# *CONNECTIONS*
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# Editorial: Planning and Development of Defense Institutions in a Time of Transformation

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One could make a persuasive argument that all countries either are at present, or will be in the near future, undergoing some form of a process that can be described as "defense reform." A reduction in the defense budget, as has happened in most NATO and Partnership states, or a significant change in policy direction—e.g., the Bush Administration's "defense transformation" strategy—will result in a spate of defense reform. However, an equally persuasive argument can be made that long-standing democracies (such as those nations within the Alliance) are particularly well equipped to undertake such re-organizations, given the strength of their defense institutions. Such strength is characterized by the following qualities: a constructive, consensus-based inter-ministerial consultative process; a cadre of educated and experienced civilian defense officials within the Ministry of Defense and national defense headquarters; the presences of defense experts in key civilian ministries (most importantly, the Ministry of Finance); carefully promulgated (and vetted) laws relating to defense; and an experienced body of professional military officers, who are well versed in the realities of civilian control of the military. One should note, for example, that, based on recent experiences with defense reductions in Great Britain and the Netherlands, defense reforms can be confusing to the public and painful to execute from within the defense community, even when these advantages are present.

Consider, therefore, the plight of a young democracy with weak institutions, insufficiently educated and trained defense officials and senior military officers, legacy bureaucratic structures, an imperfect codex of defense legislation, and a dysfunctional inter-ministerial consultative process. Given the extent of the challenges presented by defense reform, it is little wonder that the effort to undertake such reforms is likely to appear all but insurmountable in such a state, and for good reason.

Therefore, one should give a favorable assessment to the declaration of 7 June 2004 by the Euro-Atlantic Partnership Council of a new Partnership Action Plan on Defense Institution Building (PAP-DIB). To be sure, there is little new in what has become known as the "Ten Commandments" of PAP-DIB:[1]

1. Develop effective and transparent arrangements for the democratic control of defense activities, including appropriate legislation and coordination arrangements setting out the legal and operational role and responsibilities of key state institutions in the legislative and executive branches of government.

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[1] Euro-Atlantic Partnership Council, *Partnership Action Plan on Defense Institution Building* (PAP-DIB) (Brussels: NATO Basic Texts 7 June 2004), available at www.nato.int/docu/basictxt/b040607e.htm.

2. Develop effective and transparent procedures to promote civilian participation in developing defense and security policy, including participation of civilians in governmental defense institutions, cooperation with non-governmental organizations, and arrangements to ensure appropriate public access to information on defense and security issues.

3. Develop effective and transparent legislative and judicial oversight of the defense sector, including appropriate arrangements to ensure due legal process.

4. Develop effective and transparent arrangements and procedures to assess security risks and national defense requirements; develop and maintain affordable and interoperable capabilities corresponding to these requirements and international commitments, including those within the framework of PfP.

5. Develop effective and transparent measures to optimize the management of defense ministries and agencies with responsibility for defense matters and associated force structures, including procedures to promote inter-agency cooperation.

6. Develop effective and transparent arrangements and practices to ensure compliance with internationally accepted norms and practices established in the defense sector, including export controls on defense technology and military equipment.

7. Develop effective and transparent personnel structures and practices for defense forces, including training and education, promotion of knowledge of international humanitarian law, arrangements for transparent promotion and career development, and for the protection of the civil rights and freedoms of members of the armed forces.

8. Develop effective and transparent financial, planning, and resource allocation procedures in the defense area.

9. Develop effective, transparent, and economically viable methods for the management of defense spending, taking into account macroeconomic affordability and sustainability; develop methods and policies in order to cope with the socio-economic consequences of defense restructuring.

10. Develop effective and transparent arrangements to ensure effective international cooperation and promote neighborly relations in defense and security matters.

Rather, the true value of PAP-DIB is to better align the orientations of member nations of both the Partnership and NATO to addressing what is admittedly a considerable amount of unfinished business in the area of defense rationalization and reform. By placing defense reform within the useful context of the Planning and Review Process, PAP-DIB brings to bear the attention necessary for both reforming countries and for those engaged in providing them with needed technical assistance in defense reform and in adapting Western norms of civilian control of the military and transparent planning and execution. If nothing else, defense officials and military officers from Allied and Partner nations should come to identify PAP-DIB with national defense reform. All efforts that are initiated to achieve the PAP-DIB objectives will inexorably assist in effecting national defense reform. Indeed, while perhaps verging on impertinence, one

might well argue that PAP-DIB could be even more important for NATO nations that it is for their partners, because it has brought the subject of defense institution building to the forefront of policy deliberations within the Alliance, as well as within the context of 26 + 1 deliberations.

This special edition of *Connections* was conceived by the Consortium of PfP Defense Academies and Security Studies Institutes to serve as an initial step toward a constructive dialogue on the question of what constitutes effective defense institution building. In this issue, the editors have attempted to bring together a series of practically-focused essays that address specific areas of defense planning and transformation. Readers will find essays on principles, best practices, and case studies in defense policy-making, capability-based planning, defense resource management, and acquisition management, as well as information on technical assistance, education, and training resources available for reforming Partner countries. We hope that readers who are interested in enhancing existing defense planning mechanisms will find in this publication ideas on how to match capabilities with security risks, defense requirements, and available resources; how to increase the effectiveness and the transparency of financial, planning, and resource allocation procedures; and how, in general, to enhance the effectiveness of their efforts toward managing defense ministries and armed forces.

Certainly, the literature of defense reform is in need of both growth and enrichment. If these essays encourage defense experts to document the experiences of successes and failures of other nations in the reform of defense structures, procedures, and management, then all nations—whether Allies, Partners, or otherwise—will be the better for their efforts. It is clear that best practices in defense reform can be discerned by studying successful reforms, but they can also be gleaned from examining what has failed, and why. Moreover, let us be clear and forceful in arguing that the experiences of small, reforming nations in defense institution building are equally legitimate contributions to our collective understanding of best practices as are those derived from long-established and large democracies. Best practices can be applied across borders and in different contexts, yet we should also keep in mind that what has worked in one nation may not work everywhere else. Thus, the more Allies and Partners can identify and document best practices, the better will be the understanding in all nations of how best to achieve the elusive and perennially challenging task of undertaking defense reform.

# DCAF's Activities in Support of Effective and Democratically Transparent Defense Planning

*Philipp Fluri and Eden Cole* [*]

The Geneva Centre for the Democratic Control of Armed Forces (DCAF) focuses on democratic oversight of and guidance for the defense and security sector. Increasing transparency and efficiency in defense planning and spending thus do not generally fall under DCAF's purview in the strict sense, and are addressed only within the larger context of defense institution building.

The defense budgetary process in a given state—from its formulation by the executive, its enactment into law by the legislature, its implementation, and ultimately its auditing and evaluation—is circumscribed by a number of parameters, and requires that the different actors have competencies in dealing with democratic processes and multiple constituencies that are never called upon under authoritarian systems. On the contrary, the legislature in authoritarian states is often content to "render unto Caesar what is Caesar's"—that is, to leave the responsibility for things military with the military and/or the security services, as such matters "cannot be understood by lay persons anyway." In a similar vein, within their ministry itself the defense planners may decide to leave their task essentially in the hands of the "commissars" of the presidential apparatus, as this is the place where power is concentrated and monopolized in such systems. As an important consequence, defense planning in transitional states is fraught with problems that are all too familiar: an executive which has first to learn about transparent planning cycles and gain self-confidence in the implementation thereof; a legislative power which needs to learn about guidance and oversight mechanisms; and national media and institutions of civil society which need to change their expectations from commenting on the successes of authoritarian leadership to the assumption of the responsibility for public oversight.

On the other hand, defense planners in democratic societies often take a transparent and accountable defense planning cycle for granted, which may cause misunderstandings in cooperative programs with their counterparts from transitional states. The "logic" of the national security planning process involves extraneous parameters that are not simply "givens," but that themselves presuppose transparent and accountable decision-making processes. These processes take into account such notions as national interests; threats, risks, and challenges to the national interest; the identification of opportunities and mechanisms to address them; and documents on the perception of security-related issues (a national security policy document, a defense strategy). They are also subject to the objective availability of resources, which depends on the economic

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performance of a given society and the competing demands between the security sector and other segments of society for their share of the national economic pie.

Since 2000, DCAF has developed a number of programs to assist transitional states in developing proper democratic oversight of their armed forces, including guidance strategies and competencies that also touch on defense planning. In this essay, we will provide a list of such activities, including references to further documentation available on the Internet.

## 1. Self-Assessment Studies

For both domestic and international experts to gain a clear understanding of the status of the defense and security sector in a given country—and, against this background, to gain an appreciation for the needs and opportunities of a *structured* reform process—there is a need to document, analyze, and take stock of the current state. Acting on a mandate from the Swiss Ministry of Foreign Affairs, the Geneva Centre for DCAF implemented (in cooperation with the Stability Pact Table III) Self-Assessment Studies on Defense and Security Sector Reform in Albania, Bulgaria, Croatia, Macedonia, Moldova, and Romania from 2000 through 2004.[1] Mixed teams of experts from both governmental and non-governmental organizations, academia, and the media were instructed on best practices in defense and security sector governance through training programs and readings in the current literature in the field. These teams were then asked to document and assess one aspect of defense and security sector reform in their country.

The "self-assessment" program, though not free from initial challenges posed by group dynamics and knowledge gaps, yielded six book-size country studies which are to date the most comprehensive documentations of defense and security sector reform readily and unrestrictedly available in English. By empowering a group of dedicated

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[1] These works include: Eden Cole, Timothy Donais, and Philipp H. Fluri, eds. *Defence and Security Sector Governance and Reform in South East Europe Self-Assessment Studies: Regional Perspectives* (Baden-Baden: Nomos, 2004), see www.dcaf.ch/publications/ SSG_regional.cfm?nav1=4&nav2=2; Philipp H. Fluri and Jan A. Trapans, eds., *Defence and Security Sector Governance and Reform in South East Europe: Insights and Perspectives: A Self-Assessment Study,* Volume 1*; Albania;. Bulgaria; Croatia* (Belgrade/Geneva: CCMR, 2003); Volume 2, *Macedonia, Moldova, Romania* (Belgrade/Geneva: CCMR, 2003), see www.dcaf.ch/_docs/SSG_regional/SEE_publications.pdf; David Law and Philipp Fluri, eds., *Security Sector Expert Formation—Achievements and Needs in South East Europe* (Vienna: National Defence Academy, in cooperation with the Geneva Centre for the Democratic Control of Armed Forces and the PfP-Consortium of Defence Academies and Security Studies Institutes, 2003), available at www.dcaf.ch/publications/SS_expert.cfm?nav1=4&nav2=2; Philipp Fluri and Velizar Shalamanov, eds., *Security Sector Reform—Does It Work? Problems of Civil-Military and Inter-Agency Cooperation in the Security Sector* (Sofia: Procon, 2003), available at www.dcaf.ch/publications/ SSR_work.cfm?nav1=4&nav2=2; David Greenwood, ed., *Transparency and Accountability in South East European Defence* (Sofia: DCAF/George C. Marshall-Bulgaria, 2003), available at www.dcaf.ch/publications/ Transparency_defence.cfm.

experts from both government and civil society, this approach also contributes to the creation of a "strategic community" of experts in these countries. Elaborate question-naires ensure not only a structured approach for a given country, but also permit cross-country analysis on specific topics. Special attention ought thereby to be given to accountability and transparency.

A team of Georgian experts has been engaged in a similar exercise since 2002.[2] In Ukraine, the publication of the proceedings of a series of seminars documenting the progress of defense reform served a similar purpose.[3]

## 2. Working Groups/Yearbooks on Defense and Security Sector Reform

Ideally, such self-assessment efforts do not stop with the publication of reports, but lead to sustained local efforts to document, assess, and possibly support ongoing reform efforts. This is the case in Bulgaria, where a consortium of non-governmental think tanks is monitoring the reform process, and in Turkey, where the forthcoming (2006) Yearbook by a TESEV-led security sector reform working group may have a ground-breaking effect on both the empowerment of civil society and the monitoring of defense and security sector reform.

## 3. Collection and Analysis of Laws and Policy Documents

As most transitional states suffer from a multitude of both inherited and newly created laws, presidential *ukasy*, and policy documents, etc., which in the interest of a "divide-and-conquer" mentality were never fully publicized in these states' authoritarian past, there will be a need to document the existing legal situation by collecting and making publicly accessible such laws and policies (ideally also in English), as there may (and in fact should) be an interest on the part of cooperative programs in assessing and proposing amendments to such legislation. The Geneva Centre has run such documentation programs in the Russian Federation (in cooperation with the Duma Defense Committee), Georgia (in cooperation with the Parliamentary Staff Directorate), and in Ukraine (in cooperation with then-Rada President Litvin and Defense and Security Committee Chairman G. K. Kriuchkov). The Ukrainian legislation is now being trans-

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[2] David Darchiashvili and Philipp H. Fluri, eds., *After Shevardnadze: Georgian Security Sector Governance After the Rose Revolution,* available at www.dcaf.ch/publications/georgia_ssg.cfm?nav1=4&nav2=2.

[3] Philipp H. Fluri and Sergei Piroshkov, eds., *Ukrainian Security Sector Reform: Materials from the International Conference, Kiev, 27th – 28th May 2004* (Kiev: Mig Press for DCAF & NIISP, 2004) (in Ukrainian); available at www.dcaf.ch/lpag/pub_fluri_piroshkov.cfm?navsub1=4&navsub2=3&nav1=3. See also Leonid Polyakov, "An Analytical Overview of Democratic Oversight and Governance of the Defence and Security Sector in Ukraine," *DCAF Working Papers*, No. 152 (January 2005); available at http://www.dcaf.ch/_docs/wp152.pdf.

lated into English by the Geneva Centre on a mandate from NATO in support of the impending defense review process in Ukraine.[4]

## 4. Textbooks, Model Laws, Model Organizational Charts, etc.

In support of these early collection and assessment activities, aid organizations may decide to produce a number of model laws (e.g., on democratic parliamentary oversight) and model descriptions of ministerial organization (most transitional states will be found to have no civilian oversight structures within the Ministries of Defense—a number of Mediterranean Dialogue countries do not even have Defense Ministries). Geneva Centre publications on parliamentary oversight of the defense and security sector—co-published with the NATO Parliamentary Assembly (NPA) and the Inter-Parliamentary Union—have proven to be rather successful; of the latter, some 100,000 copies have been distributed worldwide in thirty languages to date, including Arabic, Russian, Spanish, Turkish, and Chinese.[5] Similarly, textbook-type publications on such topics as defense institution building, defense planning and budgeting, etc., can be ex-

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[4]  *Collection of Russian Security Sector Laws*, All extant acts relating to the security sector published in English and Russian, see http://www.dcaf.ch/publications/bm_arbatov.cfm ?nav1=4&nav2=2; *Georgian Security Sector Laws*, All extant acts relating to the security sector translated and published in English as "The Security Sector Laws of Georgia," available at http://www.dcaf.ch/publications/SSL_Georgia.cfm?nav1=4&nav2=2; *Ukrainian Security Sector Laws*, published as Volodimir Litvin, Philipp Fluri, and Georgi Krychkov, eds., *Legal Foundations of the Defense Apparatus and Civil-Military Relations* (Kiev: Verkhovna Rada, 2005) (in Ukrainian and Russian), published in cooperation with DCAF, see http://www.dcaf.ch/publications/legal_foundations.cfm?nav1=4&nav2=2.

[5]  Philipp Fluri and Anders Johnsson, eds., *Parliamentary Oversight of the Security Sector: Principles, Mechanisms and Practices* (Lausanne: Presses Centrales Lausanne SA, 2004) is available in Albanian, Arabic, Armenian, Azeri, Bahasa, Bosnian, Bulgarian, Croatian, English, Farsi, French, Georgian, German, Hungarian, Kyrgyz, Latvian, Macedonian, Mongolian, Polish, Romanian, Russian, Serbian, Slovenian, Spanish, Turkish, Urdu, and Ukrainian. See www.dcaf.ch/oversight/_publications.cfm?navsub1=12&navsub2=3& nav1=3.

   For the DCAF-NATO Parliamentary Assembly Handbook for Defence Committees, see Hans Born, Philipp H. Fluri, and Simon Lunn, eds., *Oversight and Guidance: The Relevance of Parliamentary Oversight for the Security Sector and its Reform* (Brussels/Geneva: DCAF, 2003); see http://www.dcaf.ch/_docs/dcaf_doc4.pdf. Russian and Ukrainian versions have been available since 2005.

   Versions in other languages are pending, and can be provided once funding is available. On parliamentary oversight of intelligence services, see Hans Born and Ian Leigh, eds., *Making Intelligence Accountable: Legal Standards and Best Practice for Oversight of Intelligence Agencies* (Oslo: Publishing House of the Parliament of Norway, 2005). Russian, Ukrainian, and Serbian versions are also available; see www.dcaf.ch/handbook_intelligence/_index.cfm ?navsub1=27&nav1=3.

pected to be of similar interest both to experts directly involved in these processes and to a larger public interested in substance and oversight questions.[6]

## 5. Empowerment Programs

At early or even only preparatory stages of reform, as well as during the entire reform process, empowerment programs for both governmental and non-governmental experts are of importance. The Rose-Roth process has been highly successful in the parliamentary sphere, while a plethora of Partnership for Peace programs have been instrumental in training mainly representatives of the executive branches and the military and security services themselves—a reason why one may favor considering similar programs for the MENA region now. Within the framework of the Partnership for Peace, DCAF has been cooperating continuously with the NPA and local parliaments and ministries. Special attention has also been given to DCAF's South East Europe Parliamentary Staffers empowerment program. Under this program, DCAF hires, equips, and trains staffers in most South East European countries (in cooperation with the national parliaments). As of April 2006, the Moldovan Parliament has also been offered the services provided by the training program, and is deliberating how to best make use of it.

## 6. Implementing Reform

All the activities listed above will continue to be of importance in the implementation phase of the reform process. They may, however, change in shape, and will certainly change in content, depending on local conditions. In a number of reform situations, "twinning" has been found to be a highly effective tool for "on-the-job training." As decision-makers and high-level administrators can be expected to be burdened with a heavy workload, they will hardly be able to acquire further expert knowledge while in office by any way other than learning on the job. Training must thus be brought to them under the conditions of their specific working and decision-making positions. Through "twinning," experienced or retired officials from established and/or advanced reform states are paired with administrators in a similar position in a transitional state. These trainers make themselves available for a number of weeks a year to visit their partners, as well as their superiors and collaborators, and to assist them in making decisions in the light of best practices in the field. These partners can also provide assis-

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[6]  A DCAF-prepared *Model Law on Parliamentary Oversight* was adopted in 2001 by the CIS Parliamentary Assembly. For English text, see www.dcaf.ch/_docs/dcaf_doc1_1.pdf; for Russian text, see www.dcaf.ch/_docs/dcaf_doc1_1R.pdf. See also *Draft Federal Law for Improvements to Civilian Oversight of Armed Forces in the Russian Federation*, at www.dcaf.ch/_docs/dcaf_doc6.pdf.
   Similarly, a DCAF-prepared *Model Legislation on Peacekeeping and Military Affairs* was passed by the CIS Parliamentary Assembly; it is available online at www.dcaf.ch/lpag/ev_stpeter_031001_papers.cfm?navsub1=4&navsub2=2&nav1=3 and www.dcaf.ch/_docs/dcaf_doc5.pdf.

tance in drafting documents and finding training opportunities for the next generation of civil servants in the ministries in question. Though no domain of defense governance should be excluded from such cooperation, there are key areas of democratic defense and security governance that will require special attention:

- Key guidance, transparency, and confidence-building policy documents, such as a national security policy document
- Democratic civilian executive and parliamentary oversight, including over the intelligence services
- Defense planning and budgeting
- A qualified information policy
- Inter-ministerial, inter-agency, and international cooperation
- Legal transparency and the rule of law

## 7. Monitoring Reform

For defense and security sector governance to be truly democratic and effective, the relevant actors need to be monitored and assisted by empowered parliaments and civil societies. Reform, though in many cases planned and implemented by the executive branch, needs to be firmly rooted in the nation's culture itself. Reform is, in the last analysis, a transfer and promotion of cultural values, norms, standards, and procedures, and will only work if and when the expectations and habits of the entire society become democratic and a system of checks and balances is firmly in place.[7]

## 8. Legal-Political Assistance Group (LPAG) and "Twinning" Programs

In a transitional state, all hands are needed on deck, and senior defense officials will rarely find opportunities to acquire new expertise through training or advanced education. Moreover, in a classical post-authoritarian situation, very few transition leaders can be expected to have had any lived experience of democratic defense and security sector governance. In order to support the transition process, DCAF therefore has created a group (known as the LPAG) of senior politicians and defense officials from established democracies and advanced transition societies who are at the disposal of senior and mid-ranking decision-makers and defense/security sector officials in transitional societies.[8] "Twinning," the temporary and repeated/repeatable mentoring assignment of a seasoned, active, or retired expert from a democratically controlled defense establishment to a partner in an emerging democracy, has proven to be a highly promising approach as well.

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[7] See Philipp H. Fluri and Eden Cole, "Security Sector Reform in South East Europe: A Study in Norms Transfer," in Heiner Hänggi and Theodor Winkler, eds., *Challenges of Security Sector Governance* (Münster: LIT, 2003), 119-146.

[8] See www.dcaf.ch/lpag/_index.cfm?navsub1=4&navsub2=1&nav1=3.

## 9. Rooting Reform in Civil Society

Any transition to democracy cannot be completed without the presence of a vibrant civil society. As a research and documentation activity, the Geneva Centre analyzes and compiles best practices for civil society involvement in governance in Western and emerging democracies, and seeks to create tools and means for communicating such insights to non-governmental organizations, academic institutes, and the media in partner countries.[9] DCAF takes special care to develop strategic partnerships with non-governmental organizations that have strong potential to promote good governance.

### *Documentation of Best Practices*

DCAF's Civil Society Working Group conducts research on the impact of civil society actors, including the media, that seek to promote transparency, accountability, and public discussion of public policy-related issues in mature democracies and transitional states. The working group structures its projects around core themes of promoting the development of civil society, empowering institutions to make their voices heard and influence governmental decision-making, and enabling civil society to help inform and educate the public about vital policy issues.

As mentioned above, the Geneva Centre, acting on a mandate from the Swiss Ministry of Foreign Affairs, implemented stock-taking exercises on the status of security sector reform in South East Europe (including Moldova). Special attention was given to *civil society's involvement in security sector reform*, and the *need for expert formation, capacity building, and empowerment* (both governmental and non-governmental) in these countries.[10] In order to contribute to expert formation itself, the DCAF project leaders cooperated closely with "country teams" consisting of both governmental and non-governmental experts, which benefited from workshops and exchanges with international experts organized on their behalf. Further studies investigated the status of *transparency in defense matters*—again, a field in which civil society will play a cru-

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[9] See e.g. Marina Caparini, Philipp Fluri, and Ferenc Molnar, eds., *Civil Society and the Security Sector: Concepts and Practices in New Democracies* (Münster: LIT, 2006), www.lit-verlag.de/isbn/3-8258-9364-2. DCAF invited prominent representatives of donor organizations and civil society to compare approaches and discuss lessons learned in Civil Society empowerment programs, both from donor and recipient perspectives. The research project involved individuals from prominent donor agencies and non-governmental organizations working in the field of democracy and security sector reform promotion, and having a specific focus on Civil Society support, transparency and good governance. The project, whose findings are now available in book form, identified and evaluated strategies and methodologies for engaging Civil Society in transition countries more effectively in good governance.

[10] See, for example, Law and Fluri, eds., *Security Sector Expert Formation – Achievements and Needs in South East Europe*, available at: http://www.dcaf.ch/publications/SS_expert.cfm?nav1=4&nav2=2.

cial role—and *overall satisfaction with the status of security sector reforms.*[11] The DCAF-organized Consortium of Defence Academies Working Group on Security Sector Reform—another tool for independent capacity building—assisted DCAF in these successful and highly pertinent undertakings.[12]

## Civil Society Capacity Building and Empowerment

Totalitarian rule in Eastern Europe and the former Soviet Union fragmented society and isolated the individual. After the fall of the Soviet Union, representatives of the old order founded a number of "non-governmental" organizations with a view toward absorbing Western funding and other benefits. DCAF therefore gives special attention to capacity building among the younger generation, women, and minorities—groups that were largely excluded from the initial influx of funding after the fall of the Soviet bloc.

Strategic partnerships with select institutions and individuals have been highly successful. A DCAF-sponsored civil society platform in the Russian Federation, for example, actively assists the Federation Council in security sector decision-making by providing comparative analysis.[13] In Ukraine, a civil society platform documents and analyzes reforms, and has (via its academic links) created an ADL post-graduate course on democratization and security sector governance. The Turkish Foundation for Economic and Social Research has created a Working Group on Security Sector Reform, which organizes highly acclaimed conferences on select aspects of security sector reform. In 2006, the working group will publish an independent Yearbook on Security Sector Reform in Turkey.[14]

## Handbooks for Media and NGOs

Given the success of the *IPU-DCAF Handbook on Parliamentary Oversight of the Defense and Security Sector*, DCAF has published a comparative study on best practices for media involvement in security sector governance, and is cooperating with UNDP Bratislava on the publication of a *Civil Society Handbook on Security Sector*

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[11] See, for example, Fluri and Shalamanov, eds., *Security Sector Reform, Does it Work? Problems of Civil-Military and Inter-Agency Cooperation in the Security Sector*, available at www.isn.ethz.ch/dossiers/ssg/pubs/books5.cfm; and Marina Caparini, "Security Sector Reform and Post-Conflict Stabilization," in Alan Bryden and Heiner Hanggi, eds., *Reform and Reconstruction of the Security Sector* (Geneva: Centre for the Democratic Control of Armed Forces, 2004); available at www.dcaf.ch/publications/e-publications/SSR_yearbook2004/Chapter_7_Caparini.pdf.

[12] See www.dcaf.ch/pfpc/_index.cfm?navsub1=16&nav1=3.

[13] Seminar series in partnership with the FPC discussing legal, political, media-related, and security sector reform aspects of civil society in Russia. See http://www.dcaf.ch/csbp/_index.cfm?navsub1=19&nav1=3.

[14] See, for example, Willem F. Van Eekelen, Philipp H. Fluri, Alain Faupin, et al., "Democratic Oversight of the Security Sector: Turkey and the World," *DCAF and TESEV Series in Security Sector Studies,* No. 1 (Istanbul: TESEV, 2005).

*Reform* (forthcoming, 2006). Moreover, in 2005 DCAF responded to calls for a *Sourcebook on Security Sector Governance* for general readers.[15]

## Conclusions

The Geneva Centre for the Democratic Control of Armed Force was established with the explicit mandate to combine comprehensive research into and documentation on best practices with equally comprehensive concrete, sustainable, long-term empowerment programs in transition societies. In order to fulfill this mandate, DCAF not only focuses on defense reform and democratic oversight of the defense sphere, but has also actively developed a comprehensive integrated border management program, which by sheer cost is probably the most substantial DCAF program.[16] Preparations for a parallel policing program are under way, and an intelligence services oversight and reform program already exists.

DCAF, originally and still largely an initiative of Switzerland's foreign and defense policy, is today a trans-governmental organization with forty-six member states. Its research-cum-technical cooperation format and its lean management structure allow for foresight, comprehensive understanding, and conceptualization of emerging challenges and opportunities in security sector governance, as well as rapid response to calls for assistance and support from governments and international organizations alike.

DCAF thus did not find it difficult to answer a call from NATO International Staff (IS) to assist with the conceptualization and implementation of the PAP-DIB program. In April 2005, two consecutive events launching PAP-DIB used its conceptual framework to discuss more broadly the principles of democratic oversight, accountability, and transparency in the context of security sector governance and to qualitatively deepen the partnership relationship between EAPC countries and those in the Caucasus and Central Asia. Participants from Moldova, Armenia, Azerbaijan, and Georgia attended both events.[17] Proceedings of the launch event were later published as *Defence Institutions Building. The 2005 Partnership Action Plan on Defence Institution Building—Regional Conference* (Fluri and Cole, eds., Vienna: LaVak, 005). Further-

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[15] Philipp H. Fluri and Miroslav Hadzic, eds., *Sourcebook on Security Sector Reform* (Belgrade/Geneva: DCAF, 2005), available at www.dcaf.ch/publications/e-publications/SSR_Sourcebook/contents.html.

[16] Additionally, the DCAF Research and Documentation Department is soon to publish the first study by Marina Caparini and Otwin Marenin, eds., *Borders and Security Governance: Managing Security in a Globalised World* (Münster: LIT, 2006, forthcoming).

[17] See http://www.dcaf.ch/news/ev_tblisi_050425.cfm?nav1=2&nav2=2. The events were organized as a joint Swiss-Georgian initiative, with the support of the Geneva Centre for the Democratic Control of Armed Forces, NATO IS, and the NATO Studies Centre, Bucharest. For further information about Partnership Action Plan–Defense Institution Building, see http://www.nato.int/docu/basictxt/b040607e.htm.

more, additional research has been made available, both in electronic and printed form.[18]

These conferences were subsequently highly commended at the EAPC Ambassadors meeting at NATO IS in Brussels on 11 May, and the lessons learned have been incorporated into planning discussions for a similar PAP-DIB event for Central Asia. Unfortunately, the original plan for the event to be co-organized with the Turkish Ministry of Defense in March 2006 could not be realized. In 2006, a *PAP-DIB Source Book* (edited by Willem van Eekelen and Philipp Fluri) will be published by LaVAk in Vienna, to be available in both English and Russian. Through these actions, the Geneva Centre stands at the forefront of the effort toward supporting security sector reform in Europe.

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[18] Eden Cole and Philipp H. Fluri, eds., *Defence Institution Building: Papers presented at the Conference on 2005 Partnership Action Plan on Defence Institutions Building (PAP-DIB) Regional Conference for the Caucasus and Republic of Moldova, held in Tbilisi, 25 April 2005* (Vienna: LaVak, 2006), available at http://www.dcaf.ch/publications/defence institution_conf_tbilisi.cfm?nav1=4&nav2=2.

# The Art of Shaping Defense Policy: Scope, Components, Relationships (but no Algorithms)

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In 1999–2000, I taught the first defense planning course at the "G.S. Rakovski" Defense and Staff College in Sofia, Bulgaria. All students were senior officers—mostly full colonels—and yet the course had to begin with a thorough explanation of what "defense planning" is and how it differs from and relates to "operational planning." At the time, references to "planning" in regard to the military almost exclusively addressed the intended use of available forces, or what was known as "strategic and operational planning." That is hardly surprising, because—unlike in NATO—defense policy-making and planning in the Warsaw Pact were fully centralized. The capitals, with the exception of Moscow, had either no or very limited knowledge and experience in defense policy and planning.

In addition, in the 1990s the defense establishments in the former Warsaw Pact countries and ex-Soviet republics were only a small part of what were immature and generally weak democratic institutions. Even under the impact of declining economies and the lack of an obvious enemy, senior political and military leaders felt safer adhering to inherited force structures and force development models. One result is that, at the time of their accession, very few of the new NATO members had any sizeable contribution to make to the Alliance's capabilities.[1]

A reader who is an experienced defense policy maker or defense planner is advised to skip this article. But many defense establishments in Partner countries, as well as in a number of new NATO members, still struggle with the concept of defense policy, the role of civilians in defense, the concept of capability, the linkage between plans and budgets, and the relationship between force development and technological modernization.

This article is intended to facilitate an understanding of basic concepts and relationships in defense policy making. It does not provide an algorithm, nor any one-size-fits-all templates of processes and documents. The figures included in this article are intended to illustrate relationships, and not algorithmic steps. Nevertheless, I hope that it

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[1] See, for example, Jeffrey Simon, "The New NATO Members: Will They Contribute?" *Strategic Forum* 160 (Washington, D.C.: National Defense University, April 1999), available at http://www.ndu.edu/inss/strforum/SF160/forum160.html.

might assist readers who are interested in the art of defense policy-making in assessing weaknesses and identifying opportunities for improvements in the process of articulating defense policy, supported by planning and force structure development and all balanced by the risks posed to even the best-laid defense plans by changes in the funding environment.

## Why the Interest in Defense in the Twenty-First Century?

> *You may not be interested in war, but war is interested in you.*
>
> – Leon Trotsky [2]

This quote from Leon Trotsky eloquently summarizes the reasons behind the widespread public interest in defense issues in the new century. But why is the discussion on defense and defense policy so important at a time when most states in Europe and North America do not feel threatened by acts of armed aggression launched by other states against their territories?

It may be that war as we know it from the experience of two world wars of the twentieth century is not on the global security agenda in the foreseeable future, but at the same time,

> … in the Balkans, Africa, the Caucasus, and Moldova, but especially in Iraq and the Middle East, crises remain unresolved, wars are still going on and chaos could spread, while international terrorists have already proved that they are capable of striking everywhere and destabilizing the traditional patterns of international security. Whether they like it or not, whether they are ready or not, Europeans will not be able to avoid this international disorder, at a time when security has become a major concern of European citizens. [3]

### What is "Defense Policy"?

Neither NATO's *Glossary of Terms and Definitions* [4] nor the U.S. Department of Defense's *Dictionary of Military and Associated Terms* [5] propose a definition of *defense*

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[2]  No source of this quote has been clearly identified, but it is commonly attributed to Leon Trotsky. See http://en.wikiquote.org/wiki/Leon_Trotsky.

[3]  *European Defense: A Proposal for a White Paper*, Report of an independent Task Force (Paris: EU Institute for Security Studies, May 2004), 5; available at www.iss-eu.org/chaillot/wp2004.pdf.

[4]  *NATO Glossary of Terms and Definitions*, NATO Standardization Agreements, AAP-6, 2005; available at http://www.nato.int/docu/stanag/aap006/aap6.htm.

[5]  *Department of Defense Dictionary of Military and Associated Terms*, Joint Publication 1-02 (Washington, D.C.: Department of Defense, 12 April 2001, as amended through 31 August 2005), available at www.dtic.mil/doctrine/jel/new_pubs/jp1_02.pdf.

*policy* or *policy*. Among the various authoritative definitions of *policy*, the following two in the *Webster's Dictionary* are appropriate for our discourse:[6]

1. A definite *course or method of action* selected from among alternatives and in light of given conditions to guide and determine present and future decisions

2. A high level overall *plan* embracing the general goals and acceptable procedures esp. of a governmental body

The on-line portal *Armchair Generalist* provides a definition that is in line with the first of the *Webster's* definitions listed above.[7] Paraphrasing to avoid the U.S.-oriented specifics of the definition, *defense policy* is

a course of action or conduct, as defined by senior executive leadership, intended to influence and determine decisions, actions, and other matters relating to the conduct of military affairs, consistent with the [nation's] security strategy.[8]

In line with the second *Webster's* definition, a number of on-line dictionaries define defense policy as "a program for defending a country against its enemies," where *program* is further defined as "a system of projects or services intended to meet a public need."[9]

## Thesis

The two definitions given above do not contradict each other; rather, they are complementary. A good starting point in a discussion on defense policy is to clarify that the term *defense policy* covers both *ends*—that is, what needs to be achieved—as well as *ways* and *means*—how and with what resources those ends are to be achieved.

In regard to policy as it relates to defense and military matters, there are two distinct tasks:

1. How to use *available means* to reach the ends, e.g., in the event of military aggression against a country

2. Define the means that would allow a nation to deal effectively with likely future threats and challenges

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[6]  *Webster's Ninth New Collegiate Dictionary* (Springfield, MA: Merriam Webster Inc., 1991); emphasis added.

[7]  "Defense Policy Versus Strategy and Tactics," at http://armchairgeneralist.typepad.com/ my_weblog/2004/12/1_defense_polic.html (viewed 14 March 2006).

[8]  Security strategy may refer to the strategy of a nation, as well as to that of an alliance.

[9]  See, for example, *The Free Dictionary* (http://www.thefreedictionary.com/defence+policy); *Dictionary.LaborLawTalk.com* (http://dictionary.laborlawtalk.com/defence_policy); *Die.net* (http://dict.die.net/defence%20policy/); *WorldWeb Online* (www.wordwebonline.com/en/ defencepolicy); *Answers.com* (www.answers.com/topic/defense-program-defense-policy-defence-program-defence-policy); and *eLook.org* (http://www.elook.org/dictionary/defence-policy.html).

The first task encompasses issues from both the strategic and operational realms, including both deliberate and contingency planning, as well as direction of troops in combat. It is often referred to as *force employment*.

The second task is the primary task of defense policy, and is the focus of this essay. It can be approached in a variety of ways. In goal-oriented (or "top-down") approaches, desired ends drive the design of future forces, which is illustrated in Figure 1.[10] For instance, defense transformation would hardly be possible if policy and planning are not "goal-oriented."
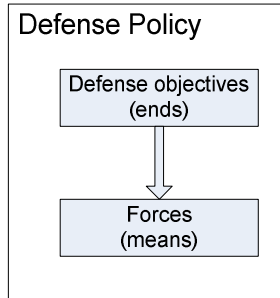


Figure 1: Relations between Ends and Means in Devising Defense Policy

Although it will be obvious to many readers, the premise that defense policy requires the definition of both ends and means is not easily understood and readily accepted everywhere, in particular in countries in the post-Soviet space. One reason is language.[11] In a number of languages—quite possibly in all Slavic languages—there is only one word, *politika*, that is used to translate both *policy* and *politics*; this word has strong connotations of everything "political."[12] Therefore, a quite common perception is that defense policy resides in the realm of the politicians, but the term is understood narrowly as including only making decisions on the ends—i.e., setting the objectives that the armed forces must be able to attain.

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[10] For other approaches and a discussion of the advantages and disadvantages of this approach, refer to Henry Bartlett, G. Paul Holman, and Timothy E. Somes, "The Art of Strategy and Force Planning," in *Strategy and Force Planning*, eds. R. M. Lloyd, et al. (Newport, RI: Naval War College Press, 1995), 15–27; and *Handbook on Long Term Defence Planning*, RTO Technical Report 69 (Paris: NATO Research and Technology Organization, April 2003), available at http://www.rta.nato.int/Pubs/RDP.asp?RDP=RTO-TR-069.

[11] It is certainly not the most important one, however. Lack of civilian expertise, prevalent patterns of civil-military relations, and cultures of secrecy, among others, also contribute to opacity and inefficiency of defense policies, planning, and plans. See Daniel Nelson, "Beyond Defense Planning," in *Transparency in Defense Policy, Military Budgeting and Procurement*, ed. Todor Tagarev (Sofia: Geneva Centre for DCAF and "George C. Marshall–Bulgaria," 2002).

[12] As far as I am aware, this is also the case in the Romance languages (*politique*, *politica*).

On the other hand, and given the often frequent lack of knowledge on military matters among politicians and their civilian staff in post-Soviet states, it is often taken for granted that only the military have the knowledge and the authority to define what forces are needed in order to meet their objectives—a process that is also understood as implementing the policy that has been determined by politicians. According to Soviet terminology, this is referred to as the "build-up" (*stroitel'stvo*) of the armed forces. In the post-Soviet era, this understanding is often disguised under the rubric of "military policy."

The main thesis of this essay is that defense policy encompasses both ends and means, and desired ends drive the creation of adequate means (forces). A number of amendments need to be made in order to make the representation on Figure 1 useful in practice.

## Amendment 1: Defining Defense Objectives

The elaboration of defence policy flows from the desire to uphold and promote the values and the interests of a nation or an alliance, the underlying security strategy and the role of the military among the instruments of national power, all of which influence the definition of defense objectives (as shown in Figure 2). Defense objectives, in turn, are often expressed as defense missions, i.e. possible roles of the armed forces, and levels of ambition in defense.
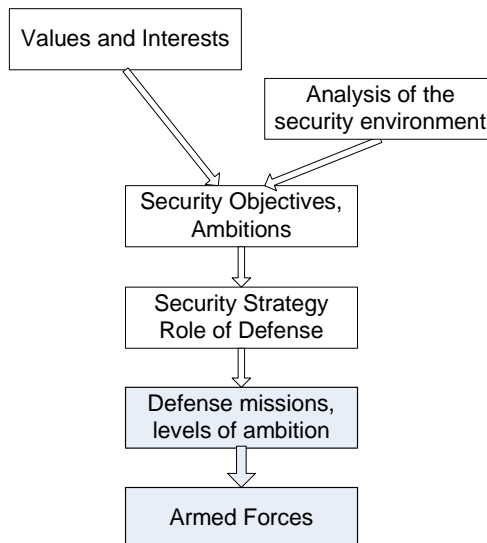


Figure 2: Definition of Defense Objectives

## *Analysis of the Security Environment*

Security objectives, strategies, and defense objectives stem from values, interests, and security challenges, risks, and threats that have been identified as a result of thorough analysis of the security environment. Current security analysis emphasizes threats posed by (among others):

- International terrorism
- Proliferation of weapons of mass destruction and the means for their delivery
- Failed or failing states
- Organized crime,

as well as a variety of combinations among them. Other risks originate from ethnic tensions and the failure to respect differing ethnic, religious, and cultural values; intolerance and xenophobia; demographic pressures; and environmental degradation.

Countries in transition see as a particular challenge the frequent lack of accountability on the part of the armed forces (and other security sector organizations) to civil society. Additional challenges include widespread inefficiency of the defense sector in transitional states; the preservation of large ineffective force structures; and a lack of management expertise to deal with a variety of legacy issues. For example, the countries from South Eastern Europe (SEE) in a "common assessment paper" identified as a particular challenge the "failure of [defense] reform and disruptions in [Euro-Atlantic] integration processes [that] could result in negative consequences on regional and international security."[13]

As a result of the analysis of the security environment, it is particularly important to state explicitly and clearly the general *lack* of risks and threats, especially of the kind that have until recently had a strong impact on defense policies. In the example of the South Eastern European assessment, the countries agreed that "there is no perceived risk of military aggression between states in SEE in the current and foreseeable political environment."[14]

## *Security Objectives*

The objectives of the security policy of a state address current and foreseeable security challenges, risks, and threats, and reflect the values and interests of the nation, as well as its ambitions in the international security arena. For example, the aim of the 2002 *National Security Strategy of the United States* is "to help make the world not just safer but better." In that light, it sets forth the following goals, or "security objectives":[15]

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[13] *South East Europe Common Assessment Paper on Regional Security Challenges and Opportunities–SEECAP* (Budapest, May 2001), para 16(g); available at www.nato.int/docu/comm/2001/0105-bdp/d010530b.htm.

[14] Ibid., para 15.

[15] *The National Security Strategy of the United States of America* (Washington, D.C.: The White House, September 2002), 1; available at www.whitehouse.gov/nsc/nss.html.

- Political and economic freedom
- Peaceful relations with other states
- Respect for human dignity

In addition, the *National Defense Strategy of the United States* provides the following definitions of four "strategic objectives" in terms of security and defense, all in line with the *National Security Strategy*:[16]

- Secure the Unites States from direct attack
- Secure strategic access and retain global freedom of action
- Strengthen alliances and partnerships
- Establish favorable security conditions

## *Security Strategy*

A good security strategy provides a clear, realistic, and effective concept of the use of diplomatic, economic, military, and other instruments of power in order to achieve a nation's security objectives. Depending on assessments of security risks and threats, potential opponents' traditional strengths and weaknesses, and identified opportunities—along with an assessment of one's own and one's adversaries' vulnerabilities—the security strategy may envision various roles for the armed forces among the instruments of power. These roles are often referred to as the "missions" of the armed forces.

## *Defense Missions and Goals*

Bulgaria's 2002 *White Paper on Defense* defines the following missions of the nation's armed forces:[17]

- Contribution to national security in peacetime
- Contribution to peace and security in the world
- Participation in the defense of the country

Similarly, the United Kingdom defines its "defense aims" in the following manner:

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

In the U.S. example referred to above, the military is tasked to contribute to the accomplishment of the nation's security objectives in four main ways. (The title of the re-

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[16] *The National Defense Strategy of the United States of America* (Washington, D.C.: Department of Defense, March 2005), iv, details on 6–7; available at www.defenselink.mil/news/Mar2005/d20050318nds1.pdf.

[17] *White Paper on Defense* (Sofia: Ministry of Defense, 2002), 27; available at www.mod.bg/bg/docs/BULWP.pdf. This document was adopted prior to NATO's invitation to Bulgaria to join the Alliance at the 2002 Prague Summit.

spective section of the document underlines the role of defense as an instrument in the implementation of security policy; on the other hand, these may be interpreted as "defense objectives"):[18]

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

## Defense Ambitions

The "level of ambition" of a defense establishment sets forth in military terms the number, scale, and nature of operations that a country (or an alliance) should be able to conduct.[19] A related term is *operational tempo*. It refers to the number and size of missions undertaken by a military force *relative* to its strength, and takes into account the complexity and the length of these operations. A high operational tempo indicates a significant number of sizeable, ongoing deployments to multiple theatres.[20] For example, NATO's stated level of ambition is to be able to conduct *three simultaneous major joint operations* outside of the territory of the Alliance.[21]

The member states of the European Union have committed to be able by 2010

> … to respond with rapid and decisive action applying a fully coherent approach to the *whole spectrum of crisis management operations* covered by the Treaty on the European Union. This includes *humanitarian and rescue tasks*, *peace-keeping* tasks, *tasks of combat forces in crisis management*, including *peacemaking*. As indicated by the European Security Strategy this might also include *joint disarmament operations*, the support for third countries in *combating terrorism* and security sector reform.[22]

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

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[18] *The National Defense Strategy of the United States of America*, iv, details on 7–9.

[19] *The Defense Planning Process* [of NATO], available at www.nato.int/issues/dpp/index.html.

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

[21] See, for example, Michèle A. Flournoy, CSIS, "Defense Integration in Europe: Enhancing Europe's Defense Capabilities for New Missions," paper presented to the Clingendael Security and Conflict Program workshop *Enhancing European Military Capabilities within the EU and NATO* (The Hague, 14–15 December 2005), notes to slide 17; available at www.clingendael.nl/cscp/events/20051214/Flournoy.ppt (viewed 20 January 2006).

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

The U.K., in its current *Defense White Paper*, defines the following ambition levels:[23]

- Support three concurrent operations, of which one is an enduring peace support operation

- Conduct limited national operations

- Be the lead, or framework nation for coalition operations on a small to medium scale

- Retain the capacity to undertake large-scale operations at longer notice in Europe, the Mediterranean, and the Gulf region

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

France, in its *Program Law 2003–2008*, also very clearly defines its defense ambitions, stating that the country must:[24]

- Protect [France's] autonomy of decision and action …, including the ability to act alone should it be necessary (e.g., to ensure defense of sovereign territories and … to meet her defense agreements in Africa and the Middle East)

- Have the capability of a lead nation in a European operation and sufficient military capabilities to contribute to a spectrum of military actions, especially in high-intensity operations

- Maintain the "necessary technological know-how to ensure, through time, the credibility of nuclear deterrence, to develop the resources of protection against new threats, and to preserve an industrial base …" to manufacture her own major defense systems

The French *Program Law* also states that, in order to meet this level of ambition, France will increase its personnel levels, and therefore its defense spending. The law provides considerable detail on the structure of the defense budget and the objectives that will be achieved in attracting active and reserve personnel, the status of the military, and force modernization.

Canada recognizes that, internationally, its forces will conduct operations across the whole spectrum of conflict, but will normally be part of a coalition or alliance. The Canadian Armed Forces lack the capability to achieve international goals by themselves; hence, they could not conduct or even take the lead role in operations on the scale of the Kosovo campaign in 1999. Instead, Canada's ambition is to provide "tacti-

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[23] Defense White Paper, *Delivering Security in a Changing World*, volume I (London: Presented to Parliament by the Secretary of State for Defence, December 2003); available at www.mod.uk/linked_files/publications/whitepaper2003/volume1.pdf.

[24] *2003–2008 Military Program, Bill of Law*, France, Unofficial translation (2002), 4–5; available at www.info-france-usa.org/atoz/mindefa.pdf.

cally self-sufficient units" (TSSU), capable of integrating into combined force packages. The minimum requirement of TSSUs is to be able to conduct at least "medium intensity operations."[25]

Sweden's international defense ambition is to be able

> … *to lead* and participate in *two large-scale* international missions, each requiring the deployment of an entire battalion, and *three smaller operations*. It shall be possible to undertake some operations with *little prior warning* and to *sustain* other operations *over a longer period* of time. The Swedish Armed Forces shall be able successfully to tackle *any crisis management task* given to them, from confidence-building, conflict prevention, humanitarian and peace-keeping tasks to peace-enforcement measures.[26]

In its 1999 *Military Doctrine*, Bulgaria clearly stated the defense ambition of the country. At that time, Bulgaria had announced its intentions to seek NATO membership, but accession did not appear to be in the near future. Without the protection of NATO's Article V guarantees, and with the nearby Kosovo crisis still in its "hot" phase, Bulgarian policy makers admitted the possibility for aggression against the country. The stated ambition was to be able to defend the nation's territory and population on its own, without outside assistance. Importantly, the *Military Doctrine*—a public document approved by the Parliament—described the parameters of the plausible aggression: in one theatre of operations, with significant warning times, and without full mobilization of the aggressor.[27]

## Amendment 2: Forces and Capabilities. Linking Defense Objectives and Capabilities

In designing a defense policy, it is not the forces as such that are important, but rather the capabilities they have, or will have, in relation to the nation's defense objectives (see Figure 3). Furthermore, although most of the nation's defense capabilities are provided by formations of the armed forces (marked on Figure 3 with 'F'), there are cases when requisite capabilities will be provided by other organizations, e.g., non-military intelligence services, police, shipping companies, civilian air transport, etc.

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[25] *Capability Based Planning for the Department of National Defence and the Canadian Forces* (Ottawa: Department of National Defence, May 2002), 14–15; available at www.vcds.forces.gc.ca/dgsp/00native/rep-pub/j-cbpManualPdf_e.asp.

[26] *Our Future Defence: The focus of Swedish defence policy 2005–2007*, Swedish Government Bill 2004/05:5, 14, emphasis added; available at www.sweden.gov.se/content/1/c6/03/21/19/224a4b3c.pdf.

[27] *Military Doctrine of the Republic of Bulgaria*, Approved by the Parliament in 1999, amended in 2002; available at www.mod.bg/en/doc_konc.html#.
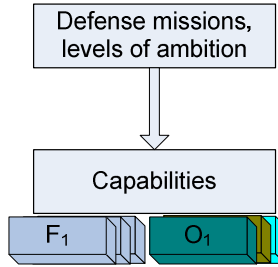
Figure 3: Capabilities as 'Means' in Defense Policy

*Capability* is defined here as the capacity, provided by a set of resources and abilities, to achieve a measurable result in performing a task under specified conditions and to specific performance standards.[28] Therefore, the link between objectives and capabilities is not straightforward. The definition of capabilities necessary to achieve the objectives depends on the situations, or scenarios, in which the armed forces might be used, and accounts for the way in which they will be used (see Figure 4).
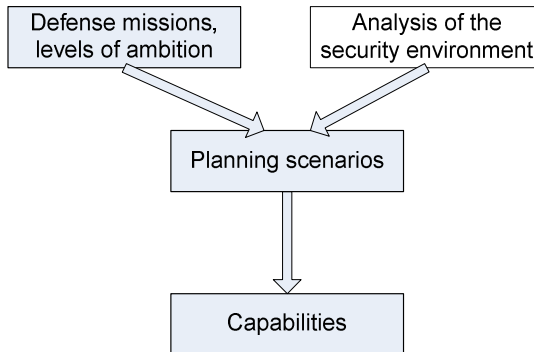


Figure 4: Linking Objectives and Capabilities through Planning Scenarios

## Planning Scenarios

In defense policy-making and planning, scenarios are used as planning situations, specified in terms of environmental and operational parameters. Planning scenarios are not intended to predict future situations and outcomes; rather, they are used in a proc-

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[28] For alternative definitions, see my accompanying article in this volume.

ess of specifying force structure and defense plans. They serve several purposes.[29] First, scenarios broadly describe potential missions, based on challenges or threats faced in a ten to twenty-year time-frame—a duration comparable with the time needed to reshape force structures and develop and field corresponding weapon systems. Second, scenarios lay out assumptions related to the scope of a nation's aims and ambitions *vis-à-vis* its potential challenges and threats. Third, planners use them as a tool to define capabilities to conduct operations and as a testbed for assessing proposed operational concepts, capabilities, or system requirements against formulated mission objectives.

Policy makers and planners need to consider multiple scenarios in order to address the complex nature of military missions and to select a set of scenarios that will be used to shape force development. The set should be representative of the security challenges outlined in the nation's defense policy. The selected scenarios, in combination, need to capture the full spectrum of missions, operations, and objectives and interests of the state. Finally, all selected scenarios must be sufficiently credible so that the resulting analyses and plans will be acceptable.[30]

In its defense policy and planning process, NATO develops nearly thirty generic defense-planning scenarios, ranging from an operation for non-combatant evacuation to forcible entry to major war, which are then used to inventory the capabilities required.[31] In its proposal for a White Paper on European defense, the group of authors proposed five strategic scenarios:[32]

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

To take a national example, Canada uses the following set of generic scenarios:[33]

1. Search and rescue in Canada

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[29] For details see *European Defence: A proposal for a White Paper*, Report of an independent Task Force (Paris: EU Institute for Security Studies, May 2004), 67–70; available at www.iss-eu.org/chaillot/wp2004.pdf; and *Handbook on Long-Term Defence Planning*, RTO Technical Report 69 (Paris: NATO Research and Technology Organization, April 2003); available at http://www.rta.nato.int/Pubs/RDP.asp?RDP=RTO-TR-069.

[30] Scenario selection is a critical activity. The need for detail and a broad spectrum of planning scenarios is inevitably confounded by the limited analytical ability of policy makers and planners.

[31] Michèle A. Flournoy, "Defense Integration in Europe," notes to slide # 17.

[32] *European Defence: A proposal for a White Paper*, 71–98.

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

2. Disaster relief in Canada

3. International humanitarian assistance

4. Surveillance/control of Canadian territory and approaches

5. Evacuation of Canadians overseas

6. Peace support operations (Peacekeeping)

7. Aid of the civil power/Assistance to law enforcement agencies

          7a. Chemical Weapon Variant

8. National sovereignty/interests enforcement

9. Peace support operations (Peace enforcement)

          9a. Failed State Variant

10. Defense of North America

          10a. Radiological Weapon Variant

          10b. Cyber Attack Variant

11. Collective Defense

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

## *Nature of Operations*

The definition of the capabilities necessary to achieve the objectives accounts for the way in which these capabilities would be used. That requires an understanding of the changing nature of operations and the potential use of novel operational concepts, e.g., of effects-based operations, network-based warfare, etc.[34]

## *Missions to Tasks to Capabilities*

*Capability* is broadly defined as the ability to perform a particular task.[35] Therefore, planning scenarios are used to derive the set of tasks to be performed in operations. In order to be uniformly understood, each task to be performed in a scenario is defined by the respective term in a generic task list (which is represented in Figure 5).

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[34] For a comparative analysis of twentieth- and twenty-first-century operations, the reader may refer to Scott Jasper, "Defense Transformation: Required Capabilities for the Future Security Environment," Presentation to the *International Defense Transformation Course* (Monterey, CA: CCMR, NPS, December 2005).

[35] See, for example, *Guide to Capability-Based Planning*, TR-JSA-TP3-2-2004 (The Technical Cooperation Program, Joint Systems and Analysis Group, Technical Panel 3, MORS Workshop, October 2004); available at www.mors.org/meetings/cbp/read/TP-3_CBP.pdf.
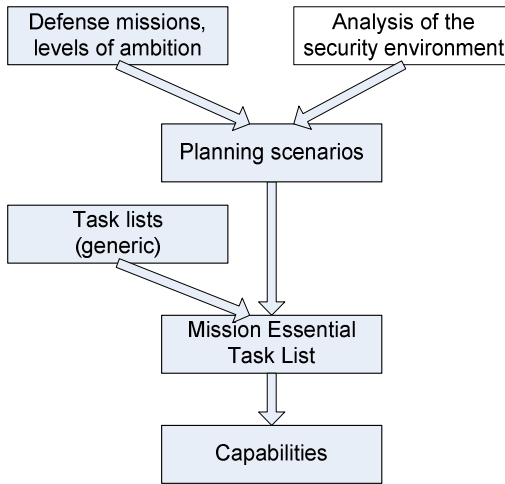
Figure 5: Mapping Capabilities to Tasks

For example, Canadian defense policy-makers and planners use, among other documents, the "Canadian Joint Task List" as a "common lexicon … for capability planning."[36]

In the case of the United States' force planning system, the set of tasks that results from analyzing the scenario set for each mission is referred to as the "Mission Essential Task List." Actually, the tasks can not be defined outside of an explicit *concept for employment* of the armed forces, or "Operational Concept." Considerable importance in current transformation initiatives is attributed to "Effect-Based Operations" as a driving operational concept. In this approach, capabilities are mapped to desired effects, which are then in turn mapped to operational objectives.

Mission-essential task lists define the types of capabilities needed to accomplish the tasks (or to achieve the desired effects). Then, planners define the capability levels needed to accomplish the tasks (or "capability goals"). Thus, for each scenario, planners design a force package that would provide the capabilities to apply the operational concept and to achieve the mission objectives. The output of the process, presented in Figure 5, is a set of force packages for each scenario. These are then built into a force structure that would allow the military to realize the level of its defense ambitions—

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36 *Capability Based Planning for the Department of National Defence and the Canadian Forces* (Ottawa: Department of National Defence, May 2002), 19; available at www.vcds.forces.gc.ca/dgsp/00native/rep-pub/j-cbpManualPdf_e.asp.

concurrent participation in operations with a certain duration.[37] In capability-based planning, the goal is not to optimize the set of capabilities (capability levels or related force package) for a particular scenario; rather, the capability set should be *robust* as defined against the set of plausible scenarios.

## *Distribution of Capabilities Among Organizations*

The next task in making security and defense policy is to distribute the requisite capabilities among organizations within a nation's security and defense establishment. Effectiveness and efficiency are important considerations in deciding which capabilities to assign to an organization, and may lead to decisions for the specialization of security sector organizations.

For example, an aerial surveillance and reconnaissance capability, maintained by an air force, may potentially be used in law enforcement efforts (e.g., border control) and disaster management operations. Rather than each organization developing its own aerial surveillance capabilities, a cost-effective solution, particularly for a small country, would be to maintain this capability only in the air force, and to make it available for other types of operations when necessary. Certainly, this will place higher resource demands on the air force, but overall it will be cheaper than the case of three organizations developing and maintaining separate capabilities for aerial surveillance and reconnaissance.

A number of factors, however, such as constitutional arrangements, constrain the scope of possible decisions in this area. In addition, decisions on the distribution of capabilities are influenced by strategy, available experience, perceptions within the military, and, last but not least, resource constraints. Finally, any decision on the specialization of the armed forces needs to be reflected in definitions of their roles and missions.

## Amendment 3: Reconciling Objectives, Force Structure, and Financial Constraints – The Role of Planning Risks

The rule in policy-making is that demands always exceed resource availability. Policy-makers and planners work hard to balance goals, strategy, and means, with risk being the balancing factor (see Figure 6).[38]

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[37] For further considerations and a thorough examination, the reader may refer to the *Handbook on Long-Term Defence Planning*, RTO Technical Report 69 (Paris: NATO Research and Technology Organization, April 2003), 9–15; available at http://www.rta.nato.int/Pubs/RDP.asp?RDP=RTO-TR-069.

[38] This is an adaptation of the "Bartlett model" of strategy development, presented in Bartlett, Holman, and Somes, "The Art of Strategy and Force Planning," 15–27.
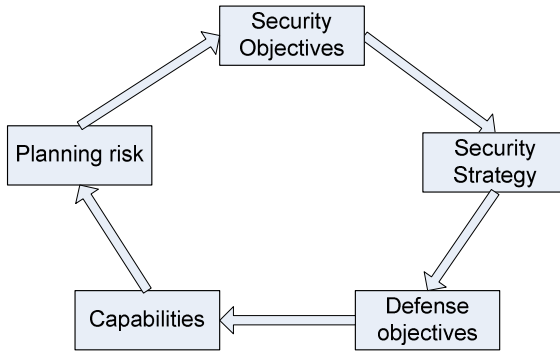
Figure 6: General Policy-making Cycle

Realistically, policy-makers recognize that all the main variables—objectives, strategy, means, and risk—need to be treated as variables until a good balance is found. Obviously, the search for a balanced policy is sought in the current and anticipated security environment and within resource constraints (as represented in Figure 7).
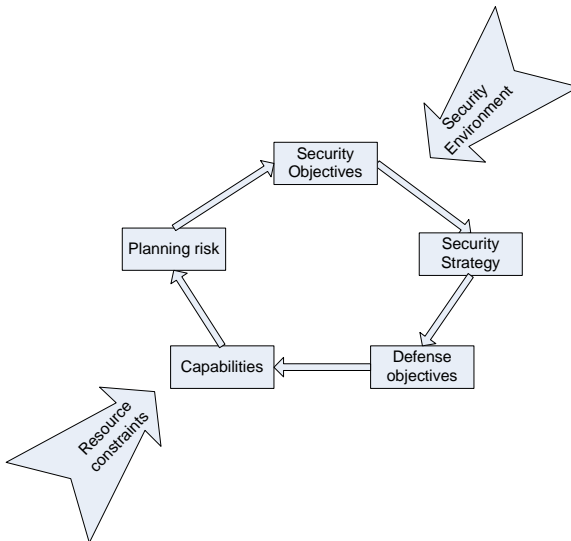


Figure 7: Policy-making Cycle in a Context

Hence, a realistic defense policy is based on the recognition that it is not possible to guarantee a nation's security against all possible threats. Instead, it is based on a risk

management approach. Policy-makers and planners distinguish four related types of risks:[39]

- *Operational* risks, associated with the current force structure that, if deployed, will execute the strategy successfully within acceptable human, material, financial, and strategic cost.

- *Defense planning*, or *future challenges* risks, associated with future capacity to execute missions successfully against a spectrum of prospective future challenges.

- *Implementation*, or *force management* risks, associated with the successful implementation of force structure decisions and force development plans. The primary concern here is recruiting, training, and retaining military and civilian personnel, equipping the force, and sustaining an adequate level of readiness.

- *Institutional* risks, associated with the capacity of new command, management, and business practices.

The second category of risk is of primary importance in making defense planning decisions and, thus, in designing defense policy.

Defense planning risk is measured through the impact or consequence of an unfavorable outcome, given the occurrence of some military event or other event of organized violence, and a nation's force structure. Thus, the measure of risk is probabilistic. It is defined by the likelihood of the occurrence of an event and the estimated consequences in case the event occurs and we have a given force structure in place.

Each force structure is associated with a certain level of risks. Figure 8 presents visually the difference between two force structures under examination. Force Structure$_1$ is associated with Risk$_1$, and could be built and sustained if Budget$_1$ is made available. When a given force structure is defined as needed, defense planers (often implicitly) assume that the associated risk, i.e., Risk$_1$, is acceptable. When planners have to find a force structure that is "realistic"—i.e., that could be built and sustained within expected budgets (Budget$_2$ in the figure)—they create plans for a force structure associated with Risk$_2$.

In practice, the mismatch between needs, or the required defense capabilities, and resource constraints is inevitable. It creates a gap of unfunded capabilities. What could be done in regard to that gap? Dr. Jack Treddenick, Professor at the College of International Security Studies at the George C. Marshall Center in Garmisch-Partenkirchen, Germany, has identified a number of possibilities:[40]

- Pretend the gap does not exist

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[39] *The National Defense Strategy of the United States of America*, 11. U.S. defense strategy defines (1) operational, (2) future challenges, (3) force management, and (4) institutional risks.

[40] Jack Treddenick, "Transparency and Efficiency in Defense Planning and Spending," Presentation to the PfP Consortium Security Sector Reform Conference (Garmisch-Partenkirchen: George C. Marshall Center, 13 December 2005).
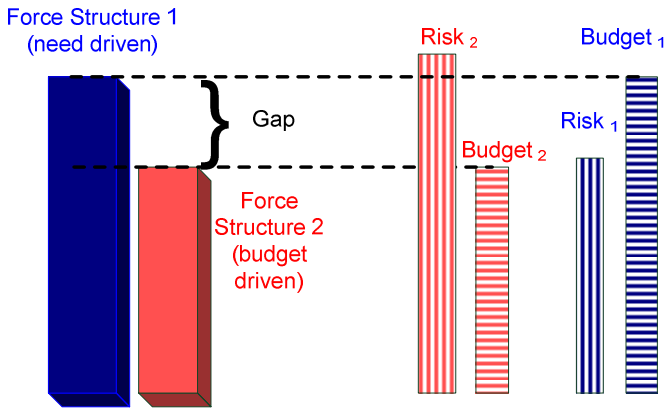
Figure 8: Force Structures, Risk Levels and Budgets

- Revisit the national security strategy
- Revisit the national military strategy
- Revisit the required force structure
- Reconsider the allocation of resources to defense
- Seek improvements in efficiency
- Transform the armed forces

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

Usually, a proposal for a force structure may be accepted if the associated planning risk is acceptable (i.e., the likelihood of an event's occurrence is determined to be low) or the likely consequences, given such an occurrence, are judged to be minor. An analysis of past experience, simulations, and expert judgment are used to assess risk. Whatever the approach, in the end the acceptance (or non-acceptance) of a planning risk strongly depends on the personality of the decision-maker. Some people are risk-averse, while others are more wiling to accept risk. Thus, any risk management strategy is inherently subjective.

On the whole, risk assessment should be integrated into the process of making decisions and setting priorities among competing demands. A fairly self-explanatory risk management model is presented in Figure 9.[41] Risk assessments, among other things, may be used to assign risk management responsibilities along organizational hierarchies.

**Estimated negative impact**

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

**Likelihood**

Figure 9: A Basic Risk Management Model

## Summary

There is no computer-applied algorithm for the application of a scenario-led, capability-based approach to force planning. Nevertheless, effective defense policies are based on disciplined approaches to the creation of force structure and force development plans that share some common steps:

- Definition of defense objectives, missions, and ambitions
- Design of and agreement on plausible scenarios, or environments in which these missions will be carried out (often including development of adequate operational concepts and selection of a course of action)

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

- Deconstruction of scenario activities into tasks and definition of "mission-essential task lists" (tasks are often drawn from generic task lists)
- Definition of the capabilities needed to accomplish the tasks; this step includes a number of sub-steps, the latter two performed in iteration:
  - o  Definition of the needed types of capabilities
  - o  Assessment of the planning risks
  - o  Design of a cost-effective force package that would provide capability levels needed to accomplish the tasks with acceptable risk
- Design a force structure appropriate for all anticipated missions and scenarios

All these steps may be performed in a variety of ways. What is important is to adhere to a rational, disciplined approach to defense policy-making and the principles of transparency and accountability. The examples from the experiences of democratic societies with mature defense policy-making mechanisms presented in this article may help PfP member states who endeavor to effectively manage the development of their armed forces.

# Capabilities-Based Defense Planning: Techniques Applicable to NATO and Partnership for Peace Countries

*Thomas-Durell Young* [*]

Defense planning, even at its best, is an inexact science. Objective data that demonstrate how well (or poorly) existing and future capabilities will perform on operations as envisaged in the planning process are difficult to come by. And, despite the fact that countries are willing to spend inordinate sums on defense capabilities, the academic and professional literature that addresses defense planning *qua* planning is modest, in stark contrast with the literature on business planning.[1] Perhaps unjustified concerns by ministries of defense over the security of information, or simply a 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. This lack of an objective and normative body of literature on this subject should not, however, be allowed to dissuade defense officials and planners from examining extant approaches to defense planning. To be sure, the range of methodologies from which

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[1] The discipline of strategic studies, albeit a relatively new specialty in the field of international relations, is surely an oddity. While exceedingly rich in most areas, the literature of strategic studies has all but ignored addressing, in any generic and systematic sense, the basic issue of how nations should best conduct defense planning. The extant literature on "defense planning," which is indeed prodigious, typically addresses a single country's experience while ignoring any cross-national analysis of methods, let alone attempting to offer generic methodologies that can be adopted by governments, either in their entirety or piecemeal. Surprisingly, there is not a single work in the extant literature that provides a theoretical approach to defense planning, management, and execution, either for didactic purposes, or for application by a government. Instead, particularly in the context of U.S. professional military education, curricula are often developed from source materials that are neither intellectually nor academically rigorous, given their bureaucratic genesis. Moreover, as countries undertake defense reform efforts—a rather prevalent practice, given that the end of the Cold War spawned a large number of young and fragile democracies—there is simply a dearth of work that contains a comprehensive presentation of all of the key contingent elements of defense planning that could serve as an appropriate guide or even template for emulation. This lack of a generic planning approach has a number of debilitating characteristics, not the least of which is that, without such a template, it is exceedingly difficult to demonstrate the benefits of integration, a *sine qua non* for an efficient and effective planning and execution system. Given that almost all countries have ministries of defense and defense forces, which regularly undergo restructuring and reform, the lack of any rigorous treatment of how nations can improve their planning, management, and execution of the mission of national defense is a significant lacuna in the professional and academic literature.

one might select may be modest; however, there are sufficient examples of successful planning systems to be studied for emulation.

The present writer has had the unusual opportunity to be able to combine a period of formal academic study with program management responsibilities in the area of defense planning reform.[2] Given the objective of this special edition of *Connections* on Partnership Action Plan on Defense Institution Building (PAP-DIB),[3] instead of addressing a specific case of defense planning reform, this essay will introduce a planning methodology that is discussed (and apparently emulated) but is little understood, particularly as regards its more nuanced aspects. The planning methodology under consideration is "capabilities-based planning." Again, a remarkable fact is that, despite its apparent popularity, the academic and practical literature on capabilities-based planning is modest at best, and non-existent at worst. One might speculate that one explanation for this gap is due to the fact that this methodology appears to be relatively new to North America and Europe. After all, until the early 1990s, NATO and Warsaw Pact countries largely employed variations on threat-based planning—on which there is, not surprisingly, a rather large literature. The excesses of this form of defense planning were, perforce, limited by resource constraints.[4] However, a Euro-centric myopia in this area can result in overlooking a particular instance where one advanced Western defense establishment undertook, over numerous years of trial and error, the development of a capabilities-based planning methodology. While this is not widely known in NATO and Partnership for Peace countries, Australia experimented with capabilities-based planning—that is, planning that is not based on identifiable or quantifiable threats, but rather on the capabilities already present in its armed forces—for over two decades as the basis for designing its force structure.[5]

By the end of the 1980s, after many false starts, the Australian Department of Defense, including the Headquarters Australian Defense Force (HQADF), had developed principles and processes for guiding force development that reflected government strategy and guidance to defend the country, while giving less weight to "threats." In their place, "credible contingencies" were created that were based on capabilities rather than on existing threats. The result of these efforts has been to create a unique

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[2]  See, for example, Aldo Kask, Jaan Murumets, and Thomas-Durell Young, *Approaching the Need for Defense Reform: Background and Outlines of Suggested Estonian Defense Planning System,* Proceedings 1 (Tartu: Estonian National Defense College, 2003).

[3]  Euro-Atlantic Partnership Council, "Partnership Action Plan on Defense Institution Building" (PAP-DIB), (Brussels: NATO Information Service, 7 June 2004).

[4]  For an early attempt to provide NATO defense officials with new planning principles and guidelines, see Ted Greenwood and Stuart Johnson, "NATO Force Planning without the Soviet Threat," *Parameters* 22:1 (Spring 1992): 27–37.

[5]  For instance, in a submission before the Australian Parliament's Joint Committee on Foreign Affairs, Defense and Trade, the Department of Defense claimed that the 1971 Strategic Basis paper acknowledged that Australia needed to pursue its own security interests through greater individual effort than had previously been the case. See Australia, Parliament, Joint Committee on Foreign Affairs, Defense and Trade, *The Management of Australia's Defense* (Canberra: Australian Government Publishing Service [AGPS], 1987), 22–23.

methodology that made the development of the Australian Defense Force (ADF) more relevant to Australia's enduring strategic circumstances. At the same time, the ADF become more responsive to government guidance and less influenced by particularly service-specific interests and problematic threat scenarios. Thus, the relevance of the Australian experience is that it established guidelines against which the ADF could conceivably operate in a non-threat-specific environment, while making adequate provision for other important planning factors, such as financial limitations.

Notwithstanding the unique characteristics of Australia's geo-strategic situation, the overriding policy requirement that Australian defense planners should come to terms with a threat-ambiguous environment is broadly similar to the imperative now faced by many NATO and PfP countries in the post-Cold War world. Therefore, an examination of the Australian capabilities-based methodology is more than apropos to the subject of PAP-DIB. As such, the purpose of this essay is to describe the Australian defense planning system and its force development methodologies, concluding with an analysis of the lessons learned from Australia that might be useful to other countries. While not all aspects of the process will be relevant elsewhere, the twenty-plus years of experience of the Australian Department of Defense warrants careful examination. At the least, an understanding of this planning methodology could spare defense planners in NATO and PfP nations from making the mistakes that bedeviled their Australian counterparts.

## The Defense Planning Process: Content and Outputs

Any sound defense planning and force development system can only be successfully implemented if there is a modicum of stated and clear government policy to guide planners. 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. In the end, guidance and priorities need to be promulgated in Ministry of Defense-level policy documents that, inevitably, will include such principles as defense of national sovereignty (and, in the NATO context, collective sovereignty), participation in crisis-response operations, etc.

Following the arrival at a clearer understanding of the nation's defense policy guidance and priorities, Australian defense planners established four major steps to be followed in the defense policy process, which will be described generically below.[6] Some

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[6] For background on Australia's defense planning methodology during the period in question, see Paul Dibb, *The Conceptual Basis of Australia's Defense Planning and Force Structure Development*, Canberra Paper on Strategy and Defense No.88 (Canberra: Strategic and Defense Studies Centre, Australian National University, 1992).

aspects of this planning process particularly reflect Australia's singular geo-strategic situation, and will therefore be only briefly explained.

First, defense planners need to recognize the fundamentals of a country's geopolitical and geo-strategic setting. While seemingly obvious, a nation's unique geographic characteristics, such as proximity to other countries, population centers, and infrastructure, need be carefully considered in a disciplined and systematic fashion. For instance, in the particular case of Australia, defense planners are confronted with defending an island continent, distant from other countries, that has a vast and climatically inhospitable northern area with limited population and infrastructure. The country also has the advantage of possessing a formidable "air-sea gap" between its northern shores and the islands to its north, which a potential enemy would have to overcome if it wished to threaten Australia.[7]

Second, it is necessary for planners to develop a disciplined and systematic appreciation of the capabilities of the armed forces—both those currently in service and those likely to be procured in the future—possessed by regional states. Officially, these are *not* threat assessments, but rather surveys of regional defense capabilities, current and anticipated.[8] Given the nature of the contemporary security environment in the Euro-Atlantic region, a solely geographically-oriented survey could well be replaced by a formal appreciation of terrorist capabilities, the likelihood of natural disasters, etc. In the Australian case, these appreciations were based simply on regional capabilities and did not involve any consideration of (or judgments about) the motives or intentions of other countries in the region. An appreciation of a country's geographic setting and the military capabilities of regional states produce, in effect, warning time and defense preparation requirements.[9]

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[7] "The area of direct military interest includes Australia, its territories and proximate ocean areas, Indonesia, Papua New Guinea, New Zealand and other nearby countries of the Southwest Pacific." See Australian Department of Defense, *Defense of Australia 1987* (Canberra: AGPS, 1987), 2, n. l; and, more generally, 1–3; 74. Note that this policy of self-reliance does not mean that Australia plans to be self-sufficient in terms of the manufacturing and supply of all defense-related equipment and stocks. See *Strategic Review 1993* (Canberra: Department of Defense, December 1993), 75–77. Note that this document superseded *Australia's Strategic Planning in the 1990s* (Canberra: Department of Defense, 27 November 1989).

[8] While those Australian defense officials interviewed emphatically argued that these appreciations were not threat assessments, references to "intelligent adversaries" and the country's "favorable security environment" pre-suppose an evaluation of a "threat," no matter how ill defined. Australian defense officials responded to this observation by stating that their methodology did not allow "threats" to dominate or overly influence their force development methodology.

[9] See Dibb, *Conceptual Basis*, 1–8.

Third, by combining the findings from the first two steps, a series of credible contingencies and national defense requirements can be generated.[10] A credible contingency, in effect, is that level of contingency possible given Australia's geo-strategic circumstances and current and foreseeable regional military capabilities, without consideration of motive or intent. Essential elements of these analyses are the capabilities possessed by regional states, their strategic doctrine, level of training and sustainability; the analyses also include an appreciation of the level of conflict one could reasonably expect to confront (e.g., low, low-escalated, medium, etc.).[11]

Australian defense planners argued that these contingencies were not employed as formal threat-based contingency planning, but were developed to produce a baseline against which a country's defense capabilities could be measured in the immediate term. 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 (i.e., reserve forces and expansion of defense industrial capabilities) for conflicts that would take longer to develop.[12]

Fourth, and finally, financial assumptions were introduced. These data were essential to enable the Australian Department of Defense to develop a five-year planning horizon to support and guide force development plans. A key purpose of the defense planning process is to provide vetted force development priorities derived from specific requirements, as opposed to championing "worthy causes." An estimate of the financial resources available for the near future, therefore, is extremely useful for planning purposes. However, particularly in many new NATO members and reforming PfP

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[10] For greater explanation of credible contingencies see Dibb, *ibid.*, 9–15. Note that these analyses would appear to be similar to the illustrative planning scenarios employed in the U.S. Joint Strategic Planning System. These scenarios suggest, for illustrative purposes, situations in which the United States, perhaps with allies and partners, becomes embroiled in conflict with hypothetical adversaries. These scenarios were described in the *Defense Planning Guidance* (more recently re-titled as *Strategic Planning Guidance*) as manifesting military challenges that might be addressed during the Future Years Defense Program. It must be noted, however, that these scenarios are neither predictive, nor exhaustive, regarding those challenges; nor are envisaged as reflecting policy decisions. These caveats aside, these scenarios purportedly illustrate the types of military capabilities needed, enable Department of Defense (DoD) components to perform detailed program planning, provide a basis for ensuring consistency among various DoD component programs, and serve as analytical tools and a base-line for evaluating component programs after they are submitted. See Douglas C. Lovelace and Thomas-Durell Young, *U.S. Department of Defense Strategic Planning: The Missing Nexus* (Carlisle Barracks, PA: Strategic Studies Institute, U.S. Army War College, 1 September 1995), pp. 7–8, 19-21.

[11] Levels of conflict, in Australian usage, are: low-level, escalated low-level, and more substantial conflict. These were defined by Paul Dibb in his *Review of Australia's Defense Capabilities* (Canberra: AGPS, March 1986), 53–54. Escalated low-level conflict was publicly defined by the Australian government as "the attacker supplementing or substituting unconventional tactics and forces with military units prepared to confront our forces directly." See *The Defense of Australia* (1987), 24–25.

[12] See Dibb, *Review of Australia's Defense Capabilities,* 16–20.

nations, such guidance is unlikely. Therefore, financial assumptions will likely need to be developed with a given nation's Ministry of Defense solely for internal planning purposes.

To describe how this planning methodology is translated into reality in Australia, the process produces these conclusions:

- Australia possesses an air-sea gap that is a natural and formidable barrier.
- Australia's regional security assessment is favorable because no identifiable country exists with the intent or ability to threaten fundamental Australian interests, let alone its national security (i.e., to launch and sustain an operation on Australian soil).
- Certain countries do, however, possess capabilities that could be employed against Australia, and these nations' acquisition of more threatening weapon systems could be countered by increasing the ADF's capabilities.
- In the short term and without expansion, such capabilities could be used only in low-level or escalated-low level conflict.
- As a consequence, Australia will defend itself through a strategy of "defense in depth."

These conclusions concerning Australia's geo-strategic environment produced the equivalent of a net assessment and established requirements for the ADF standing force structure and national defense infrastructure. For defense policy, the assessment had the following implications:

1. Given Australia's threat-ambiguous environment, sophisticated intelligence-gathering and assessment capabilities are crucial to providing sufficient warning time for an appropriate political response to be made. Clearly, no (sane) government is keen to spend any more than is necessary on national defense (a common theme in contemporary Europe). In consequence, it is assumed that if there exist sufficient intelligence capabilities, government will have sufficient time to act to develop additional capabilities to meet emerging threats.

2. Inhibiting incursions and monitoring Australian sovereign territory and seas require sophisticated air, maritime, and ground surveillance and reconnaissance capabilities, suitable for peacetime and wartime deployment.

3. Priority needs to be placed on building capabilities to meet low and escalated-low, versus high, levels of conflict.[13]

What this defense policy establishes, therefore, is a practice by which defense officials can approach the definition of missions without accentuating implausible threat scenarios. This is not always an easy objective to fulfill because it is dependent on a relatively high degree of consensus between ministries of defense and their subordinated national defense headquarters—what is, in effect, a critical test of a country's

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[13] See *Strategic Review 1993*, 41–49.

civil-military relations. In consequence, the above procedures provided Australian defense planners with stable direction for developing force structure, which, in principle, structured the ADF for the defense of Australia and in a top-down manner. It should be stressed that, at that time, the sole determinant for structuring the ADF was for the defense *of* Australia. While the ADF was envisioned as being capable of carrying out other missions—e.g., providing military support to civil authorities, acting in regional interventions, and carrying out alliance/global responsibilities—these tasks in themselves were not allowed to become force structure determinants.[14]

## Force Development Methodology

The previous capabilities-based force development process employed by the Australian Department of Defense and HQADF was divided into three stages (see Figure 1).[15] However, because the process itself should be understood as a continuum, the distinctions drawn between its three stages are somewhat arbitrary. The stages are: Stage I: Strategic Concepts; Stage 2: Defense Force Capability Options papers; and, Stage 3: Specific Capability Proposals, including Major Capability Submissions. Omitted from this analysis, for the sake of brevity, is any reference to the numerous joint-service and civilian-military committees that assess and adjudicate conflicting requirements and establish priorities throughout the development process.

### Stage 1: Development of Strategic Concepts

Derived directly from the defense planning process, the force development process must first identify the missions the defense force is likely to be required to perform. In addition to constitutional, legal, and policy requirements, the environmental factors conditioning the identification of missions are:

- Relevant key features of a country's geo-strategic situation, such as geophysical aspects and other political, diplomatic, and legal considerations, including technological developments

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[14] Note that this provision has been the case for some time. The problem, however, was in its implementation prior to the late 1980s. See, Australia, Parliament, Joint Committee on Foreign Affairs, Defense, *The Australian Defense Force: Its Structure and Capabilities* (Canberra: AGPS, 1984), 63.

[15] For an excellent explanation of this process, see the article by Frank Lewincamp, then-Director of the Concepts and Capabilities, Force Development Branch, Department of Defense, "Strategic Guidance and Force Structure: The Force Development Process," FDA Presentation to Acquisition and Logistics Project Management Course, Canberra, 21 July 1992. The process is fully explained in Australia, Department of Defense, *Defense Instructions (General)*, ADMIN 05-1 (The Force Development Process), 23 December 1991, 3. A summary is found in Australia, Department of Defense, Concepts and Capabilities Section, Force Development Branch, "The Force Development Process: From Strategic Guidance to Specific Capability Proposals–A Summary," revised 6 May 1993. Note that all of these documents are unclassified.

- Current and projected regional military capabilities, including their nature and level of potential threat
- Their potential employment by an intelligent adversary.

A Strategic Concept developed from this analysis will consist of a list of derived tasks to support the identified mission of the Australian Defense Force, including: specification, in the greatest possible detail, of task parameters that include (but are not limited to) rates of effort, location, and duration/sustainability; and, wherever possible, initial judgments of task priorities. In short, Strategic Concepts specify the military tasks that will be needed to support identified missions that are likely to be required of the defense force. It is essential that these tasks be identified correctly and comprehensively in the development process, because they will form the subsequent basis for force development. Once they have been articulated in Strategic Concepts, the tasks identified raise the following questions:

- What has to be done?
- Where must the task be done?
- When and how many times must the task be done?
- How long will the task have to be done?

Note that, at this particular stage, tasks specified in Strategic Concepts are conceptual, and do not specify *how* missions are to be accomplished. For illustrative purposes, there were eight formal Strategic Concepts developed out of the *Strategic Review 1993*, which clearly identified eight specific roles for the ADF.[16] It is important to note that they were developed to ensure a joint force focus so as to complement the various service capabilities of the ADF. The eight Strategic Concepts were:

1. Intelligence collection and evaluation
2. Surveillance of maritime areas and northern Australia
3. Maritime patrol and response
4. Protection of shipping, offshore territories, and resources
5. Air defense within Australia's maritime areas and northern approaches

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[16] See *Strategic Review 1993*, 45; 61–67 (Annex A). Note that these were superseded following another review in 1997. The revised hierarchy was structured as:
- Priority One: The knowledge edge (intelligence; command arrangements and command support systems; surveillance of our maritime approaches)
- Priority Two: Defeating threats in our maritime approaches (air superiority; defeating ships)
- Priority Three: Strike
- Priority Four: Land forces (defeating hostile land forces on Australian territory; surveillance of land targets; response).

See Department of Defense, *Australia's Strategic Policy* (Canberra: Directorate of Publishing and Visual Communications, December 1997, DPUBS: 29785/97), 56–66.
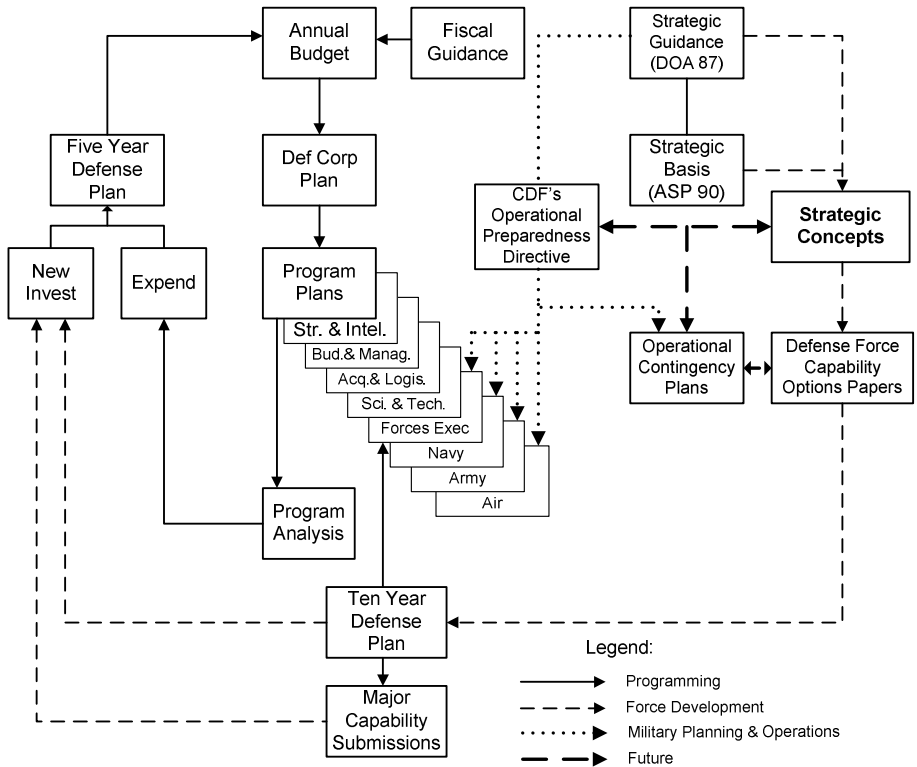
Figure 1: Defense Policy, Planning, and Programming System

6. Defeat of incursions on Australian territory

7. Protection of important civilian and defense assets, including infrastructure and population centers

8. Strategic strike.[17]

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.[18] Moreover, once all required Strategic Concepts were developed and endorsed, it was foreseen that one master Strategic Concept should be developed in order to provide macro-level context to the documents.

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[17] Cf. *Australian Strategic Planning in the 1990s*, 28–29. Note that developing a response to operations specific to "South Pacific nations" was dropped in the 1993 strategic review.

[18] See Department of Defense, "The Force Development Process: From Strategic Guidance to Specific Capability Proposals."

## 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 the endorsed Strategic Concepts. Where tasks cannot be completed to a level judged to be sufficient or adequate, an analysis is undertaken to ascertain which broad options should be considered for use in overcoming these deficiencies. (It should be noted that this is not an original methodology; its earliest origins can be found in the management reforms implemented in the U.S. Department of Defense during the McNamara era.[19] A key element of these reforms was the introduction of economic decision-making techniques to the capabilities-requirements process. 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.[20]) This is an important step in the development process because it forces the planning system to examine, in a joint service and civil-military context, what can be accomplished with current capabilities and, failing that, what new capabilities are genuinely necessary.

The development of these analyses involves accomplishing the following steps:[21]

1. Ascertain existing capabilities and assess whether they are relevant to the task in question. This analysis must estimate the performance likely to be achieved from using all existing capabilities. This finding is important because it will provide the baseline against which the cost of adjustment options can be measured.

2. Make initial judgments about the acceptable level of performance of capabilities and assess the consequences of not being able to execute tasks to that level, i.e., does a deficiency need to be overcome? This analysis must also consider the likely operational implications of not being able to undertake the tasks completely.

3. Explain how the defense force could reduce or limit the deficiency without major financial expenditure, i.e., cost-effective (involving little capital expenditure) adjustments such as changes in doctrine, organizational structures, or changes to existing command authorities and structures.

4. If the defense force cannot fulfill a task identified in a Strategic Concept, the analysis must explain how it could acquire a higher level of proficiency by improving its various components, e.g., increases in manpower, new equipment, expanded individual/unit training, etc.

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[19] Charles J. Hitch and Roland N. McKean, *The Economics of Defense in the Nuclear Age* (Cambridge, MA: Harvard University Press, 1960).

[20] 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.

[21] See Department of Defense, "The Force Development Process: From Strategic Guidance to Specific Capability Proposals."

5. Estimate the expected level of improvement needed while assessing the resource implications of such changes in terms of the costs of any such enhancement options, as well as the possible consequences of not being able to perform the tasks to the level already judged acceptable.

6. Finally, establish force development options and priorities based upon the preceding analyses that present the best return for expended resources.

While perhaps lengthy and complicated, this process can be summed up briefly:

- Can the identified tasks be performed now? (This is not only a question of what is present in the current capabilities inventory, but also how *well* this can be done at the time of the analysis.)

- How much is enough? (If a surplus of capability exists, a decision must be made whether to reduce the current structure in order to shift excess capabilities elsewhere—e.g., shift low-demand forces from the active force to reserve status. If existing capabilities are inadequate, identify where the discernible shortfall exists and what should be done to justify this shortfall.)

- What are the costs and risks? (It should be remembered that costs can take the form of traditional financial costs, as well as "opportunity costs" to the armed forces; as such, they both need to be identified, quantified, and assessed).

- What are the preferred generic options? (It is important that this process not recommend specific capabilities to fill identified gaps. For example, it would be appropriate for such analyses to conclude that a defense force required improved air defense, or anti-armor capabilities. It would be inappropriate for these analyses to recommend acquiring new/more surface-to-air missiles, or new/more main-battle tanks.)

### Stage 3: Specific Capability Proposals, Including Major Capability Submissions

Following approval by a senior defense committee of the generic options identified in Stage 2, the final step in the force development process is to determine specific solutions and match available and envisaged future 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 the timing of procurement. Once these proposals/submissions are endorsed by political officials, they can be incorporated into the funding or programming process.

## Imperfections in the Methodology

Perhaps because of its *sui generis* nature, Australian defense officials have long conceded that their defense planning methodology fell slightly short of perfection. Simply trying to effect a full planning and execution cycle proved difficult. Like most planning systems, it was difficult to actually complete a full planning and execution cycle without innumerable recommendations to improve the system being made midstream. In

consequence, some would argue that the value of the centrality of endorsed Strategic Concepts in providing overall direction to the force development process was never fully validated. It was also not an uncommon criticism to hear that Strategic Concepts were continuously being re-vetted before they could be fully validated by the planning system. In terms of methodological problems associated with Strategic Concepts, the following problematic aspects can be identified:

- A tendency to exaggerate regional defense capabilities and the likely level of conflict (*viz.*, a natural proclivity by some planners to interpret capabilities as "threats" and assume a worst-case scenario).

- A paucity of mid-level ranking officers with the necessary analytical and methodological skills to develop these papers, particularly those capable of adopting a non-traditional approach. This is a clear caveat for PfP nations with limited civilian defense expertise. However, in the end, it is necessary to have such expertise—which must be insulated from outside influence—in order to allow them to base judgments on sound data.

- The need to ensure that such a new and unique planning process as this one is reflected in national command and control arrangements, particularly as they relate to the sensitive issue of joint command concepts over traditional single-service ones.

- The need to ensure that there is a strong and responsive process that links a Chief of Defense's (CHOD's) defense force's operational preparedness guidance to Strategic Concepts and any other deliberate plans, which should include formal operation, concept and functional operation plans.

- The need to ensure the provision (particularly costs) of adequate logistic support is factored into the planning process at the point where "capabilities" have been identified to accomplish required tasks.[22] From a methodological perspective, whenever possible, such a logistics support assessment should take place early in the Defense Force Capability Options process.

- The miscalculation on the part of some planners of the complexities and difficulties likely to be confronted by a defense force when responding to low-level con-

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[22] The lack of development of a methodological approach to the problem of logistically supporting the ADF in this force development process has been surprising. According to Air Marshal J. W. Newham, RAAF, Chief of Air Staff from 1985 to 1987, "In the Force Structure Committee we were trying to get a few extra Harpoon missiles to meet Navy's ships' outfits requirements, plus a few in reserve. The Assistant Secretary FDA [Force Development and Analysis Division] opined that, as we possessed 72 Harpoons, that would be sufficient to knock out all of the ships of all of the neighborhood navies, so we didn't need any more. He'd overlooked that the 72 Harpoons were of little utility if locked away in ships' magazines deployed hither and thither around Australia. The weapons would not be available unless reserves were held and air launch kits were on hand." See *Australia's Air Chiefs: The Proceedings of the 1992 RAAF History Conference* (Canberra: RAAF Air Power Studies Centre, 14 October 1992), 67.

flict. In other words, such a level of conflict is likely to be manpower- and combat-service-support intensive, as opposed to high-level conflicts requiring complex and expensive combat capabilities.

As regards Defense Force Capability Options papers, the following challenges have been identified by Australian defense planners:

- Tasks are common to more than one role and, as such, these data need to be factored into the planning process.

- The execution of tasks may require a joint service effort. This is important given that services tend to be individually funded. Therefore, service budgets need to be reflective of the potential need for "joint" capabilities.

- At least in the early phases of the planning process, planners experienced some difficulty in establishing a direct link between these analyses and standing operational contingency plans.

- The development of appropriate criteria for the capability/risk/cost trade-off (i.e., accurately defining acceptable performance standards that are based on metrics).

- Producing objective capability-to-task analyses, so as to better to inform planners and officials in their decision-making.

- The fact that many capabilities involve multiple roles, which leads to further complications in the capability-to-task analysis.

## Learning from Australia's Experience

One might conclude upon reading this brief overview of Australia's defense planning and force development processes that both of these systems are simply intuitive. Such a judgment ignores the fact that the Australian Department of Defense was a pioneer in developing this planning method, and endeavored to ensure that it was the result of a careful attempt to derive force structure by logical, quantitative, and verifiable means. Officials went to great lengths to limit the extent to which simple judgments or preferences were accepted as facts that were based upon dispassionately derived data. Indeed, these processes were not easily developed—it took a rather sophisticated political and defense community twenty years of experimentation to reach a level of adequate performance. Even today, this planning system is not without its shortcomings and, to their credit, Australian defense officials have long been candid in acknowledging weaknesses. Key elements of this discussion included institutional problems that impeded the methodology's implementation and operation, and how they have been addressed, if not satisfactorily solved. Some particularly vexing problems in this regard have been:

- Until the late 1980s, the defense community was often provided with insufficient or contradictory policy, strategy, and strategic guidance

- The department of defense suffered from inadequate organizational structures

- The challenges posed by the perennial need to reconcile funding current tasks to achieve readiness with long-range planning requirements to ensure modernization and future advanced capabilities

## *Lack of Guidance*

As surprising as it may seem, Australia's official strategic thinking evolved slowly from the early 1970s onward.[23] Between the publication of the 1972 defense white paper and its 1987 counterpart, Australian defense planners were given at best incomplete (and oftentimes contradictory) guidance from political authorities.[24] It took Dr. Paul Dibb (consultant to the then-Minister for Defense, Kim Beazley), and his seminal review of the ADF's capabilities, to move the government toward articulating and sanctioning an official national-level strategy.[25] The 1987 defense white paper provided unambiguous guidance, and the government comprehensively stated its national security aspirations and announced its strategy of "defense in depth." The white paper had the effect of clearly limiting the Australian defense establishment's force structure planning to the defense of Australia.[26]

That said, as many defense planners in PfP member states can fully appreciate, inadequate or contradictory national-level policy and guidance can make developing coherent and integrated plans very difficult indeed. An example of how this lack of strategic guidance can adversely affect planning can be seen in institutional disagreements over the level of conflict for which the ADF should be structured. For instance, prior to the release of the 1987 white paper, the department's civilian-led Force Development and Analysis Division (FDA) argued that the ADF should be structured for low-level contingencies—that is, to limit the options available to government by limiting capabilities. The services, on the other hand, stressed the need to operate at the mid- to high-level end of the conflict spectrum (largely in conjunction with allies in multinational formations). FDA was intent upon forcing the services to concentrate their de-

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[23] See Australia, Department of Defense, *Australian Defense Review* (Canberra: AGPS, March 1972), 6–10; 37–38; and *idem*, *Australian Defense, November 1976* (Canberra: AGPS, 1976), 10-14. Extracts of these important official documents can be found in Dibb, *The Conceptual Basis of Australia's Defense Planning,* 70–83.

[24] Dibb, *Conceptual Basis,* 49–52.

[25] See Dibb, *Review of Australia's Defense Capabilities,* 25; 49–52.

[26] *The Defense of Australia* (1987), 31–32. It should be noted that I have written extensively critiquing this strategy and the policy of "self-reliance," in that it seems inconceivable that defense planning should seek, in effect, to limit possible government options by limiting capabilities. See my review essay of Michael Evans's *The Tyranny of Dissonance: Australia's Strategic Culture and Way of War, 1901-2005* (Canberra: Land Warfare Studies Centre, 2005), in *The Australian Army Journal* 3:1 (Summer 2005-06): 241–47; and my paper, "The Nuanced Australian–U.S. Defense Relationship," Presentation to the Woodrow Wilson International Center for Scholars, Asia Program (1 June 2005), available at http://www.wilsoncenter.org/index.cfm?topic_id=1462&fuseaction=topics.documents&group_id=28652.

velopment efforts on building capabilities for the specific mission of the *defense* of northern Australia, while the services favored the procurement of "high-tech" capabilities better suited for a "blue on red," high-intensity conflict. Obviously, agreement upon which level of conflict will be most relevant to a country's security requirements is critical in acquiring the appropriate capabilities to equip the force. In the case of Australia, this argument was only resolved with the publication of the 1987 defense white paper.

Finally, in 1993, a review of the strategic basis of Australian security was completed: *Strategic Review 1993*. This document examined the global and regional changes affecting Australia's defense, and identified and established a prioritized list of the principal current and foreseeable tasks of the ADF. Strategic Concepts were subsequently revised or developed based upon the ensuing analysis and priorities generated by this policy document.[27] While the existence of a stated strategy—"defense in depth," as established in the 1987 defense white paper—went far in providing a framework for development that proved to be extremely useful to implementing planning based upon these Strategic Concepts, the lack of a similar level of clarity in establishing the ADF's new roles and missions in achieving these new objectives had the effect of retarding the implementation of the force development process. As such, initial efforts to (re-)write Strategic Concepts floundered because they tended to be single-service oriented. Subsequent to issuing *Australia's Strategic Planning in the 1990s,* the ADF adopted nine principal defense tasks in an attempt to develop jointly conceived Strategic Concepts. During this interim period, without any sanctioned strategic guidance, the services were forced to use levels of conflict *as guidance*.[28] In essence, the publications *Australia's Strategic Planning in the 1990s* and *Strategic Review 1993* provided unquestionable government-endorsed policy and guidance to be employed in the initial phases of the force development process.

One can thus see that it took a considerable amount of time before the Australian government was able to institute its novel defense planning and force development process. A key lesson from the Australian experience is that a top-down approach was required to overcome institutional opposition (in particular, from the individual services) to implementing the planning process. The Australian experience also demonstrates that, without recognized and accepted national-level government-endorsed guidance—policy, strategic, and financial—a top-down approach to defense planning is very difficult to execute in the presence of opposition from the services and other institutional stakeholders. However, it is also a mistake to conclude from this case study that formal documents are necessary to achieve such a planning methodology. Oftentimes, national-level policy can be found in disparate sources, such as the constitution, defense laws, and speeches by senior civilian officials. It is the task of senior civilian defense officials to gather such guidance and integrate it in a usable form for planning purposes.

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[27] See *Strategic Review 1993*, 39–49.
[28] Briefing, Department of Defense, Russell Offices, Canberra, ACT, December 1992.

## *Inadequate Organizational Structures*

Prior to the reorganization of Headquarters Australian Defense Force (HQADF) in 1990, the Australian defense organization was not well structured to implement a top-down defense planning system. Until the latter half of the 1980s, the armed services were more or less modeled upon their American or British counterparts in key elements of their structure. As in most Western defense forces, little thought or effort had been directed to developing joint capabilities. Moreover, there was a clear predilection on the part of governments, and consequently planners, to direct resources to individual service combat capabilities, as opposed to developing joint capabilities and combat support, and combat service-support, formations. Hence, the Australian services were eminently well suited for combined operations alongside their allied counterparts when forward deployed and within larger allied formations, as opposed to conducting joint and integrated operations with other services from the Australian military, even within Australia. This force structure, while perhaps appropriate to the period of "Forward Defense" in the 1950s and 1960s (when Australian forces were deployed in Southeast Asia), was judged by civilian defense planners and some elected officials as being hopelessly ill-suited to support a new defense policy based upon the premise that defending Australia proper was the top priority for the ADF, and should therefore drive its capability development.[29]

Organizationally, the individual services retained considerable independence from the civilian side of the Department of Defense, including responsibilities for force development.[30] Indeed, until the consolidation of the civilian sections of the three services into the Department of Defense in 1973, each service had its own individual department and minister! While the 1973 reorganization[31] has been referred to as the act that "civilianized" the Australian defense establishment, it still left many problems unsolved.[32] Most significant was that it left the services' force development divisions intact. In consequence, there ensued a lack of advance coordination between the civilian and military defense planning organizations, and a series of joint planning documents went largely ignored by the services.[33] In fact, the services were often accused by civilian defense planners of simply proposing block replacement of aging equipment, without adequate consideration of their relevance to Australia's defense needs. Indeed, as Dibb observed in 1986,

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[29] For example, see T.B. Millar, *Australia's Defense,* 2nd ed. (Carlton, VIC: Melbourne University Press, 1969), 109–45.

[30] See *The Management of Australia's Defense*, 301–2.

[31] Australia, Department of Defense, *Australian Defense* (Report on the Reorganization of the Defense Group of Departments, Presented to the Minister for Defense, Canberra, November 1973).

[32] See Robert O'Neill, "Defense Policy," in *Australia in World Affairs, 1971–1975*, ed. W.J. Hudson (Sydney: George Allen and Unwin, 1980), 24–25.

[33] See Wesley H. Schmidt, Jr., *Planning Australia's Defense Forces* (Newport, RI: Department of National Security Decision Making, U.S. Naval War College, 14 March 1990), 195–96.

Force structure planning deficiencies have been compounded by the lack of a comprehensive military strategy and operational concepts for the defense of Australia. In the absence of more definitive guidance, each Service has developed its own planning. ...These documents are not coordinated with one another, nor do they necessarily follow closely current strategic guidance. Some of their force structure objectives are unrealistic.[34]

These organizational problems were addressed in 1990 following an important review that restructured the HQADF. This headquarters, which had been established in 1984 to serve as a joint staff, assumed greater authority through the creation of the position of Vice-Chief of the Defense Force, with responsibilities of coordinating force development and long-term planning activities, as well as an Assistant Chief of the Defense Force (Development), with resources drawn from the individual services.[35] Hence, when viewed in conjunction with the publication of key policy, planning, and strategy documents, the centralization of military force development responsibilities, along with the concentration of civilian expertise in the Force Development Division, established processes that were more conducive to a top-down approach to defense planning and force development.

## Reconciling Current Tasks with Long-Range Planning

A problem that has long plagued Australia, and one that is surely familiar to NATO and PfP member nations, is the challenge of funding current operations while leaving adequate financial resources to acquire long-term capabilities. Moreover, 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.[36] The need for farsighted defense investment is particularly important in Australia, which predicates its defense planning upon the critical assumption of sufficient warning time of a developing military threat in order to activate its defense expansion base. The end of the Cold War combined with an extensive (and expensive) capital acquisition program launched in the mid-1980s to place the Department of Defense in the perennially difficult position of needing to fund

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[34] Dibb, *Review of Australia's Defense Capabilities*, 27.

[35] See Australia, Department of Defense, Management Improvement and Manpower Policy Division, *Report on the Implementation of the Structural Review of Higher ADF Staff Arrangements* (Canberra, 1 May 1990), 19–20.

[36] For example, the government's decision in 1993 to purchase fifteen excess USAF F-111 aircraft was made because they were a "good buy." There was no need for these aircraft that had been validated by the planning system. See *The Telegraph-Mirror* (NSW), 30 June 1993; and *The Sydney Morning Herald,* 18 September 1993.

current operations while attempting to find ways to fund long-term capital acquisition projects.[37]

As one can imagine, there is no simple answer to the conundrum of funding current and future activities in an environment of effectively diminishing resources. A review was conducted in 1990–91 to reexamine force development plans and priorities in the light of lower levels of funding than were anticipated in the 1987 white paper. One of the recommendations of this report, *Force Structure Review 1991*, was that the Department of Defense adopted a ten-year planning system to complement the existing Five Year Defense Program.[38] This new program's envisaged purpose was to establish necessary longer-term priorities in order to better manage limited resources. While certainly not a panacea, the development of a ten-year development plan was judged somewhat useful in forcing the establishment of clear resource priorities. However, it should be noted that Australian defense officials discovered that an early problem developed in the utilization of this plan, in that it tended to endorse the block replacement of equipment, which is antithetical to the top-down planning process.[39] Australian defense officials felt that this issue would be resolved once Defense Force Capability Options Papers were sufficiently developed to provide a greater level of specificity to the ten-year development plan.

## The End of Capabilities-Based Planning?

A number of unconnected events appear to have conspired to end, at least in a formalistic sense, the predominance of capabilities-based defense planning in Australia. First, the electoral defeat of the Australian Labor Party in 1996 by a conservative coalition might well have spelled the end of this planning methodology. Notwithstanding the impeccable pro-American credentials of the Labor government (in power since 1983), the new conservative coalition was elected on a platform of improving Australia's defense relationship with the United States. However, it was not until the commissioning of the Defense Efficiencies Review in 1997, and the adoption of its recommendations by the government—including the consolidation and amalgamation of offices within the Department of Defense and HQADF—that power relationships and priorities

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[37] For background on this issue see Graeme Cheeseman, "Over-reach in Australia's Regional Military Policy," in *The New Australian Militarism: Undermining Our Future Security,* ed. Graeme Cheeseman and St. John Kettle (Leichhardt, NSW: Pluto Press Australia, Ltd., 1990), 73–92; and Thomas-Durell Young, "Problems in Australia's 'Defense Revolution,'" *Contemporary Southeast Asia* 11:3 (December 1989): 237–56.

[38] See Australia, Department of Defense, *Force Structure Review* 1991 (Canberra: AGPS, May 1991).

[39] Briefing, Department of Defense, Russell Offices, Canberra, ACT, December 1992.

changed.[40] Moreover, the priority to focus the nation's finite defense resources on the "defense of Australia" was replaced by the need to fund capabilities geared toward peace-support operations, such as in East Timor, as well as to support coalition operations in support of the global war on terrorism. It is as yet sufficiently uncertain to conclude whether the planning methodology failed to meet the new policy requirements of the government, or that its implementers were unwilling to adapt it to the new policy environment, or that the new defense organization was incapable of executing the system as previously organized.

## Conclusions

This essay has described and analyzed how, notwithstanding difficulties and challenges, a defense force can be structured on a threat-ambiguous planning basis that reflects government guidance and macro-regional security considerations. The Australian experience has shown that, given proper government guidance on both policy/strategy and funding, a defense force can be developed to meet the objectives established by the government. Leaving aside the specific stages and details of the planning process, the Australian case reveals that a number of institutional and policy conditions are necessary. Top-down planning is particularly dependent upon government guidance: policy leadership, strategic guidance, and financial direction. An appropriate institutional structure is also necessary in order for these directives to be implemented. The Australian experience demonstrates that, without these structures, the planning process between the individual services and the development office can be very contentious and, as a result, often ineffectual. Thus, the creation of a joint headquarters with adequate staffing, headed by a senior military officer, to work with the civilian defense force development officials will also encourage success. One of the additional benefits of such a system is that it tends to encourage and facilitate the joint development of capabilities to meet endorsed tasks.

Obviously, the Australian experience has not been without its own problems and shortcomings, the difficulty of combining the funding requirements of current tasks

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[40] The Force Structure Review recommended the adoption of an "integrated planning structure, … able to identify the capability consequences of changes to resource levels and … to determine the longer term consequences of such changes for force capability." Moreover, the review recommended the need to adopt "longer term planning so as to identify the factors that will shape the Defense Force of the future." See *Future Directions for the Management of Australia's Defense,* Addendum to the Report of the Defense Efficiency Review: Secretariat Papers (Canberra, Directorate of Publishing and Visual Communications, Defense Centre Canberra, 1997, DPUBS: 27119/97), 21–25, particularly 23. See also *Future Directions for the Management of Australia's Defense, Report of the Defense Efficiency Review* (Canberra: Directorate of Publishing and Visual Communications, Defense Centre Canberra, 1997, DPUBS: 26975/97); see particularly E-4, recommendation R16: "The Concepts and Capabilities Committee, the Force Structure Policy and Programming Committee and the Defense Source Definition Committee should be disbanded and replaced with competent staff work and ad hoc meetings if necessary."

with long-term planning being only one example. However, this should not condemn the process itself. At a time when NATO and PfP nations are searching for convincing means to justify existing, let alone new, force structures, proposals based upon methodologies that emphasize threat-ambiguous (or capabilities-based) rationales stand a greater likelihood of obtaining government support than arguments based upon other, more ephemeral rationales. To be sure, not every aspect of the Australian methodology may apply to all states. However, one could make a strong argument that the shifting of force development resources and responsibilities away from the individual services to a joint staff warrants consideration by most NATO and PfP member nations. What may be particularly valuable to some nations are certain elements of the Australian methodology that would increase the intellectual discipline and rigor of their planning processes. At bottom, the Australian methodology requires careful and systematic consideration of what a defense force should be structured to do. It should imbue the defense planning process with an active and practical mentality in what has been, in many instances, a reactive process, one that has been all too vulnerable to challenges by ministries of finance in all too many NATO and PfP nations.

In sum, the Australian experience offers insights into the planning process, successes that other countries can duplicate, and mistakes that they can avoid replicating when introducing reforms to their defense planning methodologies. Without an identifiable threat upon which to focus, defense planning in NATO and PfP nations is a "tough sell" to many politicians, and justifiably so. What responsible political leaders and civilian officials are increasingly demanding from military establishments are well-reasoned justifications for military capabilities that meet stated requirements. A threat-ambiguous planning process, based upon a review of the twenty-odd years of Australian successes and failures, might be a reasonable place to start developing such processes.

# Introduction to Program-Based Defense Resource Management

*Todor Tagarev* [*]

The Partnership Action Plan on Defense Institution Building (PAP-DIB) supports Partner countries in developing and implementing transparent procedures for the effective allocation of defense resources. These are procedures that can allow decision makers to relate decisions on security policy, defense requirements, and resource allocation. A considerable number of NATO member countries use program-based defense resource management—some in combination with capability based planning—as one of the main tools supporting the effective implementation of their security and defense policy. Other member countries do not use the explicit term "program-based," but nevertheless implement the same principles of transparency and accountability in their approach to defense resource management.

This essay examines the principles and practices of program-based defense resource management, which, as will be shown below, equates to program-based force development. It starts with outlining the reasons behind the use of *programming*, and then looks at several key topics structured around two main themes:

- What is a good program decision, and how does it depend on the design of a program's structure?
- What are the key activities in the defense-resource management *process*, and what are the connections between them?

The essay will then briefly examine some of the major implementation challenges usually encountered by new NATO members and Partner countries, and concludes with an outline of the links between program-based defense resource management and defense institution building.

## Rationale for Program-Based Defense Resource Management

Nations spend money on their armed forces with the intention of guaranteeing the security of their territory, their citizens, and their allies against a certain spectrum of risks and threats. What is important, however, are not the armed forces in themselves, but the capabilities they provide for the implementation of the country's security policy.

Therefore, in assessing resource management systems and practices, an observer can relate resource allocation decisions to policy decisions. A typical question is how resource allocation decisions lead to the realization of the country's security and defense policy objectives. A particular aspect of this approach is the "output orientation"

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[*] For information about the author see p. 15. This article reflects research on project SfP 981149 "Operations Research Support to Force and Operations Plannning in the New Security Environment," sponsored by NATO's Scientific Affairs Division in the framework of the Science for Peace Program.

of resource management—that is, how the use of defense resources leads to a "product" that is required in order to implement the country's security and defense policy. As a result of defense planning developments in the last decade or so, today it is generally recognized that main "product" of a defense establishment are its *capabilities*.[1]

In addition, in a good defense planning system the allocation of resources provides for a set of capabilities that is balanced across the full spectrum of nationally-endorsed missions of the armed forces. Under such a system, capabilities are developed and sustained in a cost-effective manner, planning risks are rigorously assessed, and risk estimates are smoothly incorporated in making resource allocation decisions. Three additional important criteria for assessing defense resource management are transparency, accountability, and flexibility. These subjects will be addressed in the second part of the essay.

There is certainly more than one way to create an effective defense resource management system. Many NATO members and Partner countries, influenced by the experience of the United Sates since the early 1960s, have implemented resource management systems in which plans are linked to budgets through *programs*.[2]

Thus, through these programs defense planners intend to link policy requirements and budgets. Secondly, programs serve to translate plans or vision of future defense and force structures—usually longer term documents that look ten, fifteen, or more years into the future—into short-term activities and decisions, such as budgeting, procurement, training, etc. Importantly, defense programs make visible the links between policy and budgets, long-term vision and short-term plans, rendering them clearly understood by decision-makers and all major stakeholders.

Defense programs are important management tools. In addition to their key role in the planning process, they support rigorous oversight of implementation. Receiving up-to-date information on the status of the defense programs, senior civilian and military leaders can realistically assess the status of defense reform and transformation efforts and, if necessary, implement corrective measures. In addition, information derived from defense programs facilitates the oversight and audit functions performed by the legislature and its specialized organizations, such as national audit offices.

## What is a Defense Program?

A defense program is a comprehensive rubric designed to articulate the intended use of defense resources to achieve measurable output. Currently, the prevailing understand-

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[1] For a detailed discussion and an example of capability-based planning, see the article by Dr. Thomas-Durell Young in this volume, "Capabilities-based Defense Planning: Techniques Applicable to NATO and Partnership for Peace Countries."

[2] The website of the Comptroller of the U.S. Office of the Secretary of Defense provides both historical context and information on current developments of the U.S. Planning, Programming, Budgeting, and Execution System; see www.dod.mil/comptroller/icenter/budget/ppbsint.htm (30 April 2006). The basic text for PPBES is Charles J. Hitch and Roland N. McKean, *The Economics of Defense in the Nuclear Age* (Cambridge, MA: Harvard University Press, 1960).

ing is that one major product or "output" of a defense establishment are the *capabilities* it possesses in order to implement—if and when necessary—any assigned missions in support of the implementation of a national or alliance security policy. The build-up of a capability requires the coherent development of doctrine, organizational structures, personnel, weapon systems, infrastructure, and training, among others.

The development of a defense capability, barring a few trivial cases, is also a lengthy process. For example, if a country does not have advanced fighter or bomber aircraft, but decides to develop capabilities to allow for long-range precision air strike, it may easily take a decade from the point a decision to develop such capability is made to the moment this capability can be effectively employed.[3] In addition, the development of new capabilities may be quite expensive. The continuation and maintenance of capabilities that do not relate to current policy is also expensive.

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

- Needs of current operations
- Long-term investments, e.g., in science and technology, development of strategic partnerships, etc.
- The necessity to deal with legacy issues

For these reasons, the effective management of defense is based on programs, including the program-based development of capabilities. Before turning to the issue of program-based defense management, there is a need to clarify more formally what is meant by a "capability."

## Capability Models

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

Australian defense planners define capability as "the power to achieve a desired operational effect in a nominated environment, within a specified time, and to sustain that effect for a designated period."[4] In the United States, the Homeland Security community uses the following definition: "A capability provides a means to perform one or more critical task(s) under specified conditions and to specific performance standards."[5]

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[3]   This is true even in cases where someone is already producing an aircraft that suits the capability requirements.

[4]   See *Defence Capability Development Manual* (Canberra: Australian Department of Defence, 2006), 5; available at www.defence.gov.au/capability/_pubs/dcdm%20(2006).pdf.

[5]   *National Preparedness Guidance*, Homeland Security Presidential Directive 8 (Department of Homeland Security, April 2005), 6–7.

A capability may be delivered in a variety of ways. A number of countries have standardized models that describe the systems aspect of capability. For instance, the Canadian construct of capability inputs is known as PRICIE, the acronym standing for:[6]

- **P**ersonnel
- **R**esearch & Development/Operations Research
- **I**nfrastructure & Organization
- **C**oncepts, Doctrine & Collective Training
- **I**T Infrastructure
- **E**quipment, Supplies and Services

Australian planners use a construct of eight groups, called Fundamental Inputs to Capability, or FIC.[7] These are:

- Organization
- Personnel
- Collective Training
- Major Systems
- Supplies
- Facilities
- Support
- Command and Management

Planners in the United States use the construct DOTMLP, which stands for:[8]

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

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

[8] Ibid., 7, n. 6. The construct is commonly used by U.S. Army planners, but lately Air Force and Navy, as well as joint organizations (who add "Facilities" to the equation, resulting in DOTMPL-F) also find it useful in such efforts as analyzing functional needs and gaps and identifying solutions using enterprise architectures. See, for example, Ted Warner, "DOD's Ongoing Efforts to Implement Capabilities-Based Planning," paper presented at the Monterey Strategy Seminar on *Capabilities-Based Defense Planning: Building a 21st Century Force* (Monterey, CA: Center for Contemporary Conflict and the Cebrowski Institute for Information Innovation and Superiority, September 2004). For the use of the construct in the U.S. Army, see *How The Army Runs: A Senior Leader Reference Handbook*, 25th ed. 2005-2006 (Carlisle Barracks, PA: U.S. Army War College, 2005), 10, 38–42; available at www.carlisle.army.mil/usawc/dclm/linkedtextchapters.htm (24 April 2006).

- **D**octrine
- **O**rganization
- **T**raining and Education
- **M**ateriel
- **L**eadership
- **P**eople

With the creation of the Allied Command for Transformation and its growing role in the NATO force planning process, it can be predicted that the ACT capability model will (possibly with minor modifications) be introduced in the planning process of many countries. The NATO construct is known as **DOTMLPFI**, which stands for:[9]

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

Even though the models used in these various nations may differ, each one is intended to ensure appropriate levels of quality, consistency and balance in the capability components, or inputs. The development of a capability requires coherent development of human resources, the materiel component, doctrine, structure, and training. Programs are put in place to provide and steer this development.

*Defense Programs*

Defense programs are intended to provide for the attainment of defense objectives within resource constraints. A *defense program* is "an integrated plan of intended use of available and expected resources (personnel, materiel, money, etc.) in order to achieve results, i.e. build and maintain capabilities."[10] The primary function of a defense program is to support resource decision-making, linking resources to products (see Figure 1) and providing for "output-oriented" policy and plans.

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[9]   See, for example, Admiral Sir Mark Stanhope, (then) Acting Supreme Allied Commander for Transformation, Briefing to the Conference of National Armaments Directors /CNAD/ (26 October 2005); available at http://www.act.nato.int/multimedia/speeches/2005/051026asact cnad.html.

[10]  Adapted from the official Bulgarian Ministry of Defense document *Concept for Planning, Programming, and Budgeting in the Ministry of Defense and the Armed Forces* (Sofia: Military Publishing House, 2001), 14–15.
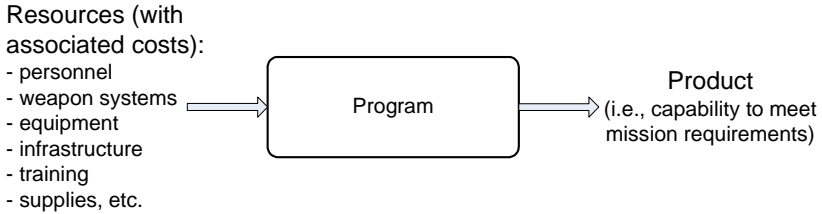
Figure 1: Designation of a Defense Program

This is usually a mid-term plan that looks four to eight years into the future. Since NATO in its defense planning and review process uses a six-year horizon—for instance, for most force goals, and in the reporting format of the Defense Planning Questionnaire—many NATO member countries and aspirants to Alliance membership also use programs that look six years ahead. In addition to connecting resources to intended results, a defense program also serves to relate long-term plans to budgets and other short-term plans.

*Program Structure*

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

- Programs should allow, as clearly as possible, the linkage of spending to "product" (that is, capabilities—see Figure 1)
- Programs should be comprehensive
  o Nothing can be done and no money may be spent outside the program framework
  o Programs shall account for all money to be spent on defense (MoD budget, budgets of other ministries, bi-lateral programs, NATO, trust funds, etc.)
  o Final decisions need to be made on all programs at the same time, with an objective analysis of trade-offs
- Programs should provide for the feasible distribution of responsibilities among program managers, who should have a stake in the good design and successful implementation of the program
- Programs should be manageable—the program structure and procedures should provide opportunities to objectively assess and search for trade-offs in resource allocation

In the implementation of the first of these requirements, Canada's Ministry of National Defence uses a program structure in which the programs are explicitly called

"capability programs." Canadian planners work with five capability programs that, in combination, "encompass all the fundamental aspects of the business of defense in Canada, and do so by aggregating all the elements of capability planning into a simple—but not simplistic—framework."[11] The five capability programs are:

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

In the development of program-based management for their armed forces, Ukrainian defense officials deliberate on a possible program structure, consisting of the following fourteen programs:

1. Capabilities for peace operations
2. Rapid reaction
3. Defense of the territory of the country
4. Capabilities to increase the defense potential (mobilization and reserves)
5. Command, control, and communications (strategic & operational C3)
6. Central logistics
7. Defense and force management (MoD, General Staff, and supporting units)
8. Participation in operations (outside and inside the country)
9. Science, research, and development
10. Education, training, and recruitment
11. Medical support (includes rehabilitation and sanatorial recreation)
12. Housing
13. Social adaptation
14. Utilization of surplus weapon systems, equipment, ammunitions, and infrastructure

Both program structures are similar in the way that they deal with (anticipated) "current operations" (Program 2 in the Canadian and Program 8 in the Ukrainian program structure); command and control capabilities (Programs 2 and 5 respectively); and centralized management functions (Programs 5 and 7 respectively).[12] Unlike the Canadian program structure, however, the Ukrainian draft program structure explicitly

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[11] *Capability Based Planning for the Department of National Defence and the Canadian Forces*, 4–5.

[12] These similarities were only recognized in hindsight. At the time the proposed Ukrainian program structure was designed, the experts did not use information on the Canadian construct.

lists the requirements for investments in the future (Program 9), of tackling legacy issues (Program 14 and, partially, Program 13), and "quality of life" issues (Program 12 and, to a great extent, Program 11).

Both the Canadian and the draft Ukrainian program structures are capability-oriented. Other countries use program structures that, on the first level, to a significant extent reflect the organizational structure of the defense establishment. For example, the U.S. Future Years Defense Program (FYDP) consists of eleven major defense programs, as follows:[13]

1. Strategic forces
2. General purpose forces
3. Communications, intelligence, and space
4. Mobility (airlift and sealift forces)
5. Guard and reserve forces
6. Research and development
7. Central supply and maintenance
8. Training, health, and other personnel activities
9. Administration and associated activities
10. Support of other nations
11. Special operations forces

Bulgaria's experience provides another example of an organizationally-oriented program structure:[14]

1. Land forces
2. Air Force
3. Navy
4. Central command and support
5. Interoperability and participation in multinational formations
6. Education and qualification
7. Security: Military police and Counterintelligence
8. Security through cooperation and integration
9. Quality of life
10. Science, research, and development
11. Administrative management
12. C4ISR systems

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[13] *How The Army Runs*, 147.

[14] *Concept for Planning, Programming, and Budgeting in Bulgaria's Ministry of Defense and the Armed Forces* (Sofia: Ministry of Defense, 2001).

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13. Military information (intelligence)

A capability-oriented program structure provides decision makers with a better understanding of the policy implications of their resource decisions. However, when the first level of the program structure has a prevailing organizational orientation, additional measures need to be incorporated in order to provide for an output orientation of defense resource management.

## Programs as a Language of Communication

All first-level programs when combined constitute "The Defense Program."[15] Separate programs—component parts of the defense program—are key parts of the lexicon in the debate and communication at senior executive levels (in the Ministry of Defense, between the Ministries of Defense and Finance, in the Ministerial Council, etc.), between the executive and the legislature, and in the legislature during deliberations on defense policy and the defense budget.

Programs and program alternatives are designed by experts in the field. It takes considerable experience and specific expertise to design an efficient program for the development of a particular capability, as well as to cost that program, to design and to compare alternative programs.

On the other hand, decision makers—both in the executive and legislative branches—use distinct programs and program alternatives as building blocks in the design of a defense policy. Just like everyone uses words to create sentences,[16] decision-makers use a set of potential, alternative programs in order to find a construct that best fits a given set of defense objectives.[17] In advanced defense planning systems this task is known as creation of a *capability portfolio*.

For example, in 2003, during the deliberations on the proposed defense budget, the U.S. Congress decided not to finance a program for the development of an advanced concept for low-yield nuclear weapons, or "mini-nukes." Debating policy (and politics), representatives decided that this program did not fit into the United States' defense objectives and constraints (which are set legislatively) and hence cut the pro-

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[15] The best-known designation is the U.S. FYDP—Future Years Defense Program.

[16] Another metaphor is to look at programs and program alternatives as building blocks of diverse shapes and sizes, out of which defense policy-makers need to select in order to build a good house within a set budget.

[17] The search for such a construct is also subject to variety of constraints, projected budget levels being one of the most significant.

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gram. The program had a price tag of US\$ 6 million; thus, the Pentagon did not receive this funding.[18]

In comparison, a debate solely about resources, situated on the input side of Figure 1, cannot be a debate on defense policy. By the same token, a decision on the defense budget, formulated exclusively in the language of budget categories (titles, appropriations, paragraphs, etc.), cannot be a transparent resource allocation decision.[19] In the example of the "mini-nuke" program, had the Congress made a decision only on the budget,[20] the Pentagon would not have had any problem spending US\$6 million (out of a budget of US\$401 billion) to pursue the development of mini-nukes.

Another example is provided in the decision of the U.S. Congress to increase the 2004 budget of the U.S. Army by almost US\$20 billion compared to 2003, and to raise the personnel ceiling by approximately 30,000 soldiers. It is important to note that these decisions reflected the demands of ongoing operations, but were based on the program for the 2004–2009 period. The proposed program envisaged the build-up of certain capabilities and, at the same time, the elimination of parts of some more traditional capabilities associated with the security requirements of the Cold War. Figure 2 provides detail on this restructuring. Thus, budget and personnel levels were defined as a *consequence* of decisions on what capabilities were deemed necessary to achieve security and defense objectives.

## On the Defense Resource Management Process

Resource decisions are made within a process that in itself needs to be transparent to decision makers, so as to allow the preservation of a clear audit trail from national security objectives, through defense objectives, to the taxpayers' money. Among the various requirements of the resource management process, this introductory article briefly examines three essential questions that any such process must address:

- How to create affordable (i.e., resource constrained) plans?
- How to deal with uncertainty?

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

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

[20] Just like the legislatures of many new NATO members and partner countries do.
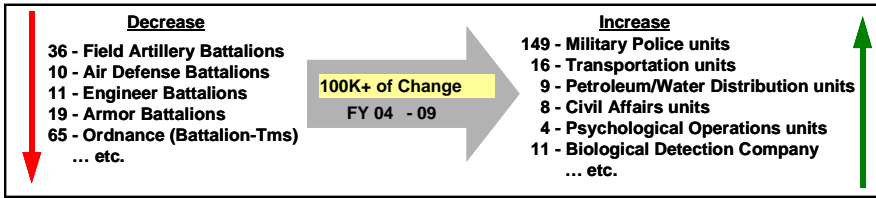
Figure 2: Restructuring of the US Army in the 2004-09 Program.[21]

- How to support the senior civilian leadership of a Ministry of Defense in the exercise of its authority and obligations as agents of democratic control of the armed forces?

## *Program Decisions as Milestones Towards Budget, Procurement, and Other Short-term Plans*

Often, decisions that are made regarding required capabilities, or defense requirements in general, are *resource informed*. That is to say, they are generally assessed as realistic, but not necessarily *resource constrained*; they are designed to approximately fit within defense budget forecasts. When program decisions are made, the cost of the defense program for each future year does not exceed the defense budget forecast for the respective year.[22]

The availability of a good defense programming mechanism is a key element in making the process transparent to decision makers. When such a mechanism exists, senior decision makers are able to concentrate on program decisions, and an endorsed defense program substantially serves as the sole authoritative source for all subsequent short-term plans, including the defense budget, procurement plans, etc.

Here it is important to remember the principles of programming that were enumerated above. The defense program shall be comprehensive: nothing can be done and no money may be spent outside the program framework; there are no parallel planning processes with resource implications; and all program decisions (on the highest program level) are made at the same point in the decision-making process. This is the only way to guarantee that the defense program is affordable, and that the programming has served as a filter of all competing demands (this is illustrated in Figure 3).

Thus, the strict implementation of this aspect of the resource management process guarantees that all short-term plans are both affordable and consistent.

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[21] "Building Army Capabilities," Draft Working Paper, prepared on behalf of President Bush (28 January 2004); available at www.comw.org/qdr/fulltext/0401armstructbrief.ppt.

[22] Often this requirement is strictly enforced only for the first two to three years of the defense program.
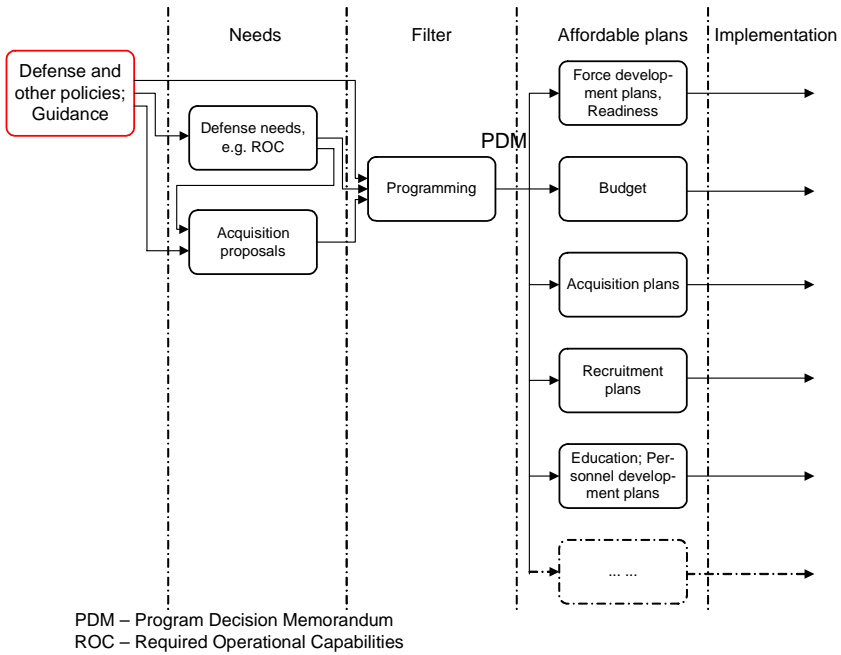
Figure 3: Defense Programming as a Filter of Competing Demands

*Dealing with Uncertainty*

Defense programs, like all plans in general, are designed under certain assumptions and forecasts, but are then later implemented in a different environment. As a result, it is rare that a program or a plan is implemented and achieves the results *exactly* as prescribed. The explanations for this variability might include a need to undertake or participate in an unforeseen operation, changes in the economic environment, changes in the nation's income or social insurance policy, an inability to meet recruitment targets, delays in procurement procedures, etc.

An efficient way to deal with the impact of such uncertainties is the use of *roll-on programming*—that is, new programs are designed bi-annually[23] or, in cases where a higher level of uncertainty exists, annually.[24] A considerable number of NATO member countries use such roll-on planning mechanisms. (A notable exception is France, where a fixed six-year program is required by law. Once implemented, it is followed by

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[23] For example, in the U.S. DoD's Planning, Programming, Budgeting, and Execution System (PPBES).

[24] Bulgaria's Integrated Defense Resource Management System may serve as an example of this type.

another legislatively approved six-year program. Ukraine is currently attempting to implement a similar approach, albeit under considerably higher levels of uncertainty.)

On occasion, the uncertainty may be even more dramatic, perhaps due to very high (and unpredictable) inflation rates; a lack of planning experience; or undisciplined implementation, such as procurement of weapon systems that are not included in the programs. In such cases it may be necessary to review and update program decisions *within* the budget planning and implementation cycle. This mechanism is sometimes referred to as *pre-programming*. Within the budget year, and if allowed by law, this may lead to a reallocation of the budget among defense programs. Both mechanisms—roll-on programming and pre-programming—provide flexibility in defense resource management while preserving transparency and accountability.

Other—qualitative—changes in the environment influencing the development of the armed forces—the rise of a new threat, the creation of or accession to a defense alliance, the impact of a disruptive technology, a new political party coming to power, etc.—cannot be accommodated through conventional defense resource management mechanisms. To account for such uncertainties, countries conduct comprehensive, in-depth analyses—sometimes referred to as Strategic Defense Reviews (SDR)[25]—that facilitate decisions on future force structure.[26] This is a target force structure for a point fifteen to twenty (or more) years in the future that guides the design of force development programs.

## *Involvement of the Senior Civilian Leadership*

At a minimum, a program-based defense resource management system includes the following steps:

1. Preparation of a programming guidance document
2. Design of programs and program alternatives
3. Program review, culminating in a decision on the Defense Program;
4. Budget planning
5. Budget execution
6. Reporting
7. Auditing

The design of programs (Step 2) is an expert activity, based on considerable specialized knowledge and experience in the respective field. The preparation of the draft defense budget in Step 4 should strictly reflect ministerial decisions made as a result of the program review. Therefore, budget planning usually does not involve strategic

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

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

ministerial decisions, qualitatively different from the decisions made at Step 3. The use of programmatic information can considerably enhance the output orientation in budget execution and creation of reports, as well as defense audits, as seen in Steps 5, 6, and 7.

All these steps are important in order to have an effective defense resource management. However, the attention of the senior civilian leadership, including the minister or secretary of defense, is most intently focused on programming guidance and program review (Steps 1 and 3 respectively).

The programming guidance, usually issued by the minister of defense, sets explicit defense objectives, primary requirements, priorities, an overall budget level and preliminary budget quotas for each main program, provides information necessary to cost defense programs, assigns responsibilities, and sets the programming schedule. In Step 3 above, experts assess the correctness of the program's design and its compliance with the programming guidance, but senior leaders decide on the programs and program alternatives to be financed, and thus on the capabilities that will be developed, maintained, or eliminated.[27] This decision is recorded in a document, often called a "Program Decision Memorandum" which, after authorization from the minister of defense, serves as an authoritative statement of both policy and budget decisions of the senior leadership of the defense establishment.

Thus, the program-based defense resource management process facilitates accountability and transparency. Military and civilian experts design programs in compliance with policy guidance, and their proposals are transparent to decision-makers. Once decisions are made, the experts are responsible for ensuring efficient and effective implementation of the programs. On the other hand, civilian leaders are bound by their own decisions formulated both in the programming guidance and the program decision memorandum. All stakeholders share a clear understanding of what the decisions mean. Finally, regular reporting on program implementation in a standard format provides for effective implementation oversight.

## Conclusion

In the implementation of the principles of program-based defense resource management, both new NATO members and Partner countries face a number of similar problems. Without attempting to be exhaustive, some of these issues include:

- A lack of related defense planning experience, in particular in business process management; design of defense programs; costing of programs; assessment of cost effectiveness, and analysis of alternatives in general; assessment of planning

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[27] For details on civil-military interaction, based on the experience of Bulgaria's defense establishment, refer to Todor Tagarev, *Control, Cooperation, Expertise: Civilians and the Military in Bulgarian Defence Planning Experience*, ISIS Research Reports No. 14 (Sofia: Institute for Security and International Studies, 2003); available at http://www.isn.ethz.ch/isis/Publications/research_reports/research_report_14.htm (28 April 2006).

risks; and incorporation of risk management methodologies in the defense planning process.

- No formal operational planning process that produces objective metrics that clearly identify capability gaps in existing force structures when measured against established operational objectives.[28]

- Organizational resistance, often drawing on the culture of secrecy, particularly within the military establishment, but also among the budget planning and financial management community. Actually, organizational resistance is to be expected, since the introduction of a new type of resource management inevitably leads to redistribution of power, or decision-making authority.

- The use of the term *program* itself. If a defense establishment intends to introduce program-based defense resource management, it should use the term sparingly and with the meaning described in this article.

The final (and perhaps the most important) lesson is that implementation cannot be successful unless the senior resource manager—the minister of defense or a designated deputy minister—acts in concordance with the principles of program-based resource management. Program-based defense resource management is a highly efficient tool for managing defense transformation while providing for transparency of decision-making, democratic control of the armed forces, and accountability of elected officials. It is one of the few available tools that enables planners to effectively implement capabilities-based planning and to assess the implementation of plans, programs, and budgets.

In particular, the introduction of the programming phase is seen as crucial to relating defense policy to financial allocations, assuring "value for money" budgeting and, potentially, effective democratic oversight of the armed forces. The implementation of program-based defense resource management can be greatly facilitated if the legislative body requests the submission of the draft defense budget accompanied by adequate program descriptions, as well as program-based performance reports by the executive branch of government. Ultimately, program-based defense resource management promotes civilian participation in the development of defense policy and contributes substantially to the effective, transparent, and economically viable management of defense spending.

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[28] Details are provided in Aldo Kask, Jaan Murumets, and Thomas Young, *Approaching the Need for Defence Reform: Background and Outlines of Suggested Estonian Defence Planning System* (Tartu: Estonian National Defence College, 2003), 9–32; available at www.mod.gov.ee/static/sisu/files/Proceedings1(PPBS).pdf.

# Twenty-First Century Defense Acquisition: Challenges and Opportunities

*Elisabeth Wright* ∗

This article is the first in a series that will examine the complexities associated with defense acquisition decision-making in the twenty-first century. Budget constraints, political dynamics, cooperative alliances, and changing requirements pose particular—and often unique—challenges. This series of articles is intended to offer systemic "models" for effecting good acquisition decisions, provoke new ideas, and encourage dialogue across national borders on matters of defense acquisition. This first article examines the use of a formal acquisition strategy methodology as a means of reducing uncertainty in defense acquisition decision-making and selecting the best alternative toward achieving a capability.

## Introduction: Defense Planning

Globalization, the emergence of new and changing threats, the devolution of central planning, and continuing reliance on aging weapon systems pose particular challenges for ministries of defense, armaments authorities, and armed forces around the world. Their quest to optimize the capabilities of their national armed forces given budget limitations, aging weapon systems platforms, and newly (or poorly) defined capabilities requires a disciplined approach with which to analyze alternatives that can satisfy validated military capabilities. And all this must be done in an operating environment that demands a tightrope balance between cost, schedule, performance, and risk.

While national interests generally form the primary basis for identifying defense acquisition strategies, the importance of coalitions cannot be overlooked in the strategy development phase. The Partnership Action Plan on Defense Institution Building (PAP-DIB) is an example of a forum that creates an opportunity for cooperation in the analysis of common threats, gaps in needed capabilities, and potential multi-party defense acquisition solutions. Joint acquisition strategy development can have a profound impact on interoperability, supply chain management, and life-cycle cost.

The shift to a focus on affordability over the entire lifespan of weapons systems, coupled with capability-driven solutions, requires a new mindset. It also demands different ways of thinking about what to buy and how to buy it.

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Of particular importance in effecting good acquisition strategy development is understanding and recognizing the interrelationship between the three primary systems supporting decision-making. The identification and implementation of an acquisition strategy requires that an operational requirement (needed capability) be clearly defined and validated, and that funding be identified to meet the required capability. Figure 1 depicts the three decision support systems.

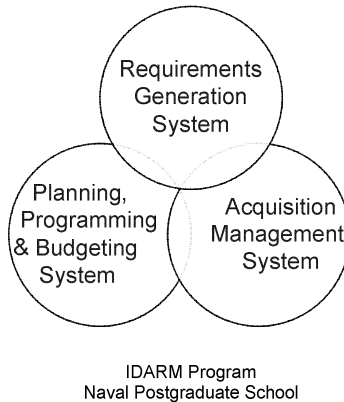

IDARM Program
Naval Postgraduate School

Figure 1: Decision Support Systems

The decision to buy a weapon system—that is, to adopt a materiel solution to acquiring a needed capability—requires a disciplined approach toward developing a well thought out and integrated acquisition strategy. This strategy identifies options and shortlists the best options in stated areas such as logistics support, competition, etc.

The defense planning model of the Ukrainian Armed Forces is depicted in Figure 2. This model demonstrates the importance of coordination among the decision support systems. Effective acquisition strategies require early identification and commitment of appropriate levels of resources, including manpower and knowledge. The first step in the acquisition strategy model is the identification of the resources necessary to develop a comprehensive acquisition strategy.

Within the context of acquisition strategy development, a common problem many nations face centers upon the identification of the operational requirements. Solutions are often identified before the problem statement is fully articulated. Consequently, little or no meaningful consideration is given to the various options available to meet a stated operational capability. The mindset is "business as usual." But the reality is that budget constraints, political dynamics, and other influences will no longer permit a "business as usual" mentality.

As a hypothetical example, consider the fictitious island nation of Cambria. For the last twenty years, Cambria's armed forces have relied on its fleet of four rotary aircraft
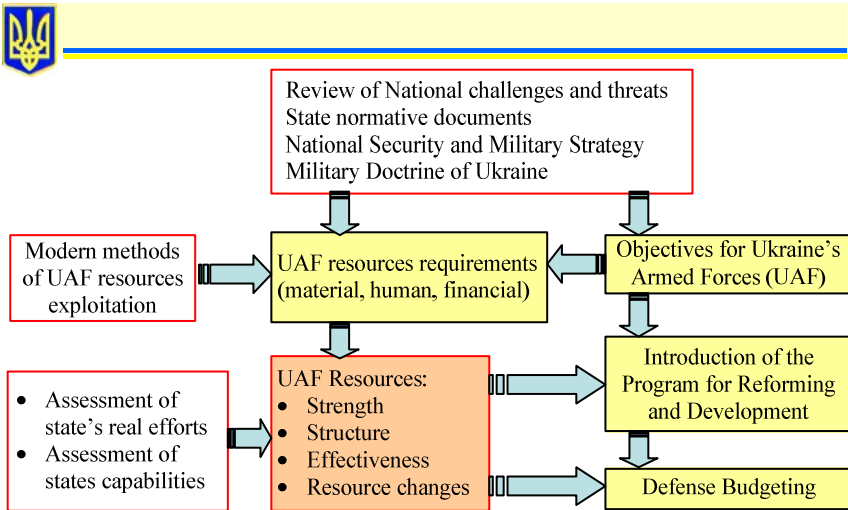
Figure 2: Ukrainian Armed Forces (UAF) Strategic Defense Model

to patrol its borders. The age of the aircraft has significantly reduced the Cambrian military's mission capability, and a decision is made to replace the aging fleet of helicopters. Further examination of alternatives would reveal other solutions; however, buying "new" helicopters is a pre-supposed solution. But even a quick analysis of alternatives would reveal other possible options: patrol boats, unmanned aerial vehicles, unmanned underwater vehicles, and perhaps others as well. To mitigate and perhaps avoid the temptation to pre-suppose a solution, a structured approach toward identifying and analyzing alternatives and selecting the best *strategy* forms the basis for a well-grounded way ahead.

## Acquisition Strategy

An acquisition strategy is a capabilities-based solution that is grounded in a thorough analysis of alternatives. It is the "helicopter view" of the path toward progress in defense planning. The helicopter view is recognized as the top level view of what needs to be done. The Cambrian view is an example of the results of taking a helicopter view. It provides decision makers with necessary top-level information with which to balance risks against cost constraints, schedule requirements, and performance needs. A methodology to identify acquisition strategies requires identification of possible solutions, evaluation of the most feasible candidates, and the selection of an overall strategy that optimizes the "integrated" outcome of the acquisition process. The focus must be at the systems level, so that affordability and feasibility across the anticipated system's lifecycle are considered. It is tempting to focus only on the actual procurement

cost of a weapon system; however, to do so presents decision makers with a flawed analysis. The entire life cycle of a weapon system includes maintenance and support costs that can build significant financial obligations into the operations and support phases of the acquisition. A top-level acquisition strategy must be based on the integration of supporting strategies in pre-defined elements. Those elements, or supporting strategies, include a competition supporting strategy, sourcing supporting strategy, life cycle supporting strategy, and others. Collectively, each supporting strategy contributes to the top-level acquisition strategy. Integrating the supporting strategies ensures that important considerations—such as training, maintenance, competitive sourcing, etc.— are not overlooked when a decision is made regarding the best overall strategy.

In acquisition strategy development, a team of knowledgeable practitioners:

1. Identify the most likely high-level strategies in important elements (e.g., sourcing, competition, logistics, etc.)

2. Identify core strategies within each high-level strategy

3. Define, research, describe, and compare core strategies

4. Select the optimal strategy for each high-level strategy and integrate those optimal strategies to ensure that they complement rather than conflict with one another

5. Assess the risks and opportunities that the integrated optimal strategies pose

We can describe acquisition strategy development as a structured decision-making process in which each phase in the process forms the foundation for subsequent phases. The end result is a recommended acquisition strategy that considers all of the important elements of the acquisition, including sourcing, costs, logistics, technology, and national interests. Each phase consists of input, throughput (or process), output, and outcome for each phase in the acquisition strategy development (see Figure 3). The input consists of all the stated requirements, resources, etc; the process turns the input into some stated output, e.g. a competition element strategy; and the output results in an outcome—for instance, international competition—that results in a better solution.

At a minimum, strategies must be developed for the following elements:

- Sourcing (e.g., whole life, procurement only, lease versus buy, etc.)

- Competition (e.g., international competitive bidding, national competitive bidding, limited competition, directed sourcing)
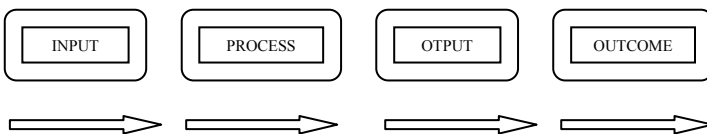


Figure 3: A Phase in the Acquisition Strategy Development

- Logistics (organic or commercial)

- Pricing (cost to buyer or cost to the supplier)

Additional acquisition strategies may be developed for quality, data and information, economic/social elements, etc. Each strategy element can be expressed as continuum of options. An example is depicted in Figure 4.
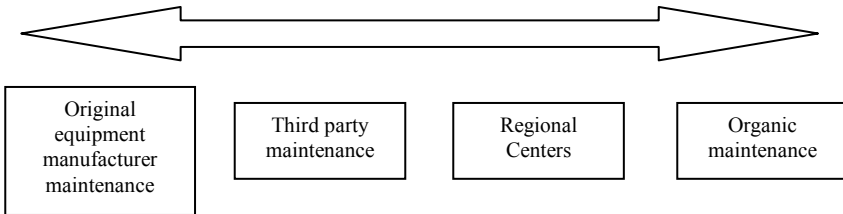


Figure 4: Maintenance Acquisition Strategy Element

I suggest a phased approach toward developing acquisition strategies.

## 1. Resources

The first phase in the development of an acquisition strategy is the identification and commitment of the right resources. Resources include people, funding, and other tangible items necessary to begin the development of an acquisition strategy. The success of the entire process depends upon the capabilities and availability of the right resources. The acquisition strategy team is responsible for collecting, analyzing, and synthesizing all of the information necessary to make an acquisition strategy decision. The commitment of a staff of knowledgeable military and civilian personnel dedicated to a single project is not common practice in many nations. The scarcity of people and the prevalence of competing demands for resources make this first step particularly challenging. Furthermore, the lingering vestiges of central planning in many states make it difficult for some institutions to "take ownership" of the process and recognize the importance of the early identification of resources, and of the need to plan a feasible acquisition strategy.

Knowledgeable, experienced people, who represent institutions and organizations that have a *significant* interest in the acquisition strategy, are the best candidates for the acquisition strategy team. Team members must be *knowledgeable* in their subject area, so that they can make meaningful contributions to the phased output of the acquisition strategy process. Ideally, the team is dedicated first and foremost to the development of an acquisition strategy. Other responsibilities should not take precedence during this process. While the demands on people's time are numerous, to allow this to happen weakens the ability of the team to complete a well-developed acquisition strategy within stated time constraints. The team must agree on the ground rules for interim de-

cision-making. Consensus is the preferred method; however, the divergent opinions of team members must be noted. Sometimes, the outliers (or extreme positions) turn out to be of particular importance. Differing positions should be voiced and discussed among the team members. This helps avoid the phenomenon known as "groupthink."[1]

Early use of the team model has proven to be a successful model for defense acquisition management. The National Armaments Directorate of the Czech Republic realized that the magnitude of the Gripen aircraft program warranted a dedicated team of acquisition program management professionals to successfully manage the program. Creating and sustaining a cohesive team from acquisition strategy through acquisition management helps preserve the institutional knowledge that is so critical in defense acquisition decision-making.

Expectations regarding funding for the project will influence the selection of viable options; the costs associated with the ongoing responsibilities and activities of the acquisition strategy team must be identified in this first phase. Sufficient funding must be identified and set aside to ensure that the work of the acquisition strategy team can continue through the duration of the acquisition strategy development process. Once the team members have been identified and have agreed on the procedures and protocol to be used during this phase, the information-gathering phase can begin.

## 2. Collection of Information

The second phase involves the collection of background information and data necessary to making a fully informed decision. As with the first phase, the project requirements must remain in focus. Team members must have access to and review all documents that may affect the development of the acquisition strategy. Five-year defense plans and related documents provide important information that will enhance the team's understanding of the requirements and their place within the context of the overall operating environment. External influences, such as existing legislation, STANAGS, or allied publications (along with a good understanding of the political landscape) will assist the team members as they begin their work.

The intended output of this step is information—information that will be analyzed, filtered, and examined as part of the development of the acquisition strategy. Potential sources, technological data, and maintenance philosophies are some of the types of information that the team must collect. Having complete information will enhance the team's ability to conduct a thorough analysis of alternatives for the supporting strategies.

Consider the importance of information in the case of the Estonian Border Guards, who required new uniforms. In collecting sourcing information, no national sources of the required fabric were identified. As a result, the only candidates for vendors of the

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[1] Groupthink is a problem-solving technique in which proposals are accepted without any careful critical scrutiny of alternatives and in which participants suppress opposing thoughts. See Irving L. Janis, *Groupthink: Psychological Studies of Policy Decisions and Fiascoes*, 2nd ed. (Boston: Houghton Mifflin, 1983).

material were located outside of the country. While this sourcing information was correct, problems ensued during the manufacture of the uniforms. When a two-contract approach was identified as the best candidate solution, the Border Guard found itself in the middle of a contract disagreement regarding the feasibility of manufacturing uniforms from the purchased fabric. Risk assessment (which is an important step in developing an acquisition strategy, discussed later in this article) provides a mechanism to identify and mitigate the risks associated with such scenarios. Had complete information regarding materials and manufacturing been gathered at the outset, this contract dispute might have been avoided.

Technology plays an important role in the operations of weapon systems. Teams must identify technological issues during this information collection phase in order to conduct realistic assessments about the likelihood that certain technologies will be made available for their use. Laws such as the Arms Export Control Act in the United States may impose obstacles to the acquisition of certain types of technologies.

## 3. Synthesis of Information

Once the information collection is complete, the team must assemble and synthesize the data into coherent and meaningful groupings. Information does not "stand alone"— that is, information related to one specific acquisition strategy element bleeds into and often impacts other acquisition strategy elements. For this reason, the eventual synthesis of all information across all elements of the strategy development process is necessary. The initial review of information should be conducted on an individual rather than a team basis; this approach helps to avoid reliance on the findings of others and helps to preserve the integrity of the information analysis.

Once the individual reviews of collected information have been conducted, team members convene to discuss and compare their individual findings. Disparities are identified, along with potential explanations for the divergences. Acquisition elements are interrelated, so that each can be represented as a continuum. For example, one important aspect of acquisition strategies is maintenance support throughout the life cycle of a system. Expressed on a continuum, we could identify extreme options for maintenance support (see Figure 4). As we move further into the development of an acquisition strategy, we will see how the two extremes on the continuum can be further developed.

Acquisition strategy development must examine the information collected to determine which approach to maintenance support—of the many options along the continuum—is the best strategy. The decision will affect cost, scheduling, supplier selection, and other supporting strategies. Thus, the collection of information related to a specific supporting (element) strategy must ultimately be examined in relation to all supporting (element) strategies to ensure complementary results.

## 4. Identification of Optional Strategies

In this phase, the strategies or solutions that merit continued examination are studied further. Optional strategies should be identified for all of the significant or "core"

strategies that influence the acquisition. For example, the detailed optional strategies for maintenance support throughout the life cycle of a weapon system may consist of the following:

1. Maintenance provided by the original equipment manufacturer
2. Maintenance provided by an outside third party
3. Organic maintenance
4. Regional or "hub" maintenance among neighboring allies

Each strategy is examined for feasibility and risk. As a result of this process, perhaps Option 4 would be unrealistic if, for example, no cooperative maintenance agreement and/or facility exists. Scheduling may also be a major consideration in eliminating Option 4, since the lack of exclusive use of a maintenance facility can result in delays. As the optional strategies are further examined, the best candidates for further evaluation are identified, and the process of detailed examination of the remaining optional strategies becomes the input for the next phase.

## 5. Further Development of Best Optional Strategies

In this phase, the team further refines and develops the candidate strategies that are the output of Phase 4. Team members compare and contrast the optional strategies in detail to determine possible risks that could affect the successful implementation of the strategy. The comparative analysis of one optional strategy versus another requires team members to examine the strengths and weaknesses of each optional strategy *for each element* in the light of the operating environment of the *future*. A strategy that is considered optimal today may not be the best strategy given future scenarios.

For example, industrial cooperation—in the form of licensed production, co-production, etc.—recognizes that long-term economic benefit at the national level can be linked directly to defense purchases. Developing a strategy for effective industrial cooperation requires an environmental scan of the future over the long term. We can see an example of this supporting acquisition strategy in evidence over the last two decades in Turkey. The Undersecretariat for Defense Industries (SSM) developed an F-16 acquisition strategy that called for in-country co-production of F-16 aircraft parts. However, as F-16 aircraft age, aircraft demand drops, and production of parts drops. A long-term solution would envisage co-production on a dual-use production line, thereby mitigating the supply/demand risk associated with exclusive F-16 parts co-production.

Team members should prepare narratives that describe why each optional element strategy is a viable choice and how the element strategy will be implemented, giving full consideration to the constraints, risks, and opportunities identified. As a result of this phase, further elimination of optional strategies may take place. Remaining viable element strategies form the basis for further evaluation in the next phase.

## 6. Identification and Integration of "Best Choice" Strategies

In this phase, team members evaluate the remaining optional element strategies and select the best strategy for each dimension. Advantages and disadvantages of each element strategy are further examined. Optional element strategies are eliminated based upon the synthesis and analysis of all the information gathered in Phase 1. This phase focuses on the "how" by asking how strategies will be implemented. For example, if national competitive bidding is identified as the "best choice" competition element strategy, how will the competition proceed? Can national sources team with outside sources? Do national sources meet the quality criteria being considered? How will prices be evaluated? What is the pricing mechanism for spare parts? Are economic price adjustment articles necessary? How and to what extent will the use of price adjustment articles affect the affordability of the system over the long term?

When the Armed Forces Philippines (AFP) decided to replace their aging fleet of two-ton military-use trucks, the competition element strategy called for international competitive bidding. The quality element strategy called for bidder to have an ISO 9000-3 certification, which affected the number of viable international bidders. In fact, no United States truck manufacturers had Level 3 certification and, as a result, none were able to compete. The AFP had determined during the development of their acquisition strategy that their geographic location and past experiences in obtaining spare parts to meet readiness levels necessitated a more stringent quality program for the new procurement.

Integration of the "best choice" element strategies allows the team members to see whether the element strategies complement or conflict with one another. If, for example, national competitive bidding is selected as the "best choice" strategy for competition, and ISO 9000-3 is selected as the "best choice" strategy for quality, are there national sources that can meet the quality standard? If not, the two strategies are in conflict, and must be reconciled.

## 7. Evaluate Best Choices

In this phase, team members conduct a final analysis of the best choices, in the light of all environmental conditions. The result will be a collection of strategy elements that can be adopted and implemented to ensure the success of the program, considering schedule, risk, and other relevant factors. There must be a supporting rationale that demonstrates that the "best choice" strategy elements are grounded in reason and analysis of objective data. As an environmental evaluation will likely reveal a different operating environment in the future, some risk is introduced into the final strategy selection in that the future is not certain. If the selected strategy elements cannot be justified considering the environmental conditions and cohesiveness in integration, team members must revisit and reexamine optional strategies identified earlier in the process. If, for example, a new public procurement act is pending parliamentary approval, what impact might the new law have on the "best choice" strategies?

## 8. Final Risk Assessment and Risk Mitigation

Risk assessment and mitigation are not unique to this final phase; rather, risk management should be an integral part of all prior strategy identification, analysis, and selection phases. However, in this final phase, risk is worth examining on its own, center stage. All types of risk related to the strategy elements and their implementation techniques must be re-examined. Risk areas that are new or may have been previously overlooked are now included in a final risk assessment. Simply put, risk assessment asks two fundamental questions: "What could go wrong?" and, "Can we accept the consequences?" Risk mitigation identifies potential options should the risk event occur. Consider the following scenario, using once again the fictional island nation of Cambria:

    a. A selected strategy for support is contractor maintenance logistics support.

    b. An environmental scan indicates that Cambria's army will deploy as part of a coalition force, and that the weapon system to be acquired will deploy with troops.

    c. What is the risk assessment related to contractor support on the battlefield?

    d. What risk mitigation techniques can be adopted to ensure continued maintenance of the systems on the battlefield?

Perhaps the best risk mitigation strategy would be to have organic capability to support the weapon system in battlefield conditions. To do so will require appropriate tendering and contract language, which would in turn impact prices and have other consequences as well. Thus, early identification of risk and mitigation techniques allows the team to manage the acquisition rather than react to "perfectly predictable surprises."

## Summary

A disciplined approach to identifying, evaluating, and choosing the best acquisition strategy must be introduced early in the defense acquisition cycle. The acquisition strategy approach described in this paper requires the time and commitment of knowledgeable acquisition professionals. It requires the examination of the options available on a continuum of choices for various acquisition elements. Each acquisition element and shortlisted strategy must be viewed in relation to other shortlisted strategies to ensure complementary rather than conflicting consequences. The process of developing a comprehensive acquisition strategy can be iterative, since the environmental context may change during the development of the acquisition strategy. Risk is an ongoing theme in the identification and assessment of acquisition strategies, and cannot be overlooked in any phase of acquisition strategy development.

# Measuring Defense Reform: A Proposed Methodology to Measure Efforts to Achieve the Objectives of PAP-DIB

*Thomas-Durell Young* [*]

The development and continuous utilization of objective metrics to demonstrate the effectiveness of reforms instituted by countries to achieve the objectives established through the Partnership for Peace–Defense Institution Building (PAP-DIB) process should be seen as both essential and obvious. However, to date there have been only modest efforts by defense experts, as well as nations, to develop systematic and disciplined methods that ministries of defense and national defense headquarters can employ to ascertain whether the PAP-DIB reforms they are instituting are meeting their intended objectives. To be sure, PfP nations participate in the Planning and Review Process on an agreed time-table with the NATO International Staff. However, notwithstanding the usefulness of these review processes (both formal reviews and the accompanying informal dialogue with NATO officials and nations), these are essentially reviews to determine the degree to which a Partner has met the Partnership Goals it has agreed to with NATO (via the Membership Action Plan, PARP, or individual Partnership Action Plan processes). As such, these useful reviews and analyses can be more accurately assessed as constituting an important element of what should be a more comprehensive and inclusive analytical methodology.

Despite the seemingly problematic nature of any attempt to measure the reform of public institutions, given their numerous subjective characteristics, there are analytical techniques that can be employed that can provide objective results to senior civilian and military officials that would enable them to measure the effectiveness of defense reforms. Indeed, such analyses should be viewed as being critical to enabling senior leadership to exercise requisite oversight through conducting informed cost-benefit analyses, based upon objective data.

When developing metrics to measure effectives in the delivery of national defense reform efforts, a hierarchy should be employed that gives greater weight to those factors that are clearly objective in character. Other factors (e.g., those that might be more subjective) also need review, but their usefulness in determining the merit of specific reform projects and/or their envisaged methodological approach needs to be assessed in the light of the results of the first level of hierarchical analysis. The proposed categories of analysis suggested in this essay are: increases in defense capability/defense efficiency; improvements in the means to support/facilitate defense efforts; a review of the methodological approach of defense reform (e.g., review of assumptions and techniques); and analyses of other technical assistance options that might be employed to effect reform.

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[*]  For information about the author see p. 35.

## Increase in Defense Capability

Although there are many objectives behind the initiation of an effort to evaluate a defense reform project, the most critical goal of any such effort is to ascertain whether during the period of analysis there has been an objective improvement in the defense force's ability to field and support its armed forces. Or, conversely, if national objectives have been to reduce capacity, as a concerted effort to limit spending, then the goal might be to determine if these reductions have succeeded in balancing effectiveness and efficiency. Within the context of PfP, Partner nations are fortunate in that there are existing and effective reporting requirements and assessment tools that they can utilize in this analysis. Said criteria should include:

- The degree to which a country has met its NATO Force/Partnership Goals during the period of assessment.
- The degree to which a country has met its NATO Bi-Strategic Commands' Military Tasks for Interoperability (MTI) during the period under review.
- The degree to which a country has been able to increase the readiness of its standing and reserve forces as determined by NATO reporting criteria.
- Review of after-action reports of performance improvements or degradations of a nation's armed forces while on national and multinational command post exercises (CPXs) or field-training exercises (FTXs). Particularly for nations with limited defense capabilities and levels of institutional development, the post-exercise reports from NATO-sponsored exercises and pre-exercise assessments should prove to be particularly useful to senior defense officials.

## Improvement in the Means to Support or Facilitate Defense Efforts

A critical objective of a country undertaking defense reform should be to discern improvements in its ability to "raise, train, and equip" its armed forces. Here, the metrics for analysis could well be less objective; however, improvements or failures can still be detected through a review of the following criteria:

- The degree to which reforms have been implemented into a country's organic law, national-level policies, inter-ministerial policy documents, and ministerial regulations. A comprehensive analysis should address both the objective number of such occurrences as well as provide an assessment of the value of such instances of implementation. Such an analysis, conducted on a regular basis, would be beneficial for most countries in that it would provide invaluable assessments of the existing constitutional, legal, and policy foundations for national defense— i.e., expose existing gaps and overlaps.
- The degree to which defense resources are being more efficiently employed as a result of implemented defense reforms. Defense reforms, *qua* reforms, should result in the more efficient utilization of financial resources, which could be dis-

cerned by the demonstration of a linkage of plans, outputs, and resources in budget justification materials.[1]

- The degree to which reforms are integrated into a nation's professional military educational (PME) system's curricula. A critically important metric is to ascertain whether reformed policies, processes, and procedures are essential elements of the formal curricula of defense educational establishments. Should officials learn that new procedures, structures, and processes are not being integrated into PME curricula, then this is an indicator that either these reforms are not being perceived as "serious" enough by MoD or military leadership to be taught, or that national PME structures are not responsive to guidance from the MoD or national defense headquarters.

- The degree to which the recommended reforms are represented in a nation's formal military training regime and organization. Analytical studies of individual and unit training, similar to that suggested immediately above, is also likely to demonstrate the degree to which reforms are being recognized and implemented within the armed forces. A critical methodological indicator of particular significance in the context of PfP nations is whether a defense force has successfully transitioned from "training to time" to "training to standard," since the latter is a key element in the "tasks-conditions-standards" training methodology employed by Western armed forces.

## Review of the General approach to a Defense Reform Effort

Any assessment of a national defense reform program should include a general review and analysis of the approach being employed by the MoD or external advisory team to ascertain if it is best suited to the requirements of the country in question, and whether it is accurately calibrated to the "absorption" capacity of the country's institutions and individuals. Some essential areas for vetting include:

- Metrics for regular and formal assessments should be built into the initiating concept, which should be aggregated to provide assessments of short-, mid-, and long-term progress.

- The degree to which reforms are integrated and mutually reinforcing. Disaggregated reforms should be fully assessed in accordance with regular annual reporting processes to ascertain the degree that they have inhibited reform implementation.

- An objective judgment as to the simplicity of recommended reforms. Needlessly complicated and complex reforms are likely to inhibit their diffusion throughout the defense establishment, and also within a nation's governing structure, thereby

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[1] These performance metrics are selected from Donald H. Rumsfeld, Secretary of Defense, *Annual Report to the President and the Congress* (Washington, D.C.: Government Printing Office, 2003), 141.

encouraging the creation or endurance of guarded pockets of expertise among officials, which will lead to the continuation of bureaucratic silos. Any reform effort should endeavor to achieve the goal of creating reforms that can be generally understood by all elements in the defense structure, thereby enabling all departments and bureaus to participate in the new planning, execution, and review processes.

- Are the planning and review methodologies relevant to the nation's requirements and its international security environment? That is, is threat-based or capabilities-based planning being recommended for adoption and implementation?

- An assessment of the capacity-building component of defense reform projects. Clearly, an external advisory project that does not place overriding importance on the development of indigenous defense management capacity will not produce a cadre of civilian and military defense planners who understand the new/ transformed systems and processes. Such collective knowledge is essential to enable officials to operate these new systems and processes and, most importantly, facilitate their adaptation to meet changing requirements and conditions.

- Is the current reform program fully integrated and coordinated with other external assistance projects? Such an analysis is crucial, both at the initiation of the reform process and throughout the span of its execution in order to guard against duplication and redundancy.

## Analysis of Other Technical Assistance Options

Finally, decisions concerning the continuation of a reform effort should include a cost/benefit analysis comparing the various elements of the transformation effort to other assistance delivery options, such as the use of non-resident Subject Matter Experts (SMEs) and the employment of different assistance models and methodologies. While perhaps effective in their initial phases, there could be cases in which assistance might be more effectively and efficiently delivered through employing different means and models. As such, an objective cost/benefit analysis should be developed to provide regular reviews to senior national and defense officials of methods of their costs.

These suggested metrics are, admittedly, imperfect. However, they provide a baseline from which a country can begin to develop and review, over time, a methodology to use when attempting to achieve national defense reform.

# Achieving PAP-DIB Objective Capabilities by Transforming the Way We Think

*Scott E. Jasper* [*]

> *You can bring all the new technologies you want, but if you don't change how you think, you will not achieve transformation.*
>
> – United States Air Force Maj. Gen. Marc Rogers [1]

> *The transformational model is one in which lessons learned, innovative thinking, education, and material implementation combine to promote capability improvement.*
>
> – Belgian Army Maj. Gen. Frank Hye [2]

The terrorist attacks on New York City and Washington, D.C. on September 11, 2001 graphically illustrated the unprecedented changes taking place in today's global security landscape. Throughout the world, but particularly in North America and Europe, nations were suddenly forced to confront the very real possibility of a devastating domestic attack by a dangerous and unpredictable enemy. In Europe, the situation rapidly evolved from potential threat to deadly crisis, as Madrid was rocked by a series of horrific train bombings in March 2004 and London's commuter transportation network was disrupted for weeks by Islamic extremist bomb attacks in July 2005. It soon became very clear that European security strategies geared towards traditional collective territorial defense did not provide the capabilities needed to address emerging global security threats. If there were any doubts beforehand, it was clear following these de-

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[1] Opening remarks at the Joint Warfare: Transformation and New Requirements conference in Arlington, VA, 22 June 2004. In 2003–04, Maj. Gen. Rogers led U.S. Joint Forces Command's J8 Directorate, which is responsible for integrating U.S. national military strategy with the U.S. Department of Defense's planning programming and budgeting system. The J8 reviews future capabilities requirements identified by field commanders, ensures joint and multi-national interoperability, and validates prototypes through experimentation and demonstration.

[2] Excerpt from speech entitled "Demystifying Transformation," delivered at the Clingendael Security and Conflict Program in Kijkduin, the Netherlands, 14 December 2005. Major General Hye currently serves as the Supreme Allied Commander Transformation Representative in Europe.

velopments that the status quo approach to NATO heartland security had lost its relevance. The Euro-Atlantic defense community was faced with two choices: to change or to *transform*. At the Istanbul Summit in 2004, Allies and Partners launched the Partnership Action Plan for Defense Institution Building (PAP-DIB), which established unified objectives for defense reform and capabilities development for collective security.[3] The achievement of PAP-DIB objective capabilities requires a transformation mindset that thinks in new ways about how to address future security risks.

## Transformation Defined

On the surface, *transformation* may seem synonymous with *change,* but there is a significant difference in perspective. Change is based on past events; it is a comparison or response to conditions that have already occurred. Transformation*,* on the other hand, indicates a more creative, forward-looking process that strives to anticipate the future and create capabilities that will address future conditions.[4] Transformation embraces more than just the exploitation of new technologies, however; it also encourages changes in core concepts, processes, personal perceptions, and organizational structures.[5] By definition, transformation has no end state. Rather, it is a continuing process that "encompasses accelerated technological modernization, doctrinal reform, re-orientation and re-organization of force structures, a culture open to change, and a willingness to accept risk."[6]

## Developing Capabilities: Closing the Gap

> *We want to develop the new military capabilities that NATO needs to fight the new threats we are facing today…*
>
> – A. Elizabeth Jones, Assistant Secretary
> for European and Eurasian Affairs[7]

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[3] Partnership Action Plan on Defense Institution Building, Brussels, 7 June 2004; available in the NATO Online Library, at www.nato.int/docu/basictxt/b040607e.htm.

[4] The importance of future-focused transformation is highlighted in Maj. Gen. Hye's presentation, "Demystifying Transformation," 2.

[5] This definition incorporates the principle capability categories—Technology, Organizations, People, and Processes (TOPP)—as identified in the United States Office of Force Transformation's *Military Transformation: A Strategic Approach* (Washington, D.C., 2003), 10; available at www.oft.osd.mil/library/library_files/document_297_MT_StrategyDoc1.pdf.

[6] General Lance L. Smith, "Understanding NATO Military Transformation" (ACT Multimedia Library, Norfolk, VA, 2006), 4. See www.act.nato.int/multimedia/facts/UNMT%20Booklet%20English%20Version.pdf.

[7] A. Elizabeth Jones, "The Road to NATO's Prague Summit: New Capabilities, New Members, New Relationships," a speech to the World Affairs Council of Northern California (San Francisco, 21 October 2002).

The Prague Summit of November 2002 defined and unified NATO's transformation efforts after 9/11. Widely acclaimed as a "Transformation Summit,"[8] Prague streamlined an Alliance command structure previously suited for the Cold War[9] and heralded the birth of Allied Command Transformation, the lead agency in "…promot[ing] the transformation of Alliance militaries and improv[ing] their ability to inter-operate, whilst enhancing the transatlantic link."[10] Prague also defined new capabilities for future forces, as manifested in the Prague Capabilities Commitment. The Prague Capabilities Commitment challenged individual nations to make specific commitments to improve collective capabilities in eight priority fields where gaps were identified:

- Chemical, biological, radiological, and nuclear (CBRN) defense

- Intelligence, surveillance, and target acquisition

- Air-to-ground surveillance

- Command, control, and communications

- Combat effectiveness (including precision-guided munitions and suppression of enemy air defenses)

- Strategic air and sea lift

- Air-to-air refueling

- Deployable combat support and combat service support units.[11]

It soon became apparent that these capability gaps could not be fully addressed within the Alliance—a wider response was needed.[12] NATO expanded its capabilities development efforts to include Partner nations that possessed the ambition to participate, adequate resources, and, most importantly, a democratically controlled defense infrastructure. The Partnership Action Plan on Defense Institution Building (PAP-DIB) was developed as a tool "to promote democratic values and foster democratic transformation across the Euro-Atlantic area, providing interested Partners with political

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[8] Former NATO Secretary-General Lord George Robertson, in discussion with U.S. President George W. Bush in October 2002, remarked that the NATO summit in Prague "will be a transformation summit where the alliance must transform itself to deal with the threats and the challenges of the 21st century." (Washington, D.C., 2002), www.defenselink.mil/news/Oct2002/n10212002_200210218.html.

[9] See John Borawski and Thomas-Durell Young, *NATO after 2000: The Future of the Euro-Atlantic Alliance* (Westport, CT: Praeger, 2001), *passim*.

[10] *NATO's Command Structure: The Old and the New* (June 2004); available at www.nato.int/ims/docu/command-structure.htm.

[11] NATO Informational flyer, "NATO After Prague: New Members, New Capabilities, New Relations" (Brussels: NATO, 2004), 2–3.

[12] German Federal Minister of Defense, His Excellency Dr. Peter Struck, MdB, made this point amply clear in his keynote address to the 21st International Workshop on Global Security. Dr. Struck examined today's global security environment and expressed the need for a unified response: "The Western world will not be able to control this threat by going it alone." (Berlin, May 2004); available at www.csdr.org/2004book/PeterStruckKeynote.htm.

and practical advice on, and assistance in, the defense and security-related aspects of the domestic reform [process], including [bringing] armed forces under civilian and democratic control."[13]

The PAP-DIB provides a conceptual framework for multilateral cooperation in defense reform.[14] PAP-DIB uses existing PfP instruments, such as the Individual Partner Action Plan (IPAP) and Membership Action Plan (MAP) to pursue PAP-DIB objectives. The specific PAP-DIB objective that engages Partner nations in NATO defense transformation initiatives is Objective 5.4: "Develop effective and transparent arrangements and procedures to assess security risks and national defense requirements; develop and maintain affordable and inter-operable capabilities corresponding to these requirements and international commitments, including those within the framework of PfP."[15]

## The Importance of Education

> *The biggest challenge, perhaps, takes place in the minds of people—intellectually and culturally.*
>
> – General Lance Smith, Supreme Allied Commander Transformation [16]

Transformation demands institutional ambition. Technology is the easy part; the more important—and more challenging—capabilities to develop are "cognitive capabilities." Cognitive capabilities are developed by establishing a fundamental understanding of transformational concepts and a culture willing to embrace innovation. In effect, education is the key enabler for creating a transformational mindset.

This mindset is reflected in the Euro-Atlantic Partnership Council's (EAPC) recognition that meeting tomorrow's challenges rests upon the ability of the Alliance to transform in order to prevail in the complex future security environment.[17] PfP nations and multi-national partners supporting NATO security objectives need to achieve interoperability with NATO member forces to work seamlessly together. Future military

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[13] NATO, EAPC(C)D(2006)0011: "Implementing the PAP-DIB: The Education and Training for Defense Reform Initiative – Guidelines for Development," 23 February 2006.

[14] PAP-DIB places military transformation in the context of the military's security role in civil society and the involvement of the military in non-traditional stability and peacekeeping roles. Dr. Karen Guttieri's essay, "Professional Military Education in Democracies," in *Soldiers and Statesmen: Institutional Bases of Democratic Civilian Control* (Austin: University of Texas Press, 2006), 318–320, explores this evolution in detail.

[15] Partnership Action Plan on Defense Institution Building, Brussels, 7 June 2004.

[16] General Lance L. Smith made this remark in his brief "NATO Military Transformation" on 16 March 2006 at the PfP Transformation Conference in Skopje, Former Yugoslav Republic of Macedonia.

[17] Gen. James L. Jones and Adm. Edmund P. Giambastiani, Jr., "Strategic Vision: The Military Challenge," Allied Command Transformation (Norfolk, VA: ACT Multimedia Library, August 2004), 2. See www.act.nato.int/organization/transformation/docs/stratvis0804.pdf.

forces need to be agile, joint, and expeditionary in nature, and must be designed to contribute effectively in operations across the spectrum of conflict. Defense transformation is seen by the Alliance and other concerned nations as the catalyst that is needed to achieve preeminence in warfare and crisis resolution in the Euro-Atlantic region and beyond.

To date, however, the insights gained in transformation workshops and the practical experiences gained from participation in multi-lateral missions have provided only limited opportunities for aspirant nations to acquire the knowledge and practical skills needed to design and implement plans for defense transformation. Nations facing the diverse security challenges of the new century deserve academic programs that will foster greater understanding on how to best optimize their national transformation agendas.

Building an experienced and educated transformation cadre is a difficult challenge common to militaries worldwide. Well-educated, trained, and experienced military planners are high in demand. Staff officers generally face each new assignment with little or no formal training or mentorship. Few defense organizations can afford to spare critical staff for several months of academic training, and must often resort to ad hoc, learning-on-the-job approaches that result in costly and preventable errors, misunderstandings, or inefficient use of time and resources.

To help in addressing these shortfalls, Allied Command Transformation and the United States Joint Forces Command, working in partnership with the Naval Postgraduate School, the United States' PfP Training and Education Center,[18] and the United States Office of Force Transformation have developed short-duration, focused educational seminars in International Defense Transformation that explore transformation principles, methodologies, and practical applications.[19] The ultimate goal is to build a core transformation community of interest, made up of international civilian and military defense planners and policy-makers who share a clearer understanding of *what* transformation means, *why* it is essential, and *how* to translate transformational concepts into operational capabilities that can be brought to bear to address current and future security concerns.

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[18] Jaap de Hoop Scheffer, NATO Secretary-General, stated: "the addition of the U.S. Postgraduate Naval School as a PfP Centre has significantly enhanced the contribution to education in support of PfP priorities agreed at the Istanbul Summit." Cover letter to the 2006 Annual Status Report of PfP Training Centers, dated 19 January 2006.

[19] This partnership has culminated in an annual resident seminar, presented for the first time at the Naval Postgraduate School in December 2005. Participants included national representatives from Bulgaria, Latvia, Romania, Moldova, Chad, Indonesia, Nepal, Pakistan, and Trinidad and Tobago, as well as observers from the Geneva Centre for Security Policy, the NATO School, the NATO Defense College, and the Slovak Republic Military Academy. This group now forms the core membership of the fledgling Transformation Community of Interest, which regularly shares transformation news and events, enrichment modules, and exchange of ideas via a dynamic, web-based virtual network at www.ccmr.org/public/spd.cfm/spi/idt.

PAP-DIB underlines the importance of this common understanding of concepts and unity of effort as Partners endeavor to transform themselves by developing new capabilities and achieving the envisaged Military Tasks for Interoperability objectives of the forces that can be declared available for NATO-led PfP activities, including operations, as outlined in country-specific Partnership Goals. As participants in the PAP-DIB process, "Allies and Partners commit themselves to engage in a dialogue, exchange of experience, and share practical cooperation."[20] PAP-DIB codifies the vital role of education in the transformation process. In particular, it prescribes conferences, workshops, and mentoring initiatives as primary vehicles for fostering cooperation and dialogue between transformation theorists and scholars and the end-users in the military and defense communities. However, as previously argued, a simple exchange of ideas is not enough. These educational venues must bridge the gap between core concepts and practical approaches for capability development.

Achieving the objectives of PAP-DIB complements the PfP's Training and Education Enhancement Program (TEEP). TEEP is designed "to increase the capacity of training and education efforts to meet the current and future demands of the enhanced and more operational Partnership."[21] TEEP calls for enhancing the number and quality of Partnership for Peace Training and Education Centers to promote inclusive training and education "available to all Allies and Partners."[22] TEEP has targeted interoperability and improved access to educational opportunities for Partners as two of its primary objectives. The aim of improving NATO/PfP interoperability is showcased in PfP participation in NATO operations in Kosovo, Bosnia-Herzegovina, Afghanistan, and NATO-sanctioned training missions in Iraq.[23]

## Capability Development Process: A Coherent Approach

Within the Capabilities Management Framework,[24] ACT developed a methodology for systematically transforming both NATO and Partner nations: the Capability Develop-

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[20] *Istanbul Summit Reader's Guide*, "Partnership Action Plan on Defense Institution Building," (Brussels: NATO-OTAN 2004), 75–76.

[21] Burak Akçapar, NATO's Defense Planning and Operations Division, "PfP Training Centres: Improving training and education in the Partnership for Peace," *NATO Review* 47:3 (Autumn 1999): 31–32.

[22] "Report by the Political Military Steering Committee on PfP," Appendix E; available at www.nato.int/pfp/docu/d990615f.htm.

[23] Jeffrey Simon, "Partnership for Peace: Charting a Course for a New Era," *EJournal USA*, U.S. Foreign Policy Agenda (June 2004); available at http://usinfo.state.gov/journals/itps/0604/ijpe/simon.htm. A few examples of varying levels of PfP participation in expeditionary campaigns include: Kyrgyzstan, Uzbekistan, and Ukraine (OEF); Albania, Finland, Sweden, and Austria (ISAF); Macedonia, Ukraine, Azerbaijan, Georgia, and Kazakhstan (OIF).

[24] The final version of Annex A to ACT Directive 80-7 (Managing Transformation), "A Framework for ACT Capabilities Management Organization and Processes," was released on 20 April 2005. It provides guidance on management approaches, the development of the Integrated Capability Teams (ICTs), and the foundation for the Capabilities Development Process; see 4–17.

ment Process (CDP). ACT visualizes it as a sort of transformation "highway—a well defined origin, destination, and route, but with several on and off ramps permitting free entrance and exit to the flow of ideas at all stages."[25] The Capability Development Process is depicted below:[26]
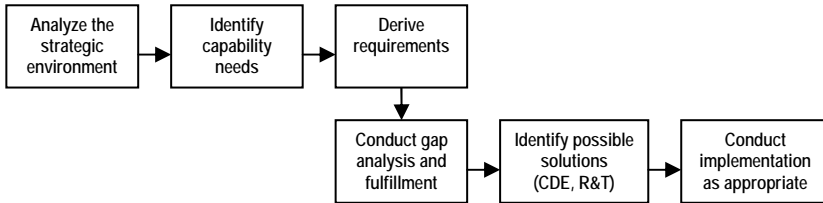


Figure 1: Capability Development Process

Capabilities development begins with an understanding of both the current and potential future security environment. Today, and for the foreseeable future, this environment is defined by the following global threats: organized crime, networked terrorism; rogue nations with capabilities and intent to impact the international community; proliferation of weapons of mass destruction; increased competition for scarce global resources; and a growing international demand for expeditionary peacekeeping and humanitarian aid/disaster relief missions in unstable regions.[27]

At the 2002 Prague Summit, NATO publicly recognized the need for sweeping changes in its missions, structure, and mindset. The uncertainties that have emerged from globalization now render traditional "territorial defense" mentalities obsolete. In consequence, the EAPC has moved away from a "threat-based" focus on traditional enemies and battlefronts, aligned along territorial borders, to a more flexible, generalized planning strategy that can be applied to a wide range of challenges—in short, capabilities-based planning. This dynamic conceptual shift was born of necessity. In the post-9/11 world, long-standing traditions of territorial defense, loosely allied militaries under sovereign national control, and a narrow focus on response to a land war in Europe are simply no longer relevant.

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[25] Remarks by then-Acting Supreme Allied Commander Transformation (ASACT), Admiral Sir Mark Stanhope, RN, KCB, OBE, during a visit with participants in the NATO Defense College's General and Flag Officers and Ambassadors Course, Brussels, October 2005.

[26] Simplified diagram from ACT's Capabilities Management Framework (May 2005), 4. Many of the steps occur concurrently or non-sequentially in an interactive and non-linear process.

[27] See address by Mr. J.P. Colston, Assistant Secretary-General for Defense Policy and Planning, at the PfP Transformation Conference in Skopje (16 March 2006): "We face an unpredictable security environment, characterized by instability resulting from ethnic and religious tensions, failed and failing states, organized crime, resource scarcity and political and economic rivalries." Available at www.act.nato.int/events/documents/pfp06/colston.pdf.

In the words of Mr. J.P. Colston, Assistant Secretary-General for Defense Policy and Planning, "The risks we face today are not the risks of strategic attack; they are the risks associated with the proliferation of weapons of mass destruction and the terrorist threat."[28] These new threats require a global response that is "agile, joint, and expeditionary."[29] Moreover, "defending the heartland" has taken on a new and geopolitically significant meaning with the bold, first-time invocation of Article V of the North Atlantic Treaty as a justification for pre-emptive military action in the name of collective defense in the global war on terror.[30]

## A Vision for the Future

> *We need forces that are slimmer, tougher, and faster; forces that can reach further, and stay in the field longer.*
>
> – NATO Secretary General Jaap de Hoop Scheffer [31]

These changes in mindset and approach are captured in *Strategic Vision: The Military Challenge*, a document issued by NATO in 2004.[32] The Concepts for Alliance Future Joint Operations (CAFJO) translates NATO's Strategic Vision guidance into concepts and capabilities for conducting coalition operations over the next fifteen years.[33] The CAFJO institutionalizes ACT's three primary transformation goals: achieving coherent effects, ability to conduct multi-national joint expeditionary operations and achieving decision superiority, which enable an effects-based approach to operations (the integration of all instruments of Alliance power to achieve the desired end state). To achieve these goals, ACT identifies six transformational objective areas:

- Effective engagement and joint maneuver
- Enhanced civil-military cooperation
- Projection of forces
- Synchronized multinational and joint logistics

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[28] Ibid.

[29] NATO's Strategic Commanders, *Strategic Vision: The Military Challenge* (ACT Multimedia Library, Norfolk, VA, August 2004), 5; www.act.nato.int/organization/transformation/docs/stratvis0804.pdf.

[30] Joseph R. Biden, Jr., U.S. Senator from Delaware and Ranking Democrat Member of the Senate Committee on Foreign Relations, *"The Istanbul Summit: Stepping Up To The Challenge,"* *EJournal USA* (June 2004); available at http://usinfo.state.gov/journals/itps/0604/ijpe/biden.htm.

[31] Speech by NATO Secretary-General Scheffer at the Royal United Services Institute, London (18 June 2004); available at www.nato.int/docu/speech/2004/s040618a.htm.

[32] Accessible online at www.act.nato.int/organization/transformation/docs/stratvis0804.pdf.

[33] "Concepts for Alliance Future Joint Operations," 20 February 2006. (Limited-distribution document available at the International Defense Transformation Blackboard Community page. For access, please contact the Center for Civil-Military Relations, www.ccmr.org/public/spd.cfm/spi/idt.)

- Information superiority
- Network-enabled concept

This progression is visualized in the diagram below:[34]

CAFJO paves the way for the introduction of an effects-based approach to operations, provides a relevant context for Alliance transformation, and establishes the parameters for integrating concept development and experimentation into the Capabilities Management Framework. The CAFJO creates a parallel structure to the Capstone Concept for Joint Operations (CCJO), the U.S. vision of the future joint force. The CCJO summarizes the family of joint operations concepts (JOpsC) that describe how joint forces are expected to operate across the spectrum of conflict from 2012 through 2025.[35]
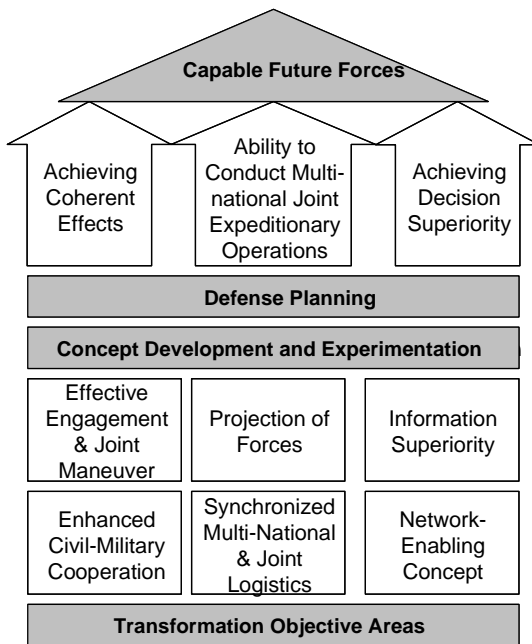


Figure 2: Effects-Based Approach to Operations

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[34] "House of Transformation" diagram from Maj. Gen. Hye, "Demystifying Transformation," 5 (edited to reflect most current CAFJO terminology per HQ SACT 5000TC-50/Ser: NU0040 of 20 February 2006).

[35] The CAFJO, in some ways, is NATO's commitment to the CCJO vision for multinational integration in future operations. See U.S. Department of Defense, "Capstone Concept for Joint Operations," version 2.0 (2005), 2, http://www.dtic.mil/futurejointwarfare/concepts/approved_ccjov2.pdf.

The CCJO delineates the key characteristics of joint forces: knowledge-empowered, networked, interoperable, expeditionary, adaptable/tailorable, enduring, precise, fast, resilient, agile, and lethal. The CAFJO offers comparable characteristics: agile, joint, expeditionary, interoperable, networked, collaborative, effects-based, and interdependent.[36] These key similarities will encourage the development of joint force characteristics for future U.S. and EAPC forces that are interoperable and compatible in scope and purpose.

## Changing Perceptions: NATO's Evolving Role

NATO's philosophy and approach have dramatically transformed and matured since the end of the Cold War. Until recently, however, the Alliance and its Partners have faced numerous challenges in realizing their ambitious goals. Part of the reason for this cultural resistance to the development of necessary operational capabilities has been a persistent mistrust among member nations about the European transformation agenda. In a recent *NATO Review* article, Mark Joyce noted that, "For skeptics, transformation became synonymous with a capital-intensive, network-centric, highly expensive and essentially U.S. model of military reform, to which it was unrealistic and undesirable for them to aspire."[37] Additionally, many EAPC members have global aspirations that may not match their current capabilities. As General James Jones, the current Combatant Commander Europe and NATO Supreme Allied Commander acknowledges: "Unfortunately, NATO's political appetite to be global is much greater than its inherent capability to act globally."[38]

NATO has taken significant action to develop capabilities that enable aspirations abroad while remaining cognizant of the political and economic limitations of its member and partner states. More and more often, "NATO is where [the world's] political leaders turn when they want to get something done."[39] In 2005, for example, NATO conducted eight simultaneous operations in theaters ranging from Pakistan to Louisiana.

## The Alliance Abroad: Building Force Projection Capabilities

One indicator of the Alliance's commitment to building a viable expeditionary force is NATO and Partner involvement in the International Security Assistance Force (ISAF)

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[36] "Concepts for Alliance Future Joint Operations," 20 February 2006.

[37] Mark Joyce defends Jaap De Hoop Scheffer's transformation efforts against these and other criticisms in "Taking the Transformation Agenda Forward," *NATO Review* (Spring 2005); available at www.nato.int/docu/review/2005/issue1/english/art5.htm. Mr. Joyce is head of the Transatlantic Program at the Royal United Services Institute, London.

[38] *Jane's Defense Weekly* (January 2006), 34; available at http://down.nmag.cn/other/Janes.Defense.Weekly.Magazine.January.25.2006.pdf.

[39] The U.S. Principal Deputy Assistant Secretary of State for European and Eurasian Affairs, Mr. Kurt Volker, made this plain-spoken assertion to students at the Naval Postgraduate School and later to students and faculty the University of San Francisco in March 2006 in his lecture, "U.S. Foreign Policy and Europe" (Monterey, 2006).

in Afghanistan.[40] At the beginning of combat operations in 2002, Allies and Partners only fielded limited support to U.S.-led combat operations. In the last two years, however, NATO has rapidly ascended to assuming the lead role in establishing lasting stability in Afghanistan. As NATO took operational control in August 2003, Allies and coalition partners were creatively woven into the force structure through the implementation of a CIMIC-based, modular expeditionary prototype, the provincial reconstruction team.

A provincial reconstruction team (PRT) is a modular organization of roughly forty to one hundred civilians and military specialists that conduct reconstruction projects or provide security for humanitarian and relief organizations. The PRT is one of the most important new developments in the transformation of organizational structures used in these types of operations. It provides a practical capability that capitalizes on interoperability and interagency integration, drawing on political, economic, civil, and military tools to achieve significant effects. The PRT possesses particularly attractive characteristics for NATO and its Partners: it is a small, largely independent command that is focused in its operational scope, non-logistics intensive, modular, and mobile. These features make it a readily deployable capability for nations that might otherwise be unable to contribute to multilateral expeditionary efforts. As of September 2005, there were twenty-one PRTs operating in Afghanistan, with significant PfP national representation, including Austria, Finland, Sweden, and Albania.

Based in large part on the experiences of ISAF, the EAPC has defined a unique long-term transformational strategy that focuses on pre-emptive global intervention and establishing stability in troubled regions. This bold vision clearly has its foundation in U.S. initiatives, but there is a distinctly "NATO flavor" to its pragmatism in identifying and addressing capability requirements, its focus on multi-national interdependence, and its emphasis on cooperatively integrating the military and other instruments of power to achieve holistic effects.

The NATO Response Force (NRF) provides "an integrated and fully interoperable sea, land, and air capability, under one command, wherever the North Atlantic Council requires, to prevent conflict or threat from escalating into a wider dispute."[41] The NRF is envisaged as "a highly trained and technologically advanced operational military force" that is "ideally suited to identify new capabilities and concepts through lessons learned and serve as a test-bed for their analysis."[42] NRF emphasizes full-spectrum utility, rapid deployability, exploitation of overarching technology, and joint and multi-

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[40] Jeffrey Simon, "Partnership for Peace: Charting a Course for a New Era"; available at http://usinfo.state.gov/journals/itps/0604/ijpe/simon.htm. PFP partners Finland, Sweden, and Austria; MAP-member Albania; and NATO invitees Romania and Bulgaria participated in ISAF.

[41] "The NATO Response Force (NRF)," available at www.nato.int/shape/issues/shape_nrf/030820.htm.

[42] General Lance L. Smith, "Understanding NATO Military Transformation," (ACT Multimedia Library, Norfolk, 2006), 16, http://www.act.nato.int/multimedia/facts/UNMT%20Booklet%20English%20Version.pdf.

national interoperability as its essential operational capabilities. Although not fully fielded, the NATO Response Force has already made meaningful contributions to multi-lateral operations across the globe, from disaster relief following the 2005 Pakistan earthquakes and Hurricane Katrina, to a supporting role in Afghanistan's stability operations.

Significantly, many of the capabilities that were deployed were drawn from places other than the traditional combat-oriented toolbox, including life-support equipment, search and rescue teams, light and heavy engineering companies, and forensic specialists.[43] Most recently, NATO provided strategic airlift to the African Union mission in Darfur, with a more expanded European role in UN-led African peacekeeping operations currently under consideration. The inclusive, geo-politically sensitive, and operationally diverse make-up of the NRF heightens its legitimacy and relevance in peacekeeping and humanitarian assistance operations where religious and ethnic strife are the primary destabilizing influences.

## The Role of Education: A Capabilities Development Process Enabler

The Alliance has aspired to the ambitious objective of building forces that are agile, joint, and expeditionary in nature. The need is clear, but a common understanding of the mechanism for achieving these goals remains elusive. Concept development and experimentation (CD&E) is a structured approach in which new and innovative ideas are explored, attempted, and evaluated through experimentation to produce capabilities that can be effectively employed on tomorrow's battlefield. CD&E is an integral component of the capabilities development process that at present has been only partially incorporated. NATO would benefit from a coherent and collaborative education program that explains CD&E in relation to the capabilities development process. Partners would additionally find value in an educational approach that relates NATO CD&E to the development of Partnership Goals that meet PAP-DIB objectives.

Military leaders involved in national and collective transformation initiatives must have a basic understanding of the elements of the CD&E process. CD&E is the primary means within the capabilities development process to identify possible solutions for capability gaps. Leaders deserve targeted education in CD&E that empowers them to formulate innovative ideas and approaches, conduct valid field experiments under realistic circumstances, assess the results, and provide cogent feedback to create viable solutions.

This novel approach to education begins with concept development. Traditional professional military education is often based on the application of doctrine. Doctrine encompasses already-mature capabilities that are employed to combat the threats of today. Concepts, on the other hand, are dynamic hypotheses that consider how things

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[43] SHAPE, "NATO's First Shipment of Relief Supplies Set to Move" (10 September 2005); available at www.nato.int/shape/news/2005/09/050910a.htm.

*might* be done in the future to address potential security challenges.[44] Often, these forward-looking concepts cannot be derived from existing doctrine or traditional educational approaches. Concept development thrives in educational venues that encourage collaboration and the free exchange of ideas, and that feature a community of participants with diverse experiences and backgrounds. Effective educational approaches will expose new concepts with varying degrees of maturity, provide opportunities for examining and vetting these concepts, and offer scenarios to explore their potential application to identified needs.[45] This methodology will help future planners to form creative hypotheses that can be applied to future security challenges, and to critically examine new ideas for potential development. Applied properly, concept development provides justification for changes in doctrine based on exhaustive research and experimentation.

Training exercises and operational experience play an equally vital role in education, since these are the environmental conditions for experimentation and lessons learned. The experimentation phase of the CD&E process is where concepts are converted into capabilities. This is a daunting task, as capabilities development is usually demand-driven. New concepts and identified capabilities needs are frequently derived from lessons learned in the field;[46] often, these experiences require immediate attention. In these situations, the experimentation phase is condensed considerably, and often conducted under less than ideal conditions. U.S. Navy Captain Steve Litwiller, ACT, Operational Concept Development Branch head, eloquently expressed this dilemma at the 2004 CD&E conference: "As we're developing a new concept, commanders are already demanding the capabilities. We're forced to move out of the vac-

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[44] Defense Science Board 2005 Summer Study on *Transformation: A Progress Assessment*, Vol. II: Supporting Reports (April 2006), 117-120, http://www.acq.osd.mil/dsb/reports/2006-04-DSB_SS_Transformation_Report_Vol_2.pdf.

[45] Jeffrey J. Becker, "Joint Concept Development at Joint Forces Command," *Military Review* 84:5 (July-August 2004); available at http://usacac.leavenworth.army.mil/CAC/milreview/download/English/JulAug04/becker.pdf.

[46] One of the most poignant examples of the conduct of battlefield CD&E is the transformation of field artillery into an indirect fire asset during the Civil War. Sgt. Milton Wylie Humphreys first field-tested this concept during the Civil War battle of Fayetteville. In his memoirs, *Military Operations in Fayette County, West Virginia, 1861–1863* (Fayetteville, WV: Privately Issued by Charles A. Goddard, 1931), Humphreys gave the following account: "The term 'indirect fire' is firing upon a point or place (A) from a point (B) which is not visible to people at (A). It is necessary, of course, that the trajectory or path of the projectile should pass above the top of the 'mask' or intervening object. At Fayetteville, May 19 and 20, 1863, the writer used a grove as a mask, but at Winchester, Va., Sept. 19, 1864, he successfully used a low hill. I claim no credit for the 'invention'; the thing is so obvious. In fact, if I invented it, I did not do it at Fayetteville, but in my day-dreams when I was about 8 years old."

uum of the labs and research within the give-and-take of operational environments. The world is our laboratory."[47]

These fluid environmental conditions place much of the responsibility for operational experimentation in the hands of military leaders, as prototype capabilities are rapidly fielded in response to emerging threats. The primary difficulty in operational experimentation is meeting the requirement of scientific rigor. The correlation of actions and results is not causal. Validity (the ability to detect change and identify and isolate its cause) is a necessary prerequisite in field experiments to prove whether the tested capability causes the desired outcome.[48] Military commanders are all too cognizant of the internal shortfall in much-needed experimentation expertise, and already employ senior concept developers and senior mentors from the transformation commands to interpret and evaluate the results of field experiments and training exercises.[49] These efforts should now be coupled with a commitment to provide military leaders in the field with targeted education in transformation principles. Education of these future planners and policy makers early in their careers will encourage the evolution of political and military cultures that appreciate the importance of investment in transformation.

## Education and a Unified Approach to Transformation

The JFCOM/ACT partnership appears firmly committed to comprehensive education and training in the field of transformation, both within its own organizations and throughout the EAPC. Since neither is an academic institution, the real responsibility for the delivery of relevant educational products for transformation falls upon U.S., NATO, and PfP education and training facilities. ACT serves as the hub that connects

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[47] Capt. Litwiller set the stage for a lively exchange of ideas for how to "bridge the gap" between concept and capability in his opening remarks at the 2004 CD&E conference in Calgary, Canada. Throughout the conference presentations, education and skill development of military officers was a resounding theme. Canada's liaison to US JFCOM, Lt. Col. Tony Battista, visualized these officers as "experimental directors" who battle-tested prototypes and newly developed capabilities in the field, then provided invaluable feedback and lessons-learned for vetting future concepts. Conference presentations are available at www.act.nato.int/organization/transformation/cde04post.htm.

[48] George Hodermarsky, "Introduction to Operational Experimentation," presented at the 2005 ACT/PfP CD&E Workshop, Zagreb, Croatia (8-10 February 2005); available at www.act.nato.int/events/seminars/05cdeconfpost.htm.

[49] This reflects an important cultural shift within the NATO military leadership, in which field commanders have embraced mentorship and partnership in exercises such as Urgent Quest 05, Allied Warrior 04, and the Joint Warrior Interoperability Demonstration 04, as highlighted in the 2004 CD&E brief from ACT's Operational Experimentation branch head, Capt. Larry Gordon (available at http://www.act.nato.int/organization/transformation/cde04post.htm).

the transformation commands to the institutions that are responsible for the development of "cognitive" capabilities, as illustrated below:[50]
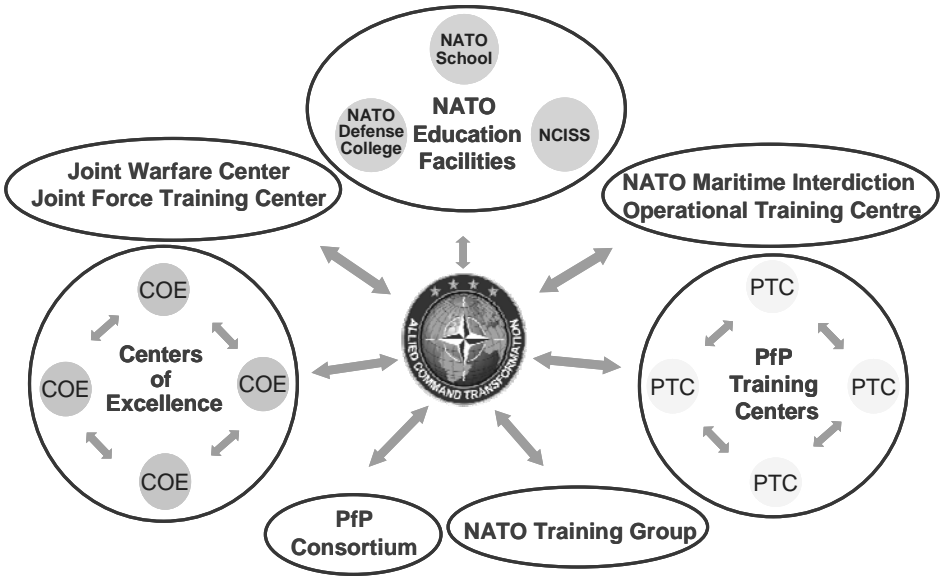


## Partnerships in Education

The aforementioned International Defense Transformation (IDT) seminar is a prime example of this ACT/JFCOM partnership with the PfP training centers (in this case the Naval Postgraduate School) for the delivery of relevant educational products. The IDT seminar discusses revolutionary methods to improve command and control, fire, maneuver, and logistics in coalition and interagency operations across the spectrum of conflict through concept development, technology demonstrations, and field experiments. The key objectives of the seminar are to familiarize participants with:

- Capabilities-based approach for the future security environment
- Network-enabled capability and effects-based approach to operations
- Transformation elements: technology, organization, process, personnel
- Concept development and experimentation

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[50] This diagram is from BG Gundars Abols' brief "Individual Education and Training," which he presented at the 2006 PfP Transformation Conference (Skopje, March 2006). It illustrates ACT's role as the "Hub of Transformation" that links the NATO/PfP Education and Training Network (NPETN). BG Abols is ACT's Deputy Assistant Chief of Staff for Joint Education and Training (JET).

The IDT seminar delivery method combines informational presentations and case studies with practical group exercises. The learning approach for IDT is based on the notion that cognitive capabilities are best developed by establishing a transformational frame of reference and then applying practical problem-solving methodologies to validate and refine transformation objectives. Academic lectures by internationally recognized professors and senior staff members on transformational principles, objectives areas, and best practices provide a theoretical foundation for participant discussion. The use of scenario-based practical exercises in an interactive group environment allows participants to consider their diverse viewpoints and negotiate unified transformation goals. The scenario for the exercise represents the realistic range of regional and transnational threats facing nations today. Participants develop a provisional national strategy for responding to principal threats, utilizing a capabilities-based defense planning methodology that considers what types of deployable and sustainable capabilities are required to contribute in multinational and interagency crisis response missions, both in the region and deployed abroad.

IDT participants include global civilian and military defense planners and policy makers that contribute a wide variety of real-world perspectives, issues, and experiences. Throughout the IDT seminar, these participants are introduced to relevant examples of attainable, feasible, and practical transformation prototypes, such as "Hastily Formed Networks," "Multi-national Interagency Group," "Coalition Combat Identification," and "Non-Lethal Weapons." Through the practical exercises, representatives from Partner nations have an opportunity to consider which type of prototype capabilities might be applicable in addressing their own Partnership Goals. Also of special importance for Partners, the IDT interaction with respected transformational professionals provides valuable insights on how the dimensions of CD&E relate to the exploration, testing, and fielding of relevant PAP-DIB objective capabilities through the capabilities development process.

The IDT seminar program connects participants and subject-matter experts on a long-term basis through a Web-based collaborative continuous learning environment. This community of interest can continue to share transformational perspectives by email and engage in advanced distributed learning (ADL) activities. The Naval Postgraduate School-hosted website produces post-seminar "enrichment" modules in interdisciplinary subjects that address the varied elements of transformation, from explaining new planning methodologies to exploring the challenges of interagency integration.[51] The dynamic, collaborative IDT seminar venue enables learners to develop a core understanding of models, roles, and responsibilities for transformation. These are the cognitive capabilities that will inspire and shape national transformation agendas.

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[51] To date, there are four enrichment modules available on the International Defense Transformation Community Page in the Naval Postgraduate School Blackboard learning system: Crisis Action Planning, Interagency Integration, Task Lists Development, and Capabilities Management. For more information, or to access these modules, visit the Center for Civil-Military Relations website: www.ccmr.org/public/spd.cfm/spi/idt.

## Conclusion

The global security environment is rife with a host of uncertain and constantly evolving challenges. Unilateral reactive response and threat-based territorial defense are obsolete strategies for addressing asymmetric threats. Global partners must undergo a unified, interdependent, and forward-thinking transformation. It is ineffective and prohibitively expensive to continue developing capabilities that aspire primarily to overwhelming technological superiority and combat power in future operations. Planners and policy makers need to adapt an effects-based approach that utilizes all instruments of power to combat global threats. Through joint concept development and experimentation, alliances and coalitions can develop integrated capabilities that holistically engage collective challenges across the spectrum of conflict.

Effects-based approaches to operations, the capabilities development process, concept development and experimentation, and other transformational principles are revolutionary and dynamic approaches that require continuous and exhaustive evaluation and revision. These concepts are increasingly incorporated into national, joint, and collective strategic policy and doctrine,[52] but they are still not firmly institutionalized in international political and military cultural mindsets. A unified focus on education is the key to instilling an understanding and appreciation of transformational principles in future civilian and military leaders. Ideally, these future leaders will collaborate in a vibrant transformation community of interest that possesses the capability and ambition to effect transformation. Educational delivery methods should promote collaborative exchanges of ideas, link the transformation commands with academia and operational counterparts in the field, and actively engage participants in realistic scenarios that encourage practical application. This educational approach will endow future leaders with the skills and functional understanding necessary to translate core transformational concepts into operational capabilities that can be assessed and refined through continuous experimentation. For Partnership for Peace nations, this transformational mindset will enable the accomplishment of Partnership Goals that achieve PAP-DIB objective capabilities.

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[52] See the recently released *Quadrennial Defense Review Report* (Washington, D.C.: Department of Defense, 6 February 2006), available at www.defenselink.mil/qdr/; and NATO's *Strategic Vision: The Military Challenge* (Brussels: NATO, August 2004); available at www.act.nato.int/organization/transformation/docs/stratvis0804.pdf. Both documents are current examples of strategic policy that focuses heavily on prescriptive transformation initiatives to address the evolving global security environment.

# Defense Institution Building: Training in Support of Defense Planning

*Hari Bucur-Marcu and Cătălin-Marius Târnăcop* [*]

Training for senior officials is always a problem of high complexity, and training on defense issues is even more complex, for several reasons. Defense is becoming an increasingly specialized field, with a wide array of professional instruments, especially in the area of planning, but it lacks the concreteness of other public domains, such as health or education, as the success of good governance in national defense reveals itself only under special conditions.

Senior-level trainees exposed to new defense planning approaches come to their training experience with a wide array of knowledge and experience, and they are skilful in handling complex issues. Some of their skills, knowledge, and experience are of great value in introducing new topics, but other elements of their background may bias them in properly understanding the depth of those new topics. Their seniority also implies that their attention span and their learning curves are different than those of young and fresh students. Senior officials seldom are able to dedicate themselves full-time to training. Usually, training is only a part, and not necessarily the most important one, of their professional agenda. When the training is of an international nature, the trainees are of different backgrounds and cultures, and establishing a common denominator that fits every one of them may result in significant lapses of practical knowledge if the training process is not handled wisely.

Taking into account all those aspects, designing an interactive training course for senior officials on national defense policy with an emphasis on defense planning proved to be a very challenging task for the team at NATO Studies Center in Bucharest when we were asked to conduct such an event for a group of international participants at a conference in Tbilisi, Georgia, in April 2005.[1] This article is an attempt to take stock of the experiences gained through planning that training program, and it proposes some general themes of reflection on training senior officials in support of defense planning. The first part presents a theoretical framework, with some considerations regarding defense planning that we thought any trainees should be aware of when embarking on a training program dealing with defense policy formulation and implemen-

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[1] On 26, 27, and 28 April 2005, the NATO Studies Center conducted an interactive training module on National Defense Policy within the Training Course on Partnership Action Plan–Defense Institution Building (PAP–DIB) in Tbilisi, Georgia. The course and the preceding one-day conference were a joint Georgian-Swiss initiative with the support of the NATO International Secretariat, the Geneva Centre for the Democratic Control of Armed Forces (DCAF), and the NATO Studies Center (NSC). The Romanian Ministry of Foreign Affairs and Ministry of Defense supported NSC participation in the course.

tation in an accountable and transparent manner. The second part of the essay captures the experience of training interactively on defense planning within the context of defense institution building.

## The Theoretical Framework

Transforming the defense establishment and the war-fighting capabilities of any armed forces will remain a major strategic issue for many nations for the rest of the decade and beyond. Many defense officials have come to believe that defense transformation is necessary for success in the war on terror, and it remains an integral part of their military strategy. This approach was augmented with an expressed interest in a revolution in military affairs that would transform concepts, military capabilities, people, and organizations, and a supporting revolution in business affairs that would transform defense planning and resource allocation processes.[2] Any nation that embarks on the process of defense institution building may derive great benefit from the theoretical framework developed in this context, and may gain some practical solutions for introducing arrangements and procedures to assess security risks and national defense requirements in a transparent and accountable manner. Those arrangements and procedures dealing with security risks and national defense requirements are based upon underlying principles, processes, and some general management requirements.

The general framework of discussion in such a course of training should be that of national defense policy. Defense policy involves the political direction of a nation's defense resources as a whole with a view to ensuring national security, protecting vital interests, and furthering the international aims of the state. There are at least two theoretical approaches to defense policy when that policy involves major changes such as a strategic review or transformation or defense institution building.

One theoretical approach is hierarchical, and the other one is holistic. Both are based on the principle that the defense sector is part of the broader security architecture of a nation. These approaches are not mutually exclusive, and in practice both are present in defense governance, but, as each may be reflected in a separate model, we prefer to discuss them separately at the theoretical level. The hierarchical model underlines the responsibilities across all governmental bodies involved in the formulation and implementation of defense policy and describes the steps that lead to the development of an efficient, affordable, and transparent defense. The holistic model, on the other hand, focuses solely on the interrelations between different security sectors.

## The Hierarchical Approach to Defense Policy Formulation and Implementation

The hierarchy of national security and defense is depicted in Figure 1. National security strategy may be defined as the art and science of developing and using the political, economic, and psychological powers of a nation, together with its armed forces,

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[2] Christopher J. Lamb, *Transforming Defense* (Washington, D.C.: National Defense University Press, September 2005), 1–3.

during times of peace and war, to secure national objectives.[3] The head of state should present a National Security Strategy (1) to the parliament within several months of his or her assignment or election. The National Security Strategy represents a middle-term assessment of four to five years, with a perspective on long-term consequences.
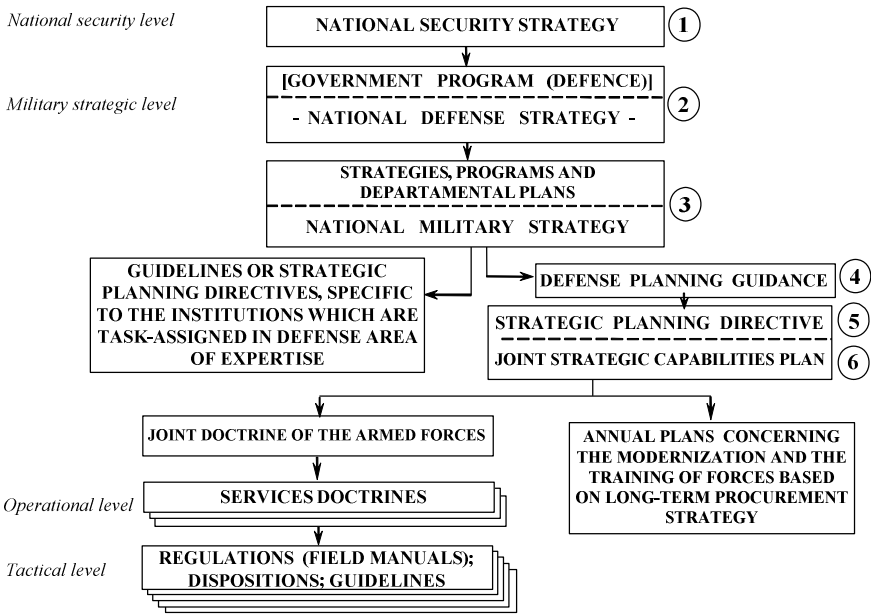


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Figure 1: National Security and Defense Hierarchy

The governmental approach (2) to defense issues may take many forms, and materializes in one or several documents, such as a defense white paper, a government program, or a national defense strategy. The format and number of such documents depend on the way the government establishes executive tasks in order to accomplish national defense and security objectives, underline solutions to strategic issues, and to allocate the available resources through defining "a broad course of action or statements of guidance adopted by the government at the national level in pursuit of national objectives."[4] Usually, the program, defense white paper, or national defense strategy are submitted to the legislative body for approval within several months of the election of the head of state. This document generally follows the same timelines as the National Security Strategy.

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[3] Colonel (Ret.) Arthur F. Lykke, Jr., "Defining Military Strategy," *Military Review* (January-February 1997): 183–86.

[4] Ibid., 183.

The next hierarchical level (3) includes strategies, programs, and departmental plans at the ministerial level; in Figure 1, we have highlighted the National Military Strategy. Military strategy reflects the objectives and missions derived from higher-order strategies, such as the National Security Strategy and the National Defense Strategy, or even longer-term strategic documents such as a Strategic Vision or Transformation Strategy, and it is differentiated from the operational strategies that are used as the basis for military operations. A national military strategy must support a nation's security strategy and comply with national policy. The National Military Strategy is a document prepared by ministries and other governmental bodies with responsibilities in the defense area, and usually will not refer to public safety or national security institutions other than those subsumed within the military. All other authorities assigned with defending national interests and carrying out security-related objectives will develop their own strategies, programs, and departmental plans, and submit them for approval to the government or the parliament along with the military strategy.

Based on the prescriptions of the National Military Strategy at the Ministry of Defense level, the Resource Planning Department will issue Defense Planning Guidance (4) that represents the allocation of resources based on a planning, programming, and budgeting system. This guidance document is intended to reflect the objectives, policies, options, and strategic and operational plans that are in use in a more elaborate and dedicated manner. The Defense Planning Guidance covers the same period of time as the National Military Strategy.

The Strategic Planning Directive (5) deals with the implementation of strategic planning and also covers the same period of time as the National Military Strategy. The Joint Strategic Capabilities Plan (6) outlines the organization and deployment of the nation's forces based on the National Military Strategy.

The Acquisition and Procurement Department will develop annual plans concerning the modernization of equipment and the training of forces based on a long-term procurement strategy. At the operational level, we should mention the development of a joint doctrine within the armed forces, and at the tactical or current level the elaboration of regulations such as field manuals, dispositions, and guidelines.

## The Holistic Approach to Defense Policy Formulation and Implementation

The holistic model may be best represented through examining the process of security sector reform, as shown in Figure 2. The security sector review includes all actors in the area of security, with defense being only one entity among others.

A holistic approach allows for the wide involvement of defense and other security departments in sharing responsibilities and means in accomplishing national objectives, and also of the involvement of civil society taken more broadly, in order to ensure that these civilian institutions understand their responsibilities in the area of security and their relationships with the defense community. Bringing all these actors together into a holistic framework may eliminate overlaps, fill gaps, and identify the most efficient means of dealing with any security problem.

A defense policy builds on assumptions and national objectives depicted at the national security level and incorporated in context descriptions, identifications of security risks, and a national security policy. (It should be noted that the defense establishment, comprising policy formulation authorities, contribute actively to all these preceding processes.) After the defense policy has taken shape, the required processes—such as missions and military task assignments, capabilities and force development, and others—take place in a holistic manner, in close cooperation and coordination with other domains of the national security structure.
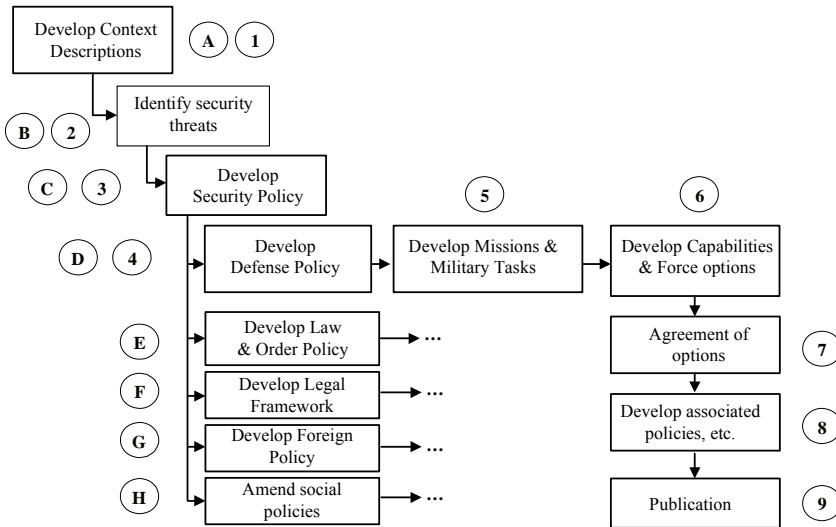


Figure 2: Security Sector Reform Process

In the first stage, context description provides an overview of the entire security environment confronting the nation. In summary, this process includes the establishment of agreed-upon views of realistic and possible scenarios within which security needs are addressed for the future. By establishing rational views of the future, unlikely extremes, which may lead to either insufficient or overstated requirements for military capabilities, can be logically eliminated in due course within the process. The process relies upon a number of drivers that have been identified as appropriate to the situation of the state. This process is a good point at which to include academics and other knowledgeable members of civil society, as well as representatives of the public, as they bring not only expertise but also credible perspectives on the position their nation may want to take in the future world.

Developing a security policy is a vital process, providing the main context for the subsequent development of departmental policies, and requiring that each area of the security sector works together in meeting strategic objectives. It builds upon an accepted understanding of the problems the state seems likely to face in the future and of

any other desired outcomes, such as international commitments. It therefore relies not only upon the earlier steps in the process, but also upon other previously implemented policies and international agreements.

The starting point for any security policy is an assessment of threats to the nation's security; these may be of a military as well as a non-military nature. The holistic model reveals that, even if a nation's main concerns revolve around military threats, any defense policy should also look at other security threats that—while non-military in nature—require a response from the armed forces. The most obvious are civil emergencies resulting from natural or manmade disasters, such as flooding, foot and mouth disease, avian flu, or nuclear power plant accidents.

The main form in which a security policy may be embodied is a national security strategy, which in this model is a consolidated result of the processes of context description development and threat assessment. Practitioners of strategy constantly struggle to achieve a balance among many competing variables. An ancient cliché holds that strategy is an art, not a science. The true art of strategy and force planning lies in making evident how well the inevitable tensions among many variables are solved.[5] Specifically, strategy is the linkage of ends and means—a "game plan" that shows how finite resources will be employed to accomplish declared objectives. Coherent strategy is the key to institutional success; it is as important for countries as it is for businesses and universities.[6]
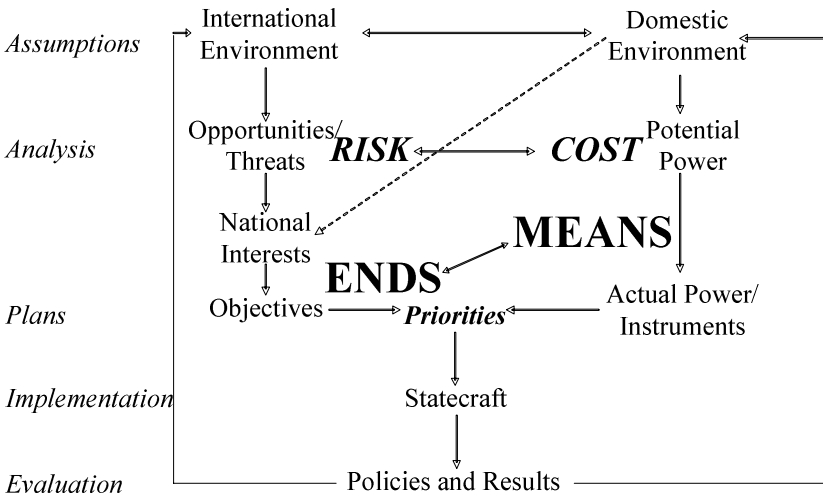


Figure 3: National Security Strategy

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[5] Henry C. Bartlett, G. Paul Holman, Jr., and Timothy E. Somes, *The Art of Strategy and Force Planning*, in *Strategy and Force Planning*, 3rd ed. (Newport, RI: Naval War College, 2000), 18–34.

[6] Ibid.

The Deibel model [7] in Figure 3 presents the basic relationships that go into shaping a national security strategy, defining the classic model of ends, ways, and means. These factors include analyzing the international environment, the domestic environment, threats and opportunities, national interests, objectives, priorities, potential power, actual power reflected in instruments of power, statecraft, policies, and results.

The security policy reflected in a national security strategy will develop a statement of broad defense requirements and roles of the military and other instruments of the state in addressing identified threats, carrying out government policies, and international commitments. This security policy is shaped by the consolidated contributions of whatever is the planning and policy body at the executive level, such as a national security council; defense authorities (both military and civilian); representatives from foreign affairs, interior, finance and other ministries within the government as deemed appropriate; as well as civil society, and, of course, the legislative body.

The main process of interest in our model is the development of a defense policy based upon the strategic statement of what is the military's role in meeting the nation's security priorities, and it involves the defense policy staff, other governmental departments, and civil society, under the legal scrutiny of the parliament.

It is expected that most of the work will be undertaken by policy structures within the nation's ministry of defense. However, it should also be transparent to others as part of a continuing process, so that they may be assured that defense policy fits as expected within the overall framework of national security and other areas of national development, and that it has taken earlier work into account.

A defense policy document such as the National Defense Strategy provides a single source for further analysis of the military capabilities that are needed. In stating the threats and requirements that should be addressed by the military, defense policy provides guidance to defense establishment, including force planners. The scope of a national defense strategy is to make the armed forces of a nation and their supporting structures accountable, affordable, and efficient.

The next process is to develop options for the delivery of military capabilities against the available resources, given other demands upon the state budget and the degree of risk that is acceptable to the state. Finally, it is necessary to look at the associated policies, processes, and structures—such as finance, logistics, personnel, or public affairs—that impinge upon actions in the area of security.

Establishing optimum levels of resource allocation for defense versus the rest of the public sector is another very important issue that may be addressed in a holistic manner. Assigning relative importance to threats requiring a military response against those requiring response from other bodies is crucial when allocating resources to each component of the security sector, given that there is never enough money to satisfy everyone. These issues involve not only the classic question of how much is enough, but also

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[7] Terry Deibel, *National Security Strategy: Fundamentals of National Security Strategy* (Washington D.C.: National War College, National Defense University, 1998).

questions about objectives; the range of capabilities that is needed, given the changes in warfare and diversity of threats; and—more important than ever—how best to use the funds available for defense.[8]

## Training Considerations

Interactive training on defense planning within the context of defense institution building needs to be consistent both with the defense planning aspects and with the specificity of such a specialized exercise. At the outset of developing this training program we had to establish some principles for ensuring the success of such an enterprise. They are discussed briefly below, in no order of priority.

One principle was to create a fictitious situation for a case study that corresponded as closely as possible to the knowledge and experience of the participants, while avoiding giving them any basis to believe that it was inspired by any reality they know, namely by any of the nations they represented. This principle served three purposes. First, it respected the political appropriateness of not commenting on the actual situation of those nations, as it was not the aim of this exercise to discuss particular problems that any of the participants' nations might face. Second, it was a factor in minimizing the bias that may have misled the participants to focus on finding similarities with their own situational environment instead of concentrating on the tasks given within the exercise. Third, it saved a lot of the participants' scarce time that they had available to prepare themselves for the exercise and to play their assigned roles, as they were already familiar with most of the aspects presented in the situation.

Another principle was to conclude each step of the training program with a concrete product. By applying this principle, we were able to keep the participants focused on a clearly identifiable task, and they could organize their efforts more easily, as they knew from the beginning that they would have to produce a certain outcome in a given time span. Moreover, they would refer to each output later, when they were to revise their actions and outcomes, or (more importantly for us) when they were to move on to the next stage of the interactive training.

This latter observation introduces the next principle, which we may refer to as the principle of consecutive results. When designing an interactive training program, one should schedule at least three legs of the activity, in order to create an environment that allows for interaction both among the participants and among the sub-processes. It also serves the need for feedback in a simulated situation, as it models real-life situations in which organizations find themselves confronted not only with a specific situation, but also with the consequences of their previous actions and commitments. And finally, it underlines the logical sequence of events. Applying the principle of consecutive results, we may start with the first conceptual phase, such as a strategy or a policy document, and then proceed to one or two planning phases, when the outcome of the previous activity is called upon—for instance, the strategy is translated into programs, and

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[8]  Paul K. Davis, *New Challenges for Defense Planning. Rethinking How Much is Enough* (Santa Monica, CA: RAND, 1994).

resources are allocated. Then we are able to simulate the relevance of the outcome for the security environment, or for the society at large.

Another principle we sought to instill in the program was the principle of relevance. Defense institutions have to deal with numerous problems, and the defense planning process has to find solutions for each of those problems. When simulating or modeling such a situation, it is of paramount importance to choose from all those problems the most relevant ones. The relevance principle ensured that the participants were more likely to concentrate on their roles and had more incentives to cooperate in order to find solutions to a fictitious situation, since they saw that the situation was relevant for them in real life.

Another principle that is always good to keep in mind when training adults is to create incentives through competition. To satisfy this principle, at least two teams should be formed, and they should be given a fair chance to confront the competing teams' results at the end of each leg of the exercise. Not only does this create a higher motivation within each team to give their best, but it also provides an opportunity to check the validity of one's solution when confronted with another team's solution.

The last in this list of principles is the so-called do-it-yourself principle. This implies that, once the exercise had started, the role of the coordinators and advisers on the exercise staff was to keep the participants on track and within the allocated time for the task at hand, while the participants themselves were doing those tasks, with no advice from the staff on the possible solutions.

Apart from these guiding principles, the general principles of modeling were also taken into account, but we will not discuss those principles here. The only thing worth mentioning was the composition of each team (or committee) that performed during the interactive training. As the situation was fictitious, it was not at all relevant if the members of the team were from different nations or from a single nation. But, for the sake of modeling real-life experience as closely as possible, it was important that each team consisted of individuals with different backgrounds, both in terms of area of service (diplomats, civilian officials, and military) and area of expertise (strategists, planners, politicians, scientists, and practitioners).

The aim of the interactive training module was to guide the course members through a simulated process of defense policy formulation. Throughout the training activities, the participants were expected to identify the characteristics of the main documents in which the defense policy is formulated (especially a defense strategy and a defense planning directive); work in a team to achieve the basic requirements for those documents; and outline the main steps to promote such a policy to the public.

The design of such an interactive training module resulted in a set of instruments that are ready for off-the-shelf use in delivering similar courses in the future. The general design was a three-day course, and it took the format of morning plenary sessions with lectures, presentations, and discussions conducted by DCAF, and afternoon interactive training sessions conducted by the NATO Studies Center. Of paramount importance was ensuring that the morning theoretical portion was fairly consistent with the practical tasks of the afternoon.

For the interactive training module, the NATO Studies Center published a syllabus comprising relevant information, including objectives, requirements, responsibilities, schedule, recommended readings, as well as a comprehensive scenario. The staff involved in the interactive training included an overall coordinator, activity coordinators responsible for each syndicate, and faculty advisors. Two Georgian graduates from NSC's NATO Senior Executive Master Course assisted the coordinator as faculty advisors.

There were twenty-two participants in the course, representing ministries of defense, other ministries, and non-governmental organizations from Armenia, Azerbaijan, Georgia, and the Republic of Moldova. The participants worked in two teams, with an even distribution of the represented nations and organizations.

The main instrument of the course was the scenario. It consisted of a background for a fictitious nation, named Invenzia, which included critical defense factors, national objectives and interests related to its defense, a given long-term strategic threat assessment, and the current objectives of Invenzia's armed forces. It also included open-ended issues related to national defense. The syllabus and scenario were available in both English and Russian; the working language of the course was Russian with translation in English, and the products were edited only in English.

The background given in the scenario revealed relevant information on Invenzia's geography, climate, population, government type, diplomacy, economy, and military sector. It also described the current status of the nation's security establishment, the main bodies of political and national power with their respective inputs on defense issues, and the actual stage of development of the nation's various defense institutions.

The critical factors for defense planning included aspects that may be found in most of the transitional nations that are members of the NATO's Euro-Atlantic Partnership Council. Just to give an example, the scenario revealed that "the delayed transition to democracy and a market economy, and the slow or even negative economic growth placed a heavy burden on the total government budget, with severe consequences for the defense budget. Most of the budget was allocated to personnel costs, under the assumption that maintaining the force as inherited from the Cold War period will safeguard the credibility of Invenzia's military power."

The open-ended issues of national defense set the scene for finding solutions based in defense policy and planning. Among those issues were:

- Is there still a need for a "total war" doctrine and its related mobilization system?

- What will be the best or the most efficient mix of active and reserve forces?

- Is conscription still a viable solution for generating interoperable and deployable forces, taking into account that all the personnel assigned for missions abroad are serving in the military voluntarily?

- Are all the military units still necessary for the new defense establishment?

- How many fighting brigades and battalions should form a highly trained, adequately equipped, rapid deployable force?

- What is the order of priority in resource allocation between deployable and in-place forces?
- What should be the order of priority among services and within services?
- What should be the order of preference among competing capabilities?
- On a three-year implementation cycle, what would be the order of priority for resource allocation among procurement of required equipment and operating personnel training?
- What would be the time-frame for the major capabilities to be operational (namely, how many three-year cycles)?
- Is the current distribution of military bases and depots on the national territory functional and adequate to the military's new missions?
- What criteria should be used in order to prioritize the flow of resources to selected bases and depots over other bases and depots?
- Is it more cost-effective to maintain and guard depots containing obsolete weapons and ammunition or to close them down and destroy the hazardous materials?

While recognizing the importance of the theoretical portion of the course reflected in the morning lectures, we added another instrument to our toolbox in order to be certain that the participants had a common understanding of the theory they needed to use in order to accomplish their tasks. This instrument was the required readings for each of the legs of the training phase. The main requirements for those readings were that they be comprehensive, easy to grasp, that they offered references for further readings if desired and, that they were readily available under copyright regulations. There was a large array of readings that met those requirements, and we may not be certain that we picked the most relevant ones, but they were well received by the participants.[9]

The most challenging part of the training was related to finding solutions within the framework of a defense-planning directive. None of the participants were skilful planners, nor had they had experience in handling complex planning issues that require analytical and managerial tools. Moreover, the participants were expected to simulate in a few hours the amount of work done in several months in real life. To overcome this challenge, we introduced a generic tool, consisting of a simple computer program in spreadsheet format. This allowed the participants to generate a large number of al-

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[9] The required readings were: Paul K. Davis, David Gompert, and Richard Kugler: "Adaptiveness in National Defense: The Basis of a New Framework" (National Defense Institute, RAND, Issue Paper August 1996); Bruce W. Rember, "Tools for Transformation: The Military Requirements Process" (Hoover Institution, Stanford University, 2000); and Patrick J. McConnell and Lee B. Becker, "The Role of the Media in Democratization" (Athens, GA: James M. Cox Jr. Center for International Mass Communication Training and Research, University of Georgia, 2002).

ternatives in a short period of time, dealing with resource allocation and other decisions on weighted divisions between services and budgetary chapters.

The requirements for the members of the teams were established up front in the syllabus. As the training was designed in three phases, it was clear what the desired outcomes were for each of them. In the section on defense institutions, the scenario described that Invenzia had a new National Defense Planning Act, which established clear democratic control over the nation's military and paramilitary forces. The parliament debated and authorized the National Defense Strategy issued by the president within three months from the day he took office. Based on this strategy, the Ministry of Defense issued a defense planning directive. Through this directive, the government committed itself to the implementation of the National Defense Strategy, giving clear guidance on the force structure and budgets, and on the key programs.

The first session was dedicated to drafting the National Defense Strategy of Invenzia. The participants were asked to find the most appropriate solutions to developing a credible and affordable defense, considering the national objectives and the national interests that were stated in the Strategic Vision as well as the strategic long-term assessment of the security environment.

The second session was dedicated to developing a defense planning directive in order to seek the most efficient implementation of Invenzia's National Defense Strategy, considering the required capabilities for strategic and military missions as stated in the strategy; the military modernization campaign and the new technologies available for warfare; and the budget necessary to implement the strategy.

For the final session, the participants were assigned to draft a public information plan in order to seek official approval and general public support for their defense strategy and the main guidelines on the defense planning directive.

The first interactive training session started with a plenary meeting where the course members were introduced. For the first two sessions, the participants played roles based on their own background. For the last session, they had to impersonate the public information staff in a fictitious ministry of defense. At the end of every training session, each team presented its outputs in a plenary session. The public information session also included a simulated press conference in which each team had to both take the stand and to impersonate the media.

The entire interactive training program was based on the assumption that the participants were supposed to develop specific products. The first reason was that a document—even in a summary format—was necessary to model or simulate a real-life document containing essential parts of a national defense policy. The second reason was that each session was based on the outcome of the previous one.

The products were consistent with the aim and scope of the program, and they were valuable outcomes of lively and focused discussions within the teams. Given the diversity of nations and organizations represented in the course, and the scarcity of time at the disposal of the participants, the main outlines of a national defense strategy, the subsequent defense planning directive, and the public information plan (including the press release/communiqué) were all of high quality, addressing the main issues in the scenario and finding solutions to most of the open-ended problems that had to be

solved. In a round-table survey at the end of the interactive training program, the participants stated that they found this exercise useful; they felt that their time well spent; and they expressed satisfaction with their own performance.