Recovery. Move forces and cargo to meet strategic requirements and in accordance with plans.

S 4.2.1 Select and Establish the LOC. Establish the transport and movements elements of lines of communication (LOC). Includes route activation, providing

terminal operations, support facilities en route and route clearances. De-conflict requirements with friendly nations.

S 4.2.2 Manage Strategic Movement Resources. Manage the movement of resources between the strategic base and the Theatre of Operations. Includes deconflicting other national and friendly forces requirements and the allocation of movement resources for intra theatre movement.

S 5 Force Protection

Determine measures to best protect national infrastructure and mobilization base from damage in the event of attack.

S 5.1 Define the Protection of the Force. Protect strategic forces, the home base and centers of gravity through reducing the effects of adversary strategic level actions.

S 5.1.1 Determine and Direct Security and Counter-Intelligence. To provide security advice, policy and resources to identify and counter the threat to security posed by foreign intelligence services, organizations or individuals engaged in espionage, subversion, sabotage or terrorism.

S 5.1.2 Determine the Degree of Force Protection. Conserve the fighting potential of the force by countering the wider threat to all its elements from the adversary and natural hazards, around the spectrum.

S 5.1.3 Direct the Strategic Assets to be protected. Direct the protection of strategic forces and national assets from attack by integrating all national and multinational surveillance systems, defensive weapons and passive measures.

S 6 Sustain

Maintain the necessary level of military logistic activity for the duration required to achieve the objectives.

S 6.1 Sustain the Force with Materiel and Services. Generate the materiel and service support needed to sustain operations inside the country and Defense Force units deployed outside of country.

S 6.1.1 Manage the National Supply Chain. Manage the call forward and priority for movement of materiel to Defense Force units.

S 6.1.2 Negotiate and Acquire Host-Nation Support. Negotiate with Foreign Governments for Host Nation Support that permits the deployment of country's units and support units in theatre and provides them with the necessary support and services. Arrangements are also necessary for the provision of country's HNS for friendly forces deploying into the country. This includes legal support for the commander.

S 6.1.3 Establish Access and Storage Agreements. Support commanders by pursuing agreements other than those within the definition of "Host Nation Support", with foreign nations. This task is necessary to support Defense Force deployments outside of country, as well as supporting friendly forces deploying into the country.

S 6.2 Develop Sustainment Base. Develop sustainment in line with evolving national military strategy or campaign strategy.

S 6.2.1 Determine Sustainment Priorities and Bases. Maximize the use of available resources. This includes Host Nation Support, co-ordination with friendly

nations and setting priorities for sustaining concurrent operations and multiple theatres.

S 6.2.2 Direct Strategic Lift for Sustainment. Obtain transportation assets to sustain the force.

S 6.2.3 Prepare the Industrial Base. Monitor the industrial base to identify what is required to reflect the sustainment needs of developing campaign objectives. This includes developing preparedness objectives, generating programmes and analytical measures with private industry and preparing plans and procedures for gearing up.

S 6.2.5 Match Medical Support to the Sustainment Requirement. Ensure medical capability reflects developing campaign objectives.

S 6.2.6 Match Support to Personnel to the Sustainment Requirement. Ensure personnel operations support meets the needs generated by the evolving operational situation.

S 6.3 Direct Personnel Support. Provide support for personnel in theatre, including management, morale, religious and health support.

S 6.3.1 Provide Personnel Management and Support Services. Provide personnel management and services support to deployed Defense Force personnel.

S 6.3.2 Provide Health Services. To arrange and provide comprehensive medical services for the force both in theatre and in country.

S 6.3.3 Direct Casualty Evacuation and Reporting. Plan, set up and manage a system for the evacuation of the sick and wounded by any appropriate means (this will include inter and intra theatre evacuation), as well as procedures for reporting.

S 7 Force Generation

The process of bringing forces, or part of them, to a state of readiness for operations, by conscripting, recruiting, assembling, and organizing personnel, supplies, and materiel. This task includes the training and equipping of forces and the provision of their means of deployment, sustainment and recovery to meet all current and potential threats. It also embraces the mobilization, re-generation and reconstitution necessary to meet a major conflict, such as general war, and the long-term development of capability to meet changing circumstances.

S 7.1 Assemble and Train Elements and Forces. Warn forces for operational duty and bring units to operational status. Prepare commands, units, and individuals to fight and win in combat as joint forces and in co-ordination with other agencies to conduct effective Crisis Response Operations.

S 7.1.1 Man and Equip the Force. Determine the manpower required by the force. Plan and execute the reallocation of regular personnel to meet requirements. Resource additional equipment, weapons, fuel, ammunition, ranges and training areas and special to theatre requirements.

S 7.1.2 Provide augmentation for the Joint Operation Command, Regional / District Commands, and for Combined HQs. Provide qualified personnel to augment JOC, Regional Commands and combined HQs in times of tension, crisis and war. In peacetime, this includes the provision of qualified personnel for assignment to international security organizations.

S 7.1.3 Identify and Implement Changes to Force Readiness States. Identify changes, obtain approval and order individual units to improve their Force Readiness States.

S 7.2 Activate Reserve Forces. Prepare to call out reserve forces, complete all administrative and processing actions, mobilize reserves.

S 7.2.1 Plan Force Generation. Prepare implement plans and procedures for identification and mobilization of individual reservists and units. This must include procedures for partial activation of reserves, as well as a full call-up.

S 7.2.2 Prepare for Reception of Reserve Personnel. Prepare procedures for reporting, reception, mobilization and training. Includes the reception and training facilities, stocks and equipment for mobilized reservists.

S 7.2.3 Activate and Assemble Reserve Personnel. Provide advanced warning of issue of call-up order(s) so that actions preparatory to induction may be taken.

S 7.2.4 Monitor Readiness of Individual Reservists. Maintain and operate procedures for tracking and monitoring the readiness for active service of individual reservists and regular augmentees.

S 7.3 Direct Personnel Requirements. Provide the Personnel required to man and sustain the force.

S 7.3.1 Determine Manpower Requirements. Determine the manpower required by the force.

S 7.3.2 Direct Personnel Replacements. Locate and provide suitable personnel replacements as required.

S 7.4 Generate Command, Control, Communications and Computers (C4) capabilities. To establish, direct, and control or interact with the networks and nodes used to support the Defense Force's overall C3 transmission and reception requirements (including data). These systems will be used to support DF peacetime and operational needs and must have connectivity with the C4 systems of friendly forces.

S 7.4.1 Communicate Operational Information Exchange Requirement. Provide Operational CIS Capability in order to send and receive information, data, imagery and video by appropriate means to all necessary HQs and deployed commanders.

S 7.4.2 Determine and Manage Means of Communicating Information. Manage the communications networks.

S 7.4.3 Maintain Operational Information & Force Status. Obtain information on theatre of operations, military objectives, enemy forces and centres of gravity, friendly forces, terrain and weather. Translate into usable form, retain and disseminate to subordinate forces.

S 7.4.4 Monitor Situation. Provision of a range of observation and monitoring operations conducted by assets ranging from strategic and operational maritime and air assets, including satellites, to individual teams on the ground.

S 7.4.5 Collect Data to Identify Remedial Action. Collect and analyse data to compare with measures of effectiveness to create a lessons identified database to identify any short or long-term remedial action. Includes maintaining war diaries and historical records.

S 7.4.6 Supervise Communications Security (COMSEC). Preparation of Communication Security (COMSEC) plan and resolution of frequency management issues.

S 7.5 Identify New Technological Possibilities / Acquire-Dispose Equipment and Facilities.

S 7.5.1 Provide Science and Technology, Research and Development and Operations Analysis in support of long-range planning. Provision of scientific and technical advice on a wide range of subjects, including advice to inform the development of policy and programmes, support the development doctrine, contingency and operation plans, support to operations, and direct support to equipment programmes.

S 7.5.2 Develop and Acquire new Equipment and Facilities/Dispose of Redundant Material. Identify the type and quantities of new equipment and facilities needed in response to changing force development assessments, implement the acquisition of the new equipment and facilities, and dispose of redundant material.

S 8 National Strategy and Policy

Pursue national security objectives through coordination with other government departments, international actors, and non-governmental agencies.

S 8.1 Identify Strategic Priorities, Formulate Policy Guidance and Strategy. Identify key priorities in routine operations and force development. Formulate policy guidance applicable to specific areas of responsibility.

S 8.1.1 Interpret Government Policy and Provide Guidance Articulate policy implications of government direction and provide policy guidance applicable to specific areas of responsibility. Provide responsive defense and security advice to government.

S 8.1.2 Determine and Issue Strategic Priorities. Issue top level planning guidance delineating priorities in routine operations and force development consistent with government policy. This includes development of annual resource guidance and management plans.

S 8.1.3 Provide Force Development Guidance. Oversees the development of concepts, doctrine and tactics, techniques, and procedures, embracing threat, technology, projected capabilities, and resource constraints for the full range of military operations required by government policy. This task also includes identifying joint service requirements through identification of deficiencies and opportunities for improvement.

S 8.2 Foster Political-Military Relations and Security Arrangements.

Co-ordinate and support activities with friendly governments. Includes establishing and maintaining liaison and cooperative arrangements, providing and receiving training and advice and other related services to further national objectives.

S 8.2.1 Enhance Regional Politico-Military Relations. Co-ordinate and conduct activities with friendly nations that foster improved relations and further national objectives. The range of activities may include exchanges, joint exercises, and briefings.

S 8.2.2 Promote Regional Security and Interoperability. Conduct activities that support confidence and security building with foreign nations.

S 8.3 Provide support to friendly governments and NGOs. To provide for assistance to IOs/NGOs and/or friendly government agencies. It includes CIMIC and other assistance to civilian authorities and population.

S 8.3.1 Produce Policy for, and Co-ordinate, Security Assistance Activities. The provision of policy for: providing friendly nations with military training and other defense-related services in furtherance of national policies and objectives; and coordinating those activities that foster relationships between operational forces and local civil authorities.

S 8.3.2 Provide Disaster Relief and Humanitarian Assistance. Respond to requests for disaster relief assistance. The task also includes providing assistance before, during or after hostile action, disasters, to reduce the probability of loss of life or damage, minimize effects and initiate recovery.

S 8.3.3 Define Policy for, and Co-ordinate, National Assistance. To define the policy for working with non-government organisation (NGOs). This includes guidance on how to develop the basis for co-operation of commanders in their areas of responsibility with the field activities of NGOs.

S 8.3.4 Define Policy for Civil-Military Co-operation (CIMIC). To define policy and co-ordinate activities in support of military operations in an area of operations that foster the relationship between the military forces and civilian authorities and population, and that develop favorable emotions, attitudes, or behavior in neutral, friendly, or hostile groups.

(Estonia 2002)

Annex G

Generic Capability Profile Format

/Capability Profile Title/	/Execution Agent/
/Task Description/	
/Task Conditions/	
Capability Requirements	
Maneuver Task Description	Performance Standards
Firepower Task Description	Performance Standards
Intelligence Task Description	Performance Standards
Command and Control Task Description	Performance Standards
Mobility/Counter Mobility Task Description	Performance Standards
Logistics and Combat Service Support Task Description	Performance Standards
Force Protection Task Description	Performance Standards
Current Capabilities	
Maneuver Assets/Forces	Performance Levels
Firepower Assets/Forces	Performance Levels
Intelligence Assets/Forces	Performance Levels
Command and Control Assets/Forces	Performance Levels
Mobility/Counter Mobility Assets/Forces	Performance Levels
Logistics and Combat Service Support Assets/Forces	Performance Levels

Force Protection Assets/Forces	Performance Levels
Capability Gaps	
Maneuver Assets/Forces	Change in Performance
Firepower Assets/Forces	Change in Performance
Intelligence Assets/Forces	Change in Performance
Command and Control Assets/Forces	Change in Performance
Mobility/Counter Mobility Assets/Forces	Change in Performance
Logistics and Combat Service Support Assets/Forces	Change in Performance
Force Protection Assets/Forces	Change in Performance

(Estonia 2002)

Annex H

Illustrative sample of Capability Areas

In order to meet the objectives established by Political Guidance, the Armed Forces have to develop capabilities within the following identified Capability Areas (Mission Areas):

1. **Land Operations** (lead agent – Army Command): operations undertaken to prevent the enemy from seizing terrain or breaking through into a defended area. Such operations aim to break the enemy attack, slow his advance, destroy his forces and stop him from accomplishing his aim. In so doing they create the circumstances for the Defense Forces (coalition forces) to take offensive action, and restoration of the sovereignty of the country or perform other tasks.

This Capability Area has the following missions and their comprehensive support:

1) Area Defense – operations to deny enemy access to terrain/facilities, that do not allow for their loss;
2) Mobile Defense – operations to defeat/destroy enemy forces, that allow for temporary loss of control over certain territory or facilities;
3) Offence (Counter-offence) – operations to exhaust and damage enemy forces, aimed at liberating certain territories;
4) Prevent/Minimize Disruption of Support;
5) Protect Personnel, Equipment, designated Facilities and Assets;
6) Territorial Defense and Rear Area Security Operations.

2. **Air Operations** (lead agent – Air Force Command): active and passive measures that seek to gain and maintain the required level of control of the air to ensure air sovereignty of the country; protect own and coalition forces, facilities and lines of communications; render all-inclusive support to own and coalition forces; and counter enemy actions.

This Capability Area has the following missions and their comprehensive support:

1) Combat Air Patrolling in designated air Area of Responsibility (AOR), to include Air Policing;
2) Passive and Active Defense of own Lines of Communication (LOCs) / Strategic Reserves;
3) Passive and Active Protection of Military and vital facilities;
4) Combat air interdiction;
5) Support to Land and Naval Forces, to include airlift;
6) Search and Rescue, to include Combat Search and Rescue.

3. **Maritime Operations** (lead agent – Navy Command): any actions performed by the forces at sea (on, under, or over, the sea) to protect the sovereignty of the country, maintain designated operational situation at sea, control it, protect maritime communications and maritime activities of the nation, render maritime support to the activities of the Forces, and perform other tasks.

This Capability Area has the following missions and their comprehensive support:

1) Sea Control of designated AOR;
2) Protect maritime assets and commercial Sea-LOCs;
3) Support protection of country's Economic Exclusion Zone, sea borders, and combating terrorism at sea;
4) Surface Warfare;
5) Sub-Surface Warfare;
6) Sea Denial – operations to delay, disrupt, attrite enemy forces and protect friendly forces;
7) Defense of Naval bases and LOCs;
8) Naval support to Land Forces in littoral waters and coastal areas;
9) Amphibious Operations;
10) Conduct sea blockades.

4. **Special Operations** (lead agent – Special Forces Command): Special operations are conducted in hostile, denied, or politically sensitive environments to achieve military, security, diplomatic, informational, and/or economic objectives employing military capabilities for which there is no broad conventional force capability requirement. Special Operation Forces (SOF) are specifically organized, trained, and equipped to accomplish the core missions assigned below.

This Capability Area has the following missions and their comprehensive support:

1) Direct Action and special reconnaissance activities;
2) Provision of military assistance through advisers (instructors);
3) Unconventional warfare;
4) Counter-terrorism;
5) Counter-proliferation of weapons of mass destruction;
6) Limited civil affairs operations;
7) Psychological operations;
8) Information operations;
9) Support of law enforcement as directed and when authorized.

5. **Host Nation Support** (lead agent – Ministry of Defense): civil and military assistance rendered in peace, tension, crisis, or war by the country to formations (to include civilian) of foreign country (countries and/or organizations), which are located on, operating on/from, or in transit through country's territory, according to international commitments. These activities constitute a separate Capability Area to the extent they exceed the existing support capability of Defense Forces unit structures, training, and stock levels.

This Mission Area has the following missions and their comprehensive support:

1) Managing and providing necessary assistance to friendly forces deploying into, operating in, or transiting the country;
2) Establish Unity of Effort among Forces transiting and operating in Rear Area;
3) Multinational and Interagency Relations Management.

6. **Out-of-Country Deployment Operations** (lead agent – General Staff). All out-of-country operations engaging Defense Forces' units or personnel. This Capability Area includes primarily peace or humanitarian operations with the participation of the country's military personnel, and participation of the Defense Forces' units or personnel in international exercises outside the country. In addition, this Capability Area covers all pre- and post-operation activities, also the sustainment of Defense Forces' units or personnel deploying, currently deployed, and re-deploying through the Defense Force's organic support capabilities, as well as through gaining missing support capabilities (e.g. air or sealift) from the Host Nation or other countries or organizations.

This Capability Area has the following missions and their comprehensive support:

1) Peacekeeping;
2) Military Diplomacy.

7. **Military Assistance to Civil Authorities** (lead agent – Ministry of Defense). Assistance rendered by the Defense Forces to civil authorities as directed by the law. Planning and participation of Defense Forces in crisis response takes place on the basis of Presidential or governmental decision or upon request of other executive authorities.

This Capability Area has the following missions and their comprehensive support:

1) Anti-terrorist Measures to Protect vital assets;
2) Terrorism Response Operations;
3) Civil Emergency Operations;
4) Render Explosive Ordnance Disposal (EOD);
5) Support National Search and Rescue;
6) Law Enforcement as directed by law.

8. **Central Command, Control, Communications and Intelligence Structure** (lead agent – General Staff). Execution of command and control of subordinate (assigned and co-operating) forces and assets, as well as intelligence gathering, analysis and dissemination. These activities are carried out both on the territory of the country and abroad, with due account of system requirements, including interoperability with other forces and nations (organizations). Create conditions for integration into unified C4I systems, as required.

This Capability Area has the following missions and their comprehensive support:

1) Execute Command and Control (C2) of forces and assets in their day-to-day activities;
2) Execute C2 of forces and assets in combat;
3) Prevent/Minimize destabilizing impact of natural factors and hostile activities on Command, Control, Communications, Computers and Intelligence (C4I) structure;
4) Conduct Electronic Warfare;
5) Strategic Intelligence, Surveillance, and Reconnaissance;
6) Counter-Foreign Intelligence Collection.

9. **Support to the national defense system** (lead agent – Ministry of Defense): activities of the Defense Forces and structural elements under the purview of the MOD to provide for national defense

This Capability Area has the following missions and their comprehensive support:

1) Mobilization;
2) Recruitment for Defense Forces and other power structures;
3) Defense Education.

10. **Support to Defense Forces' day-to-day (routine) activities** (lead agent – Ministry of Defense): activities of the Defense Forces and structural elements under the purview of the MOD to provide for Defense Forces' day-to-day activities

This Capability Area has the following missions and their comprehensive support:

1) Logistics support
2) Personnel support
3) Medical support
4) Quality of Life issues

(CCMR 2005a)

Annex J

Illustrative example of Programs Structure

Program / Sub-program / Program Element	Lead Agent
I. Land Operations	Army Command
I.1. Mechanized Infantry Brigade	Brigade HQ
I.1.1. 1st Infantry Battalion	Battalion HQ
I.1.2. Single Pioneer Battalion	Battalion HQ
I.1.3. 103rd Infantry Reserve Battalion	Battalion HQ
II. Air Operations	Air Force Command
II.1. Interceptor Fighter Wing	Wing HQ
II.1.1. 1st Fighter Squadron	Squadron HQ
III. Maritime Operations	Navy Command
III.1. Mine Countermeasures Squadron	Squadron HQ
III.1.1. MCM Vessel "Hawk"	Ship Commander
III.2. Port Albert Naval Base	Base HQ
IV. Special Operations	Special Forces Command
IV.1. SOF Team "Bravo"	Team Commander
V. Host Nation Support	Ministry of Defense
V.1. HNS Fuel Stock Sustainment	Logistics Command
V.2. Upgrading HNS Airfield	Logistics Command
VI. Out-of-Country Deployment Operations	General Staff
VI.1. Operation "Enduring Freedom"	Joint Operation Command
VI.1.1. 1st Rotation	Unit Commander
VI.1.1. 2nd Rotation	Unit Commander
VI.2. Operation "Artemis"	Joint Operations Command
VII. Assistance to Civil Authorities	Ministry of Defense
VII.1. Fighting forest fires	Joint Operations Command
VII.2. SAR at sea	Joint Operations Command
VIII. Central Command, Control, Communications and Intelligence Structure	General Staff
VIII.1. General Staff	General Staff
VIII.2. Army Command	Army Command
VIII.3. Single Signals Brigade	Brigade HQ
IX. Support to the national defense system	Ministry of Defense
IX.1. Main Mobilization Depot	Depot Commander
IX.2. National Defense College	College Commandant
X. Support to Defense Forces' day-to-day (routine) activities	Ministry of Defense
X.1. Military Hospital	Hospital Commandant
X.2. Logistics Brigade	Brigade HQ
X.2.1. Transport Battalion	Battalion HQ
X.3. Military Housing Department	Ministry of Defense

Annex K

Illustrative samples of Programs to Missions Crosswalk table

Strategic Level

Programs	Capability Areas									
	Land Ops	Air Ops	Maritime Ops	Special Ops	HNS	Out-of-country	MACA	C4I	Defense Support	Routine Support
I. Land Operations										
I.1. Mechanized Infantry Brigade	■						▒			
I.1.1. 1st Infantry Battalion	■					▒				
I.1.2. Single Pioneer Battalion	■					▒	▒			
I.1.3. 103rd Infantry Reserve Battalion	■				▒					
II. Air Operations										
II.1. Interceptor Fighter Wing		■								
II.1.1. 1st Fighter Squadron		■	▒			▒				
III. Maritime Operations										
III.1. Mine Countermeasures Squadron			■			▒				
III.1.1. MCM Vessel "Hawk"			■			▒				
III.2. Port Albert Naval Base			■							
IV. Special Operations										
IV.1. SOF Team "Bravo"				■		▒	▒			

Capability Area Level

Land Operations: Program elements	Missions					
	Area Defense	Mobile Defense	Offence (Counter-offence)	Prevent/Minimize Disruption of Support	designated Facilities and Assets	Territorial Defense and Rear Area Security Operations
I.1. Mechanized Infantry Brigade	■	■	■	■	■	▒
I.1.1. 1st Infantry Battalion	■	■	■	■	■	▒
I.1.2. Single Pioneer Battalion	■	■	■	■	■	
I.1.3. 103rd Infantry Reserve Battalion				▒	▒	■

Annex L

Commented sample format of Military Requirements Plan

PART A. INTRODUCTION AND SUMMARY

Chapters:
A.1. MAJOR CHANGES IN THE FORCE STRUCTURE
A.2. MAJOR PERSONNEL MOVEMENTS AND OPERATIONS
A.3. MAJOR CONSTRUCTION PROJECTS
A.4. MAJOR PROCUREMENT
A.5. RESEARCH AND DEVELOPMENT (R&D)

Explanation to Part A: The purpose of Part A is to give a summary of MRP Mission Areas (i.e. Part B of the MRP) in a concise format together with introductory remarks and background information (when deemed necessary). Thus, Part A is an executive summary that describes these Mission Areas at the macro level, which provides the information necessary to understand the more detailed explanation given in Part B.

Generally, the planners are free to present the information in Part A in any format they like[47]. However, there is a major exception: Part A *must* include summary tables that easily identify the total resource requirements (personnel and finances) for each Mission Area and these are further explained in Part B. Naturally, these tables may require explanations and comments that can be given in the accompanying narrative text. While composing Part A chapters, the following requirements must be taken into account:

- Chapter A.1 must identify the planned force structure for each of the MRP years. A.1 must also include a table that indicates the *total* budget requirements separately for each year and mission area. From a financial perspective, this table is the summary of the summary: it includes *all* costs that are presented in other Chapters of Part A and in even further detail in Part B. See examples of cost tables at the end of this Annex;
- Chapter A.2 must include a summary table identifying personnel figures and personnel movements. This information is presented both in total and separately for each of the mission areas[48]. From a financial perspective, Chapter A.2 identifies two cost types – personnel and Operations and Maintenance (O&M) costs[49] – separately for each mission area;

[47] A lot of information can be given simply as narrative text. Naturally, Part A should describe major events in each of the mission areas and refer to Part B for details.
[48] Optionally, information can also be presented separately for each of the units in mission areas.
[49] There is no separate chapter in part A for O&M costs or operations. This is because personnel and O&M costs (or personnel and operations) are closely related: more operations would generally increase personnel costs and more personnel activities (especially training) would increase O&M costs. Description of activities influencing O&M costs should be presented in this chapter.

- Chapter A.3 must identify major construction projects and include their costs for each year and mission area into a table format;
- Chapter A.4 must identify major procurement projects and include their costs for each year and mission area into a table format;
- Chapter A.5 must identify R&D projects and include their costs for each year and mission area into a table format.

The sum of costs identified in Chapters A.2 through A.5 must equal the total costs identified in both Chapter A.1 and Part B.

If feasible and necessary, the information in Part A should also be presented as a series of options that are then approved or disapproved during the decision-making phase of programming.

PART B. MISSION AREAS

This part of the document is divided into Mission Areas, with each of the cost accounts addressed separately under each.

B.1. LAND OPERATIONS
- B.1.1. Major Changes in the Force Structure
- B.1.2. Major Personnel Movements and Operations
- B.1.3. Major Construction Projects
- B.1.4. Major Procurement
- B.1.5. R&D

B.2. AIR OPERATIONS
- B.2.1. Major Changes in the Force Structure
- B.2.2. Major Personnel Movements and Operations
- B.2.3.Major Construction Projects
- B.2.4. Major Procurement
- B.2.5. R&D

B.3. MARITIME OPERATIONS
- B.3.1. Major Changes in the Force Structure
- B.3.2. Major Personnel Movements and Operations
- B.3.3.Major Construction Projects
- B.3.4. Major Procurement
- B.3.5. R&D

B.4. HOST NATION SUPPORT
- B.4.1. Major Changes in the Force Structure
- B.4.2. Major Personnel Movements and Operations
- B.4.3.Major Construction Projects
- B.4.4. Major Procurement
- B.4.5. R&D

B.5. OUT-OF-COUNTRY DEPLOYMENT OPERATIONS
- B.5.1. Major Changes in the Force Structure
- B.5.2. Major Personnel Movements and Operations
- B.5.3.Major Construction Projects
- B.5.4. Major Procurement
- B.5.5. R&D

B.6. MILITARY ASSISTANCE TO CIVIL AUTHORITIES
- B.6.1. Major Changes in the EDF Force Structure
- B.6.2. Major Personnel Movements and Operations
- B.6.3.Major Construction Projects
- B.6.4. Major Procurement
- B.6.5. R&D

B.7. CENTRAL COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE STRUCTURE
- B.7.1. Major Changes in the EDF Force Structure
- B.7.2. Major Personnel Movements and Operations
- B.7.3.Major Construction Projects
- B.7.4. Major Procurement
- B.7.5. R&D

B.8. NATIONAL DEFENSE SUPPORT/CENTRAL ADMINISTRATION
- B.8.1. Major Changes in the EDF Force Structure
- B.8.2. Major Personnel Movements and Operations
- B.8.3.Major Construction Projects
- B.8.4. Major Procurement
- B.8.5. R&D

Explanation to Part B: The purpose of Part B is to provide more detailed information about the activities and costs in each of the mission areas. To facilitate understanding, the description of activities and costs within a Part B Chapter (i.e., a mission area) should generally be presented in a format similar to that of Part A, e.g. B.1.1 Major Changes in the Force Structure[50], B.1.2 Major personnel movements and operations with their respective tables, etc. See examples of the cost tables at the end of this Annex.

The information about the various activities presented within each mission area must show the link to mission area Capability Gaps that are identified earlier as an outcome of the Planning phase of the process, at least in a narrative text. When deemed feasible and important enough to emphasize, the financial and personnel information can also be linked with the Capability Gaps in a table.

Unlike in Part A the information in Part B Chapters should not be summary information. Although the tables presented here should follow a similar format as in Part A, they must contain the information at the level of detail that the Minister deems appropriate. Generally, this means that most activities and costs should be tied directly to units at least on battalion (or its equivalent) level.

[50] From financial side, similarly to Part A Chapter A.1., Part B Sub-chapters B.X.1 will then also summarize cost information, but for their individual mission area only. Other Part B Sub-chapters (B.X.2 to B.X.5) will then further specify cost information specified in B.X.1.

EXAMPLES OF SUGGESTED FORMATS FOR MRP COST TABLES:

TABLE TO CHAPTER A.1. MAJOR CHANGES IN THE FORCE STRUCTURE

	YEARS				
Mission areas	**2006**	**2007**	**2008**	**2009**	**2010**
1. Land Operations total					
2. Air Operations total					
3. Maritime Operations total					
etc.					
Total					

TABLE TO CHAPTER A.2. MAJOR PERSONNEL MOVEMENTS AND OPERATIONS

	YEARS				
Mission areas	**2006**	**2007**	**2008**	**2009**	**2010**
1. Land Operations					
-personnel costs					
-O&M costs					
2. Air operations					
-personnel costs					
-O&M costs					
3. Maritime operations					
-personnel costs					
-O&M costs					
etc.					
Total personnel costs					
Total O&M costs					

TABLE TO CHAPTER B.1. LAND DEFENSE OPERATIONS

	YEARS				
Mission Area: Land Operations	**2006**	**2007**	**2008**	**2009**	**2010**
Unit 1 total					
Unit 2total					
Unit 3 etc					
Land Operations costs not associated with concrete units					
Land Operations total					

TABLE TO CHAPTER B.1.2. PERSONNEL MOVEMENTS AND OPERATIONS

	YEARS				
Mission area: Land Operations	**2006**	**2007**	**2008**	**2009**	**2010**
Unit 1					
-personnel costs					
-O&M costs					
Unit 2					
-personnel costs					
-O&M costs					
Unit 3 etc					
… ….					
Costs not associated with concrete units					
-personnel costs					
-O&M costs					
Total personnel costs					
Total O&M costs					

TABLE TO CHAPTER B.1.4.A. MAJOR PROCUREMENT PROJECTS (SUMMARY OF UNITS)

	YEARS				
Mission Area: Land Operations	**2006**	**2007**	**2008**	**2009**	**2010**
Unit 1 total					
Unit 2total					
Unit 3 etc					
Procurement costs not associated with concrete units					
Total					

TABLE TO CHAPTER B.1.4.B. MAJOR PROCUREMENT PROJECTS (SUMMARY OF ITEMS)

	YEARS				
Mission Area: Land Operations	**2006**	**2007**	**2008**	**2009**	**2010**
Rifle 1 total					
Rifle 2 total					
81mm mortars					
heavy trucks type Y					
etc, etc					
Total					

Notes to Table B.1.4.B:
Note 1: It would be advisable to combine cost information with planned procurement quantities
Note 2: There is also a need for tables that associate the units with actual numbers of personnel and equipment. If the tables are not included in the MRP, then they must be presented in the appropriate units' master plan (Step Seven of programming).

(Estonia 2002)

Annex M

Commented sample Annual Report format

Part A. Introduction and Summary
Chapters:
A.1. MAJOR CHANGES IN THE FORCE STRUCTURE
A.2. MAJOR PERSONNEL MOVEMENTS AND OPERATIONS
A.3. MAJOR CONSTRUCTION PROJECTS
A.4. MAJOR PROCUREMENT
A.5. RESEARCH AND DEVELOPMENT (R&D)

Explanation to Part A:
The purpose of Part A is to give a summary of achievements in each of MRP Mission Areas (i.e. Part B) in a concise format together with introductory remarks and background information (when deemed necessary). Thus, Part A is an executive summary that describes developments within these Mission Areas at the macro level, providing the information necessary to understand the more detailed explanation given in Part B.

Generally, the information in Part A is provided in the same format as in the respective part of annual plan, the implementation of what is reported[51]. However, Part A *must* include summary tables that easily identify the total resource (personnel and finances) actually utilized/employed in each Mission Area, to be further explained in Part B. Naturally, these tables may require explanations and comments that can be given in the accompanying narrative text. While composing Part A chapters, the following requirements must be taken into account:

- Chapter A.1 must identify the achieved force structure. A.1 must also include a table that indicates the *total* budget expenditures separately for each mission area. From a financial perspective, this table is the summary of the summary: it includes *all* expenditures that are presented in other Chapters of Part A and in even further detail in Part B. See examples of cost tables at the end of this Annex;
- Chapter A.2 must include a summary table identifying personnel figures and personnel movements. This information is presented both in total and separately for each of the mission areas[52]. From a financial perspective, Chapter A.2 identifies two cost types – personnel and Operations and maintenance (O&M) costs[53] – separately for each mission area;

[51] A lot of information can be given simply as narrative text. Naturally, Part A should describe major events in each of the mission areas and refer to Part B for details.
[52] Optionally, information can also be presented separately for each of the units in mission areas.
[53] There is no separate chapter in part A for O&M costs or operations. This is because personnel and O&M costs (or personnel and operations) are closely related: more operations would generally increase personnel costs and more personnel activities (especially training) would increase O&M costs. Description of activities influencing O&M costs should be presented in this chapter.

- Chapter A.3 must identify major construction projects and include actual expenditures under each project and mission area as a whole in a table format;
- Chapter A.4 must identify major procurement projects and include actual expenditures under each project and mission area as a whole in a table format;
- Chapter A.5 must identify R&D projects and include actual expenditures under each project and mission area as a whole in a table format.

The sum of expenditures identified in Chapters A.2 through A.5 must equal the total expenditures identified in both Chapter A.1 and Part B.

Part B. Mission Areas

B.1. LAND OPERATIONS
- B.1.1. Major Changes in the Force Structure
- B.1.2. Major Personnel Movements and Operations
- B.1.3.Major Construction Projects
- B.1.4. Major Procurement
- B.1.5. R&D

B.2. AIR OPERATIONS
- B.2.1. Major Changes in the Force Structure
- B.2.2. Major Personnel Movements and Operations
- B.2.3.Major Construction Projects
- B.2.4. Major Procurement
- B.2.5. R&D

B.3. MARITIME OPERATIONS
- B.3.1. Major Changes in the Force Structure
- B.3.2. Major Personnel Movements and Operations
- B.3.3.Major Construction Projects
- B.3.4. Major Procurement
- B.3.5. R&D

B.4. HOST NATION SUPPORT
- B.4.1. Major Changes in the Force Structure
- B.4.2. Major Personnel Movements and Operations
- B.4.3.Major Construction Projects
- B.4.4. Major Procurement
- B.4.5. R&D

B.5. OUT-OF-COUNTRY DEPLOYMENT OPERATIONS
- B.5.1. Major Changes in the Force Structure
- B.5.2. Major Personnel Movements and Operations
- B.5.3.Major Construction Projects
- B.5.4. Major Procurement
- B.5.5. R&D

B.6. MILITARY ASSISTANCE TO CIVIL AUTHORITIES
- B.6.1. Major Changes in the Force Structure
- B.6.2. Major Personnel Movements and Operations
- B.6.3.Major Construction Projects
- B.6.4. Major Procurement
- B.6.5. R&D

B.7. CENTRAL COMMAND, CONTROL, COMMUNICATIONS AND INTELLIGENCE STRUCTURE
- B.7.1. Major Changes in the Force Structure
- B.7.2. Major Personnel Movements and Operations
- B.7.3.Major Construction Projects
- B.7.4. Major Procurement
- B.7.5. R&D

B.8. NATIONAL DEFENSE SUPPORT/CENTRAL ADMINISTRATION
- B.8.1. Major Changes in the Force Structure
- B.8.2. Major Personnel Movements and Operations
- B.8.3.Major Construction Projects
- B.8.4. Major Procurement
- B.8.5. R&D

Explanation to Part B:
The purpose of Part B is to provide more detailed information about the activities and expenditures in each of the mission areas. To facilitate understanding, the description of activities and expenditures within a Part B Chapter (i.e., a Mission Area) should generally be presented similar to that of Part A, e.g. B.1.1 Major Changes in the Force Structure[54], B.1.2 Major personnel movements and operations with their respective tables, etc. See Appendix 1: Examples of the cost tables.

The information about activities presented within each mission area must show the link to mission area Capability Gaps identified earlier as an outcome of the Planning phase of the process, at least in a narrative text. When deemed feasible and important enough to emphasize, the financial and personnel information can also be linked with Capability Gaps in a table.

Unlike in Part A the information in Part B Chapters should not be summary information. Although the tables presented here should follow a similar format as in Part A, they must contain the information at the level of detail the Minister of Defense deems appropriate. Generally, this means that most activities and expenditures should be tied directly to units at least on battalion (or its equivalent) level.

Part C. Achieved Capability and Readiness Levels.
This part of reporting relies on Capability Profiles. For existing line and reserve units, developed Capability Profiles must be updated annually. Within this update, actually achieved capability and readiness levels of that unit as certified through exercises or testing, must be adequately reflected. This update, developed in a format of simplified Capability Profile, constitutes the essence of Part C of the Annual Report.

[54] From financial side, similarly to Part A Chapter A.1, Part B Sub-chapters B.X.1 will then also summarize cost information, but for their individual mission area only. Other Part B Sub-chapters (B.X.2 to B.X.5) will then further specify cost information specified in B.X.1.

Appendix 1

Sample formats of annual report expenditure tables

TABLE TO CHAPTER A.1. MAJOR CHANGES IN THE FORCE STRUCTURE

	EXPENDITURES
Mission areas	
1. Land Operations total	
2. Air Operations total	
3. Maritime Operations total	
etc.	
Total	

TABLE TO CHAPTER A.2. MAJOR PERSONNEL MOVEMENTS AND OPERATIONS

	EXPENDITURES
Mission areas	
1. Land Operations	
-personnel costs	
-O&M costs	
2. Air Operations	
-personnel costs	
-O&M costs	
3. Maritime Operations	
-personnel costs	
-O&M costs	
etc.	
Total personnel costs	
Total O&M costs	

TABLE TO CHAPTER B.1. LAND OPERATIONS

	EXPENDITURES
Mission Area: Land Operations	
Unit 1 total	
Unit 2total	
Unit 3 etc	
Land Operations costs not associated with concrete units	
Land Operations total	

TABLE TO CHAPTER B.1.2. PERSONNEL MOVEMENTS AND OPERATIONS

	EXPENDITURES
Mission area: Land Operations	
Unit 1	
-personnel costs	
-O&M costs	
Unit 2	
-personnel costs	
-O&M costs	
Unit 3 etc	
… ….	
Costs not associated with concrete units	
-personnel costs	
-O&M costs	
Total personnel costs	
Total O&M costs	

TABLE TO CHAPTER B.1.4.A. MAJOR PROCUREMENT PROJECTS (SUMMARY OF UNITS)

	EXPENDITURES
Mission Area: Land Operations	
Unit 1 total	
Unit 2total	
Unit 3 etc	
Procurement costs not associated with concrete units	
Total	

TABLE TO CHAPTER B.1.4.B. MAJOR PROCUREMENT PROJECTS (SUMMARY OF ITEMS)

	EXPENDITURES
Mission Area: Land Operations	
Rifle 1 total	
Rifle 2 total	
81mm mortars	
Heavy trucks type Y	
etc, etc	
Total	

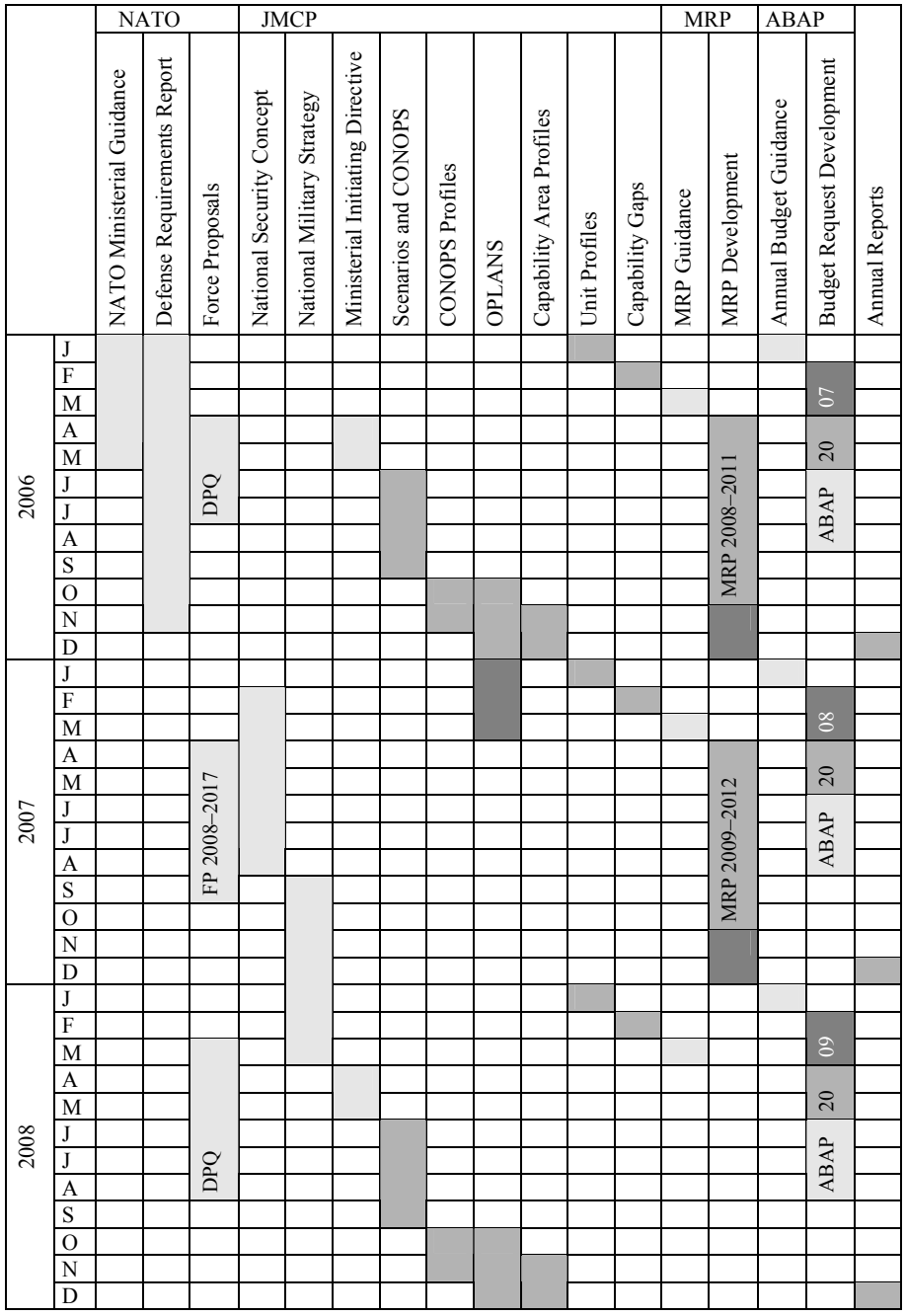
Notes to Table B.1.4.B:
Note 1 – It would be advisable to combine cost information with procurement quantities
Note 2 – There is also a need for tables that associate the units with actual numbers of personnel and equipment. (CCMR 2002)

Annex N

Illustrative sample Planning Calendar 2007

Date	Activity	Lead	Support
2/1 – 26/1	Draft and submit for Ministerial approval Budget and Planning Guidance for FY 2008	MOD Defense Planning Department	MOD: Policy Planning Department, Financial Department GS: J3, J5 Service Staffs
2/1 – 1/2	Update Unit Capability Profiles based on 2006 Reports	GS J3	GS J1, J5, J7 Service Staffs
2/1 – 30/3	Conduct detailed operational planning according to approved CONOPS and submit resulting OPLANs to next higher authority for approval	Service Staffs	GS J3 Subordinate formation and unit HQs
29/1 – 2/3	Identify Capability Gaps and submit to CHOD for endorsement	GS J5	GS J3, J4, J6, J7 Service Staffs
29/1 – 31/8	Participate in the development of draft National Security Concept	MOD Policy Planning Department	MOD Defense Planning Department GS J5
29/1 – 30/3	Develop Service Action Plans and Budget Requests for FY 2008 and submit to GS J3 for deconfliction	Service Staffs	GS J3, J5, J7, J8
5/3 – 30/3	Draft and submit for Ministerial approval MRP Guidance for 2009–2012	MOD Defense Planning Department	MOD: Policy Planning Department, Financial Department, Materiel Department GS: J3, J5 Service Staffs
2/4 – 28/9	Participate in the development of NATO Force Proposals for 2008–2017	MOD Defense Planning Department	MOD: Policy Planning Department, Financial Department GS: J5, J7, J8 Service Staffs
2/4 – 26/10	Develop MRP for 2009–2012 and submit for Ministerial approval	MOD Defense Planning Department	MOD: Policy Planning Department, Financial Department, Materiel Department GS: J3, J5 Service Staffs

Date	Activity	Lead	Support
2/4 – 25/5	Develop Defense Forces consolidated Action Plan and Budget Request for FY 2008 and submit to MOD	GS J3	MOD: Defense Planning Department GS: J1, J4, J5, J6, J7, J8 Service Staffs
28/5 – 31/8	Develop consolidated MOD Budget Request for FY 2008, submit to Ministry of Finances and participate in deconfliction	MOD Defense Planning Department	MOD: Policy Planning Department, Financial Department GS: J3, J5
3/9 – 28/12	Develop draft National Military Strategy. Final draft is due by 31/3/2008	MOD Policy Planning Department	MOD Defense Planning Department GS J5
29/10 – 28/12	Develop Mission Area Master Plans based on approved MRP for 2009–2012	Mission Area Lead Agents	MOD Defense Planning Department GS J1, J3- J8 Service Staffs Subordinate formation and unit HQs
26/11 – 28/12	Develop annual Activity Reports and submit next higher authority for consolidation	MOD Defense Planning Department	GS J3 Service Staffs Subordinate formation and unit HQs


NATO
JMCP
MRP
ABAP
NATO Ministerial Guidance
Defense Requirements Report
Force Proposals
National Security Concept
National Military Strategy
Ministerial Initiating Directive
Scenarios and CONOPS
CONOPS Profiles
OPLANS
Capability Area Profiles
Unit Profiles
Capability Gaps
MRP Guidance
MRP Development
Annual Budget Guidance
Budget Request Development
Annual Reports
2006
2007
2008
J F M A M J J A S O N D
DPQ
DPQ
FP 2008–2017
MRP 2008–2011
MRP 2009–2012
ABAP 07
ABAP 20
ABAP 08
ABAP 20
ABAP 09
ABAP 20
Lead Agent – Ministry of Defense
Lead Agent – General Staff
Lead Agents – Service Staffs