# Affordable Defense Capabilities for Future NATO Missions

A National Defense University
Special Report

Center for Technology and National Security Policy
National Defense University

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Center for Technology and National Security Policy
National Defense University
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# In Memoriam

## Franciszek Gągor

September 8, 1951–April 10, 2010

A month and a half after this study was presented at a NATO seminar, General Gągor, Chief of the General Staff of the Polish Armed Forces, died with the President of Poland and many colleagues in a tragic air crash near Smolensk, Russia. With his death Poland lost a soldier-statesman and NATO lost a charismatic leader of military reform and modernization. The contributors to this study lost an invaluable collaborator and friend who will be sorely missed in the campaign to adapt NATO forces to the emerging strategic environment.

## Contents


Executive Summary VII

Part One—Nato Future Missions and Capability Initiatives 1

I. Reassurance for Article 5 Missions 1
A. Conventional Reassurance Initiatives 2
B. Strategic Reassurance Initiatives 4
C. Naval Situational Awareness Initiatives 6

II. Resilience for Transatlantic Homeland Security 7
A. Counterterrorism Initiatives 8
B. Consequence Management Initiatives 10
C. Cyber Defense Initiatives 10

III. Responsibility to Undertake Expeditionary Crisis Response and Comprehensive Approach Stability Operations 12
A. Deployability and Usability Initiatives 13
B. C4ISR Interoperability Initiatives 16
C. Comprehensive Approach Initiatives 18
D. SOF Interoperability Initiatives 21

IV. Reengagement in Defense Diplomacy 22
A. Partner Interoperability Initiative 23
B. Military Training and Defense Reform Initiatives 26
C. Military Cooperation with Former Adversaries Initiatives 27

Part Two—Defense Reforms and Efficiencies 31

Force Structure Economies 32
Reform Measure 1: National Force Restructuring 32
Reform Measure 2: New-Era Rationalization of Force Structures 33

Better Use of National Funds 33
Reform Measure 3: Common Funding and Pooling Arrangements for Equipment 33
Reform Measure 4: Common Funding for Operations 34

Multinational Effectiveness 34
Reform Measure 5: Networked Forces 34
Reform Measure 6: Force Interoperability 35

More Efficient, Effective Commands 35
Reform Measure 7: NATO Command Structure Reforms 35
Reform Measure 8: Headquarters Reform 36

Support from Beyond NATO 36
Reform Measure 9: Division of Missions between NATO and the EU 36
Reform Measure 10: Greater Armaments and Industrial Cooperation 37

# Executive Summary

The new NATO Strategic Concept offers an important opportunity to strengthen efforts to reform and modernize NATO institutionally and develop new defense capabilities for the Alliance. To achieve these aims, NATO must begin a separate transformational process to assess current military capabilities and pursue future requirements over a 5–10 year period. The goal should be to develop specific sets of initiatives and reforms for approval by Heads of State and Government at the Lisbon Summit in November 2010. This process should be informed by the development of the new Strategic Concept and run parallel to it. In a rapidly changing security environment, postponing such a process until after the Strategic Concept is completed would increase risks for the Alliance. This report is designed to stimulate that parallel process.

Given declining defense resources in a time of recession, the case for new defense capabilities and reforms must be compelling. New measures must take full advantage of efficiencies, common approaches, national specialties, and existing capacity. They also must tie to specific NATO missions that flow from the emerging Strategic Concept. And they must be approved and supported by Alliance Heads of State and Government.

The four insights contained in the Allied Command Transformation (ACT) Multiple Futures Project 2030 translate into four enduring Alliance missions, each reflecting a priority interest of Alliance members. These NATO missions of the future can be conceptualized as the "Four Rs" discussed below and illustrated on page xii.

*Reassurance* of the Article 5 commitment to act against an armed attack;

*Resilience* against non-Article 5 attacks, nontraditional challenges, or humanitarian disasters that require some contribution from military forces;

A sense of shared *Responsibility* that all NATO members will contribute to crisis management and crisis response when the North Atlantic Council (NAC) agrees to undertake any mission, including especially expeditionary missions at strategic distance, and;

*Reengagement* with partners and other nations beyond Alliance territory to shape the environment through defense diplomacy, military cooperation, and building and leveraging existing partner capacity.

NATO's current capabilities are deficient in all four of these mission areas. Initiatives to improve capabilities are underway under the lead of ACT in Norfolk to deal with the 2009 Bi-Strategic Command (Bi-SC) 50 Priority Shortfall Areas, but they are ad hoc rather than concerted. Absent collective resolve and deliberate steps to remedy these deficiencies, NATO's ability to meet future requirements is questionable.

The 13 initiatives set out in part one of this paper build on existing NATO plans and programs to provide higher-leverage ways to improve future capabilities for these missions. Each of these initiatives makes sense on its own merits; together they add up to a powerful, coherent whole. Not all will be implemented, but each should be reviewed for its merits and affordability. The new Strategic Concept is the best opportunity to take NATO capabilities to a higher plateau and prepare the Allies to meet new missions.

Most of the 13 initiatives presented in this report revolve around five sets of capabilities that should be considered NATO's highest priorities:

First, NATO's military commands must reacquire and demonstrate a joint force capability to perform the core Alliance mission of collective defense under Article 5. This involves mainly a reorientation of commands and staffs toward planning, training, and exercising in support of Article 5.

Second, to be useable, forces offered to NATO by members or partners for any mission within and beyond NATO territory must be both deployable and sustainable. These capabilities are fundamental in an enlarged Alliance with reduced forces such that any force must anticipate moving hundreds or thousands of kilometers to perform either Article 5 or non-Article 5 missions. Hence, the capabilities to deploy and sustain are central to NATO's future.

Third, common command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR) capabilities are more essential than ever before to enabling the forces of members and partners to operate together. These capabilities should be the highest priority for future investment by members as well as NATO itself.

Fourth, several years after the concept of a Comprehensive Approach (CA) was widely accepted as the best approach to conflict resolution, NATO efforts to operate with civilian partners remain disjointed. Therefore, second only to C4ISR, a major area of investment must be to make CA the central operational concept for all missions.

Finally, the Alliance must develop a more robust "defense diplomacy" strategy using the full range of tools at its disposal designed to shape the environment by strengthening partnerships, stabilizing troubled areas, and developing cooperative approaches with past adversaries.

NATO begins deliberations on a new Strategic Concept and efforts to stimulate future capabilities development at a time when all members face a global financial crisis and unprecedented costs of ongoing operations. Only three members of the Alliance are able to meet all four of the goals intended to

give NATO the capabilities it needs to perform the missions assigned. Those four goals are to: devote two percent of GDP to defense spending; devote 20 percent of defense spending to investment; and maintain 50 percent of operational land forces deployable and 10 percent sustainable. Strong measures need to be taken at the Lisbon Summit to reinforce these goals and to halt the near freefall in defense spending Alliance-wide.

Given these resource realities, the critical three pillars of any NATO plan to realize the aforementioned high-priority capabilities will be implementing reforms, achieving greater efficiencies, and finding additional multilateral solutions.

Part two of this paper explores 10 reforms that should be considered for greater NATO use. The most important of those reforms will be maximizing common funding for priority NATO Security Investment Program (NSIP) C4ISR initiatives and providing greater common funding for intensive military operations. This will be a particularly difficult challenge given that the NSIP is currently overspent by more than half a billion Euros. This fund will need to be replenished and prioritized.

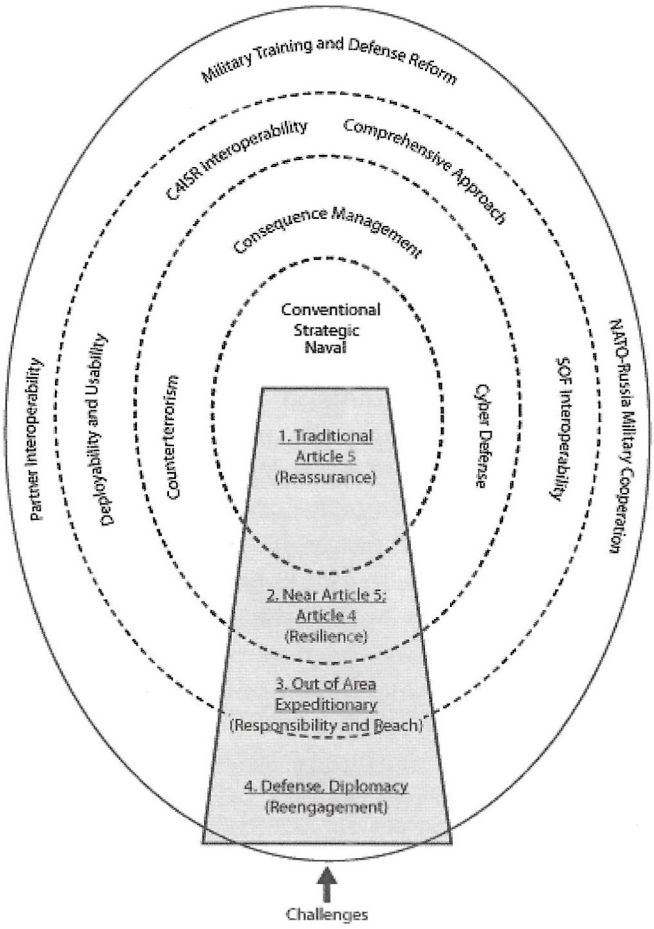
Other concepts that promise efficiencies are: restructuring national forces to meet new requirements; developing new pooling arrangements and greater multinational acquisition; creating greater interoperability for equipment, doctrine, and training; encouraging greater intelligence sharing; rationalizing niche force contributions; creating both cooperation and a division of labor between NATO and the EU; streamlining NATO's command structure and reforming headquarters processes; stimulating greater industrial cooperation; and building capacity with partner nations and institutions. New investment is equally important to the Alliance. If the twin pillars of greater efficiencies and new investments are supported by all members, NATO will provide defense and security to each member at substantially lower cost.

If the 13 capabilities initiatives suggested in this paper are to be adopted, the new Defense Planning Process (DPP) welcomed

at the 2009 Strasbourg-Kehl summit must be fully implemented and further honed. That means NATO and member nations must work toward greater overall planning synergy and capabilities transparency, ultimately in a single document that addresses military and non-military capabilities requirements, national force and resource targets, shortfall solutions, and risk assessment. Creating a joint NATO-EU capabilities mapping process with DPP and European Defense Agency cooperation would also be constructive.

ACT's role with respect to defense planning must necessarily become more salient in order to energize the process for the long term. While Allied Command Operations (ACO) identifies operational requirements, it is ACT's role to develop requirements and identify what capabilities are needed to fulfill them within the DPP. Therefore, ACT should be responsible for overseeing the implementation of most of the initiatives suggested in this report. It should be the advocate and engine for new capabilities within NATO. New authorities and additional resources for ACT would be required. Leading the Alliance in lessons learned, doctrine development, training development, and education would be among its most powerful tools. ACT would also promote the military efficiencies and reforms needed to develop these capabilities in a resource-constrained environment.

Four NATO Missions and Associated Initiatives




C4ISR: command, control, communications, computers, intelligence, surveillance, and reconnaissance
SOF: special operations forces

# Part One—NATO Future Missions and Capability Initiatives

## I. Reassurance for Article 5 Missions

Deterrence and, should deterrence fail, defense of NATO territory has always been the core mission of the Alliance, and that has not changed. Preparedness for Article 5 missions must be appropriate and apparent across every basic function of military enterprise, including training, exercising, planning, logistics, intelligence, and command. This has not been the case since the end of the Cold War. Perhaps most critical for an alliance that has transformed from maintaining a high level of readiness against a specific adversary to coping with emerging, diffuse threats, NATO must periodically demonstrate its capabilities to mobilize, deploy, and sustain forces across the strategic distances of NATO territory. These are essential and readily perishable skill sets for commands and staffs of all military forces, whether intended for land, air, maritime, space, or cyberspace missions. They require sustained attention by all Allies at all levels, military and political. NATO Article 5 preparedness has been called into question because of smaller forces, shrinking budgets, and pressing military tasks. To reassure Allies that the core mission can be executed successfully if required, NATO must redirect an appropriate level of effort toward maintaining the capacity to act on a NAC decision under Article 5. Reestablishing Article 5 preparedness must be undertaken openly and comprehensively, addressing the entire Alliance area.

Article 5 protection requires continuous early warning as well as more robust situational awareness and strategic assessment capacities, plus new capabilities to extend operations well beyond the territorial boundaries of the Alliance, especially in the maritime domain, as well as in space and cyberspace.

This section makes specific proposals to provide the capabilities for the Article 5 mission area through wise use of existing resources and careful targeting of limited future investments.

## A. Conventional Reassurance Initiatives

1. *Create a revitalized, NAC-centric crisis management system.* Allies would be reassured by a revitalized NAC-centric crisis management system for Articles 4 and 5 exercised on an annual basis. The NAC crisis management system has not yet been modernized, resourced, or prioritized as it should for an Alliance responsible for managing the full spectrum of crises that may emerge in the 21st Century. The NAC's crisis management role should be revitalized and exercised, including Article 5 scenarios. NATO should hold annual crisis management exercises at the political level, focusing on declaration of alert measures in response to terrorism, possible use of WMD, or other 21st-century threats. NATO's crisis management focus would demonstrate its relevance and readiness to address and respond to all crises.

2. *Create a new NATO Strategic Assessment Capability.* In a fast-changing world, NATO has a better opportunity to manage crises and head off military confrontation if it not only has early intelligence on a building crisis, but also can assess the strategic impact and direction of that crisis. These capabilities must be developed through an institutionalized rather than an ad hoc process. NATO should create a Strategic Assessment Capability made up of intelligence, regional, and operations experts. This group should be charged with identifying crises early, suggesting courses of action, and stimulating discussion of developing crises in the NAC. This capability would be enhanced if nations contributed their best intelligence officers to NATO.

3. *Make permanent the reestablishment of routine, generic, regional Article 5 planning and exercising.* Modeling and simulation technologies, map exercises, distributed computer-based

exercises, and command post exercises should be the main methods; periodic field and fleet exercises also should be included. Given the strategic distances over which most forces must deploy to meet any Article 5 scenario, Article 5 and non-Article 5 deployability have merged into a similar requirements profile. Restoring Article 5 preparedness should be consistent with well-conceived mobilization criteria and the geopolitical reality that, in current conditions, there is no need to restore threat-based planning.

4. *Reorganize Multinational Corps Northeast (MNCNE) to create a Collective Defense Planning Staff (CDPS) directly under SACEUR.* A standing CDPS would include robust joint staff representation. NATO member participation beyond the present three members in MNCNE (DA, GE, PL) should be encouraged, perhaps to include the United States, UK, FR, TU, NO, RO, CA, and Baltic members. The CDPS would stay in Poland, but its focus should be on contingency and exercise planning as well as coherent readiness levels for Article 5 missions throughout the NATO area and in all domains—a genuine joint operations, multinational planning staff. A key function of CDPS exercise planning should be to further interoperability.

5. *Make the NATO Response Force (NRF) the Article 5 first response force.* The NRF has always been advertised as a force for both Article 5 and non-Article 5 missions. Yet its Article 5 utility remains undeveloped, and its future existence is in danger. The NRF should be the central joint force exercise participant when Article 5 exercises are conducted. This proposal is not that the NRF be excused from crisis response missions, but that it should focus much more visibly on Article 5 operations in terms of planning and exercising. Allies should also consider designating an element of the NRF as a standing, ready force for immediate response, akin to the former ACE Mobile Force-Land (AMF-L).

6. *Create a long-term NATO Baltic air-policing requirement.* NATO nations currently rotate responsibilities to provide air policing for the Baltic States. This ongoing program should be made a permanent NATO operation and enlarged as necessary.

7. *Provide coordinated military assistance to the Baltic States.* NATO member military assistance efforts in all three states should be tracked closely by NATO, rationalized, and coordinated, where beneficial, to reduce redundancies and optimize resource effects. NATO should map out a prioritized infrastructure investment strategy focused on border states to improve their reception capacities and overall Article 5 preparedness. As a key aspect of military assistance and mentoring, as well as reassurance, the United States should maintain current U.S. force levels in Europe to assist allies and exercise with them for Article 5 missions. Assistance could be shaped by establishing planning models and simulation exercises that would focus on Article 5.

### B. Strategic Reassurance Initiatives

1. *Maintain a credible nuclear deterrent posture consistent with the need to reassure Allies.* The presence of U.S. nuclear weapons on European soil has led over the decades to several benefits for the Alliance. It has provided strategic stability and a strong deterrent posture against potential attack. It has reassured America's Allies that their security is ultimately coupled to the extended deterrence provided by America's strategic nuclear arsenal. It has created a system of nuclear consultations and burden sharing that has been critical to Alliance confidence and solidarity. And it has discouraged the ambitions of the Alliances' non-nuclear members to acquire their own nuclear capability.

Since the end of the Cold War, the United States has reduced the number of its tactical nuclear weapons based in Europe by well over 95 percent. Now there is a new effort to reduce the legacy nuclear arsenal to even lower numbers or to zero. This effort is taking place at a time when several Allies are questioning the credibility of Article 5, when Russia is presenting a more assertive nuclear doctrine and is rejecting efforts to reduce its "sub-strategic" nuclear systems, when the risk of nuclear proliferation from Iran is great, and when some other Allies are considering reducing or abandoning their participation in nuclear deterrence. The risk that this situation

presents is that some NATO nations will abandon their participation in nuclear burden sharing, while others will lose confidence in extended nuclear deterrence and possibly develop their own nuclear weapons capabilities. That combination could reduce the credibility of NATO's nuclear deterrent posture and increase proliferation risks. Questions relating to readiness, modernization, surety, and security of nuclear weapons will need to be addressed. But NATO is now near or at the minimum deterrence required for the current international environment. Further reductions or consolidation could have negative consequences for Alliance cohesion. If further reductions should take place, they should be in the context of an arms control agreement with Russia.

2. *Develop contingency plans for an Article 5 deterrence regime for states that proliferate.* One example of this requirement is Iran. Should Iran continue with its efforts to build nuclear weapons and long-range missile capabilities, the Alliance will need to consider a deterrence regime, including missile defenses, designed to dissuade Iran from using that capability against Alliance members. This will require both conventional and strategic options. A NATO declaratory policy may be required.

3. *Expand NATO's Active Layered Theater Ballistic Missile Defense (ALTBMD) architecture to include territorial defenses and the rapid incorporation of the U.S. Standard Missile 3 (SM3) into the integrated test bed.* An expanded ALTBMD system, incorporating all appropriate national and NATO systems within an integrated early warning and response network, should be capable of protecting not only deployed forces but all NATO territory and populations against an Iranian missile threat. NATO should expand the ALTBMD system to include upper layer capabilities and have the system in place when U.S. land-based SM3 deployments begin in 2015. NATO should keep Russia and other partners apprised and seek maximize feasible international cooperation. As soon as technology is available, the United States should integrate ascent phase intercept systems into the European territorial missile defense architecture via the NATO

ALTBMD Integrated Test Bed (ITB). NATO Allies should be invited to participate in SM3 development, as Japan has done.

4. *Assure NATO access to space.* NATO operations, both conventional and nuclear, demand assured access to space. NATO's SATCOM Post 2000 program should accelerate progress toward realization of its extreme high frequency (EHF) capability. Given its dependency on leased national and international commercial satellites, NATO should sponsor an Alliance study of the capabilities and vulnerabilities of members' systems. It should consult with the 13 members that have national space programs and seek new agreements for maximum NATO access to national ISR information. Allies should be encouraged to rationalize their space capability for complementarity and appropriate redundancy. NATO should capitalize on the emphasis placed on military space missions in France's Defense and Security White Paper. It should develop a comprehensive Alliance communications and ISR space policy to determine its long-term, defense-related space requirements.

### C. Naval Situational Awareness Initiatives

1. *Enhance maritime situational awareness throughout the NATO area and beyond.* Changing risks around the periphery of the NATO area and in the High North, Persian Gulf, Indian Ocean, and other areas call for a new level of sophisticated, persistent, and secure maritime situational awareness. ACT's Maritime Situational Awareness (MSA) programs and the NATO Maritime Interdiction Operations Training Center on Crete should be fully resourced. As an extension of current efforts, the NAC should task ACT to develop a strategic surveillance concept to harmonize diverse capabilities investments: space, unmanned aerial vehicles (UAVs), maritime patrol aircraft (MPA), land-based radars, surface and subsurface vessels, and robotic systems. NATO should agree on specific surveillance mission areas that underpin Article 5: pirate attacks on sovereign vessels, WMD proliferation, terrorist activities, and risks to energy platforms. NATO's new AGS capability at Sigonella,

Sicily, could provide the baseline for a NATO wide-area maritime surveillance capability.

2. *Integrate NATO and EU maritime operations.* Enter into discussions to identify missions for integrated maritime operations, such as anti-piracy, search and rescue (SAR), counterterrorism, counter-trafficking, and countermine. Determine the potential to share common NATO-EU support requirements and potential sources for maritime sustainment, medical, intelligence, and command and control arrangements. Finally, look for interoperability solutions for, e.g., secure communications, replenishment procedures, and operational cooperation.

3. *Enhance shared intelligence.* NATO should set more extensive goals for intra-Alliance sharing of information about ongoing ship operations, intelligence, and after action reports (AAR). It should rapidly disseminate sensor information across ACO from all surface, undersea, aerial, and space platforms. NATO should open an EU-NATO intelligence network for maritime operations and develop an EU-NATO common intelligence operating picture based on concepts of time sensitivity and need to share.

## II. Resilience for Transatlantic Homeland Security

Our security can no longer be defined only in terms of the defense of territory. Terrorist attacks and disasters endanger every element of our societies: people, commerce, communications and information, critical infrastructure, and vital resources. These risks cannot be ignored by NATO, even where the first line of defense falls to members. NATO must stand ready to supplement efforts of members to prevent attacks, mitigate consequences, and help reconstitute damaged or destroyed systems throughout NATO territory.

NATO's tasks in this area are, first, to assure the resilience of its own systems for cyberspace, energy infrastructure, and force protection at home. Second, the Alliance must be able to use its

capabilities to share information, intelligence, and early warning (e.g., CBRN detection) with member agencies responsible for civilian response. Third, NATO should have contingency plans, developed in concert with members, to supplement national consequence management capacity with NATO-owned or mobilizable assets for transport, communications, crisis management, medical, engineering, and other functions of disaster recovery or incident response. Finally, the crosscutting networks of national agencies engaged in various aspects of homeland security should be encouraged to use NATO as a forum to pursue coordinated "whole of government" approaches.

The new Strategic Concept should also clarify the Alliance mission and the capabilities required to assist members in energy security. A bold Alliance plan would define a comprehensive role in maintaining secure energy supplies consistent with member capabilities and the roles of other international agencies and organizations, particularly the EU and the International Energy Agency (IEA). The Alliance role cannot stop at securing the fuel NATO needs for its own operations; it should include contributing to the security of maritime energy supply routes, critical energy infrastructure protection, and preparing for consequence management, with particular regard to undersea pipelines, vulnerable port facilities, and at-sea platforms. Working with the EU, the Alliance should support international and regional cooperation on energy security through Partnership for Peace (PfP) and other partnership arrangements. NATO should also include energy-related factors in its information fusion and intelligence sharing programs. Internally, NATO should examine and upgrade its own jet fuel pipelines and storage facilities and further analyze its roles in all energy-related areas, such as conservation and alternative energy for NATO systems.

### *A. Counterterrorism Initiatives*

1. *Expand NATO's Defense against Terrorism (DAT) program.* Grow DAT from its current focus on 10 lead-nation technology

programs to include collaborative research on investigative techniques, deterrence, social networking, human behavioral modeling, and other areas. These expanded initiatives could be developed and managed under the Defense against Terrorism COE (DATCOE) in Ankara. As part of this effort, DATCOE should link these programs to members' national counterterrorism experts by constructing a secure, NATO-wide counterterrorism network for real-time knowledge sharing. NATO should endorse the position that counterterrorism is mainly a national law enforcement and investigative mission for security services. However, NATO should define a supporting role in the areas described above, especially in the protection of critical infrastructure also used by NATO for such mission-related Alliance operations as deployment and sustainment. Airfields, seaports, and rail and pipeline networks could fall into this category.

2. *Strengthen counterproliferation initiatives.* NATO should reenergize its 1999 WMD Initiative, confirmed at Prague in 2002, intended to commit allies to develop the capabilities to respond to WMD threats. The Alliance should expand and accelerate the work of its Science for Peace and Security (SPS) projects directed at the detection of atomic and chemical materials to incorporate the deployment of detection technologies. Other SPS programs can be scaled back to allow for expansion in this area. Since all NATO members have joined the Proliferation Security Initiative (PSI), NATO should endorse the PSI and consider hosting exercises to prevent smuggling of WMD materials in Alliance-patrolled waters. These projects should invite collaboration with partners, in particular Russia.

3. *Establish a counterterrorism intelligence cell within the Intelligence Fusion Center (IFC) Molesworth.* NATO should define a specific sub-agency within IFC Molesworth with a broad mandate and dedicated to counterterrorism intelligence sharing.

### B. Consequence Management Initiatives

1. *Strengthen WMD consequence management capabilities.* NATO should prioritize exercising its headquarters, subordinate elements, and relevant agencies in capitals in response to WMD events and consequence management. The Senior Civil Emergency Planning Committee (SCEPC) and the Euro-Atlantic Disaster Relief Coordination Center (EADRCC) are already engaged in an exercise regime that required sustained investment. NATO should designate prepositioned response packages and identify military requirements for response capabilities in an expanded version of the Defense Planning Process. Parallel to these initiatives, ACT and ACO should organize generic consequence management exercises to examine how forces must adapt to non-combat missions. Finally, NATO should review its Standardization Agreements (STANAGS) to determine whether they adequately cover force protection requirements for all WMD scenarios.

2. *Create a NATO-EU Joint Civil Emergency Planning Center (NATO-EU JCEPC).* NATO should study the potential to contribute the International Staff's CEPD to the creation of a joint NATO-EU center for civil emergency response. A JCEPC would also serve as a consequence management center. It should be designed to accommodate representatives of the UN, EU, and appropriate external agencies, such as WHO. Other capability initiatives NATO should explore include conducting joint NATO-EU planning and simulations to develop consequence management interoperability goals and compiling a force capabilities list for civil emergency response. The JCEPC should also develop NATO and EU concepts for assistance during international responses to pandemics.

### C. Cyber Defense Initiatives

1. *Strengthen NATO's network defense capability.* NATO's primary responsibility in cyber defense is to assure the protection of its own networks. Efforts to expand the capabilities of the NATO Computer Incident Response Center (NCIRC) are a crucial part of this broad effort. NATO should invest in the

fullest complement of incident response teams, expert skills training, and the most up-to-date cyber defense technological resources. In addition, NATO should develop a continuity plan to prioritize information assurance across NATO systems and work with nations to ensure the prioritization of national systems linked to NATO communications and information systems (CIS). Finally, NATO should determine how to develop internal processes for rapid cyber defense operational decisionmaking that can be at least as responsive as its well-established air defense decision procedures (where rapid decisions are also critical to defense).

2. *Set up a NATO member/partner early warning cyber defense network.* Given the great speed of cyber attacks, NATO should establish and exercise cyber early warning notification to all commands and agencies and dissemination to capitals. Early warning messages sent to the NATO Military Authorities (NMA) should be pushed with equal urgency down to all commands and deployed units. NATO should go further and seek MOUs to broaden early warning networks to ICI, MD, and global partners, in particular, those with forces deployed on NATO operations.

3. *Establish a world class CND training center at the Comprehensive Cyber Defense Center of Excellence (CCD-COE) in Estonia.* After the full accreditation of the CCD-COE in 2008, NATO should take the next step. Through robust education and training, the CCD-COE should be among the best cyber centers globally and should spread its knowledge and expertise in computer network defense across NATO and to members and partners. ACT's role with regard to COEs, while honoring their national basis, should be characterized by greater engagement, guidance, and collaboration. ACT should create a COE network to share knowledge and lessons learned and become a reachback reservoir of readily available skills for ACO and all deployed forces.

4. *Draw on the United States Cyber Command (following its stand-up) and other national expertise to review NATO cyber defense*

*techniques and training*. U.S. Cyber Command has a deep reservoir of effective techniques for defending against cyber attacks and reducing their impacts. It should evaluate NATO's current defenses and recommend ways to strengthen them. NATO should tap into the new Cyber Command's expertise. Other members also have invested in the development of cyber defense expertise that should be accessed to inform and collaborate with NATO.

5. *Exercise without the network*. Exercises might be conducted periodically during which Alliance commands or agencies operate without key networks or with highly degraded networks.

## III. Responsibility to Undertake Expeditionary Crisis Response and Comprehensive Approach Stability Operations

Allies expect the burden of military operations to be generally shared by most if not all members whenever the NAC agrees to act. This is the essence of collective defense and security: that there is value added and lower cost and risk in acting together rather than alone when collective interests are determined to be at stake. Nonetheless, due to limited military capabilities, constrained financial resources, or for political reasons, some Allies find themselves shouldering responsibilities unevenly, which causes problems at home for those bearing the highest cost and casualties. At least on the military capabilities side, there are steps NATO can take to overcome some obstacles to the commitment of forces. In broad terms, the one obstacle NATO must address is current rules for assigning the costs of operations. The Alliance should agree to an expansion of eligibility rules for common funding for selected operations, in particular with regard to NRF operational deployments. If operations cannot be commonly funded in full, NATO should look for additional phases or functions that can be commonly funded, such as deployment cost, logistics center operations, or no-cost support from Alliance agencies like NATO Consultation,

Control and Command Agency (NC3A) to help sustain deployed national systems.

Preparing NATO forces for expeditionary crisis response and warfighting missions will require continuing efforts to modernize European forces with C4ISR networks, new weapon systems, modern precision-strike munitions, WMD defense assets, logistic support assets, mobility assets, and other capabilities. Such ongoing European programs as acquiring new ground weapons, fighter aircraft, and naval combatants contribute importantly to this enterprise and should be continued in the coming years. NATO will need joint forces that can not only deploy rapidly to distant areas but also perform high-tech combat operations in demanding situations. This will require a capacity by NATO ground, air, and naval forces to employ strike, maneuver, and related operations in decisive, effects-based ways against well-armed opponents.

Simultaneously, NATO will need combat and support forces capable of carrying out robust stability operations that include demanding stabilization, reconstruction, and counterinsurgency missions. Building adequate capability in both areas—modern combat operations and stability operations—is a core military challenge facing NATO and should be a key focal point of NATO headquarters and national defense ministries. Progress has been slow in recent years; it needs to accelerate if future NATO forces are to possess the full spectrum of military capabilities that will be needed in Europe as well as distant areas.

### A. Deployability and Usability Initiatives

1. *Strengthen NATO's High Readiness Forces (HRF).* NATO should update its criteria for HRF to provide a valid profile not only of a unit's readiness, but also the readiness of the associated assets on which it depends for deployment and sustainment in theater over the extent of its mission window. While nations identify HRF units by category, NATO has no way of tracking the actual readiness over time of forces designated as HRF in the

DPP. Moreover, the readiness of essential transport and logistic units and stockage is not tracked and integrated. An initiative to strengthen the reliability of HRF designation is critical. This includes knowing the force readiness, training status, mission preparedness, and C4ISR network integration capacity of major HRF forces. It also means knowing these same preparedness factors for the operational enablers, deployment assets, and logistic units that are essential to the overall usability of major forces. Scarce investment funds should focus on improving the highest category HRF forces and expanding their number and diversity as needed. The goal should be a better prepared, enlarged, and more diversified pool of HRF forces and capabilities that can meet Alliance requirements for deployability and usability.

2. *Create a NATO Deployment Agency (NDA).* Such an agency, located at Mons for close consultation with and support of SACEUR, would take responsibility for consolidating all Alliance-level aspects of rapid deployment (plans; transportation, logistic, and CIS arrangements; resources, etc.). The NDA would facilitate deployment for allies with limited capabilities. It would work with member staffs and network with relevant NATO centers and agencies. The NDA should have established expertise in aerial refueling and at-sea replenishment. It should have the highest competence in strategic lift across all transport modes and the resources to assist members and commands in real-time planning and execution of deployments. Beyond deployment skills, the NDA should take a broad view that includes sustainability solutions, e.g., multinational logistics, intra- and inter-theater transport services, and pooling of support, e.g., ATC, maintenance, and supplies, across forces with like systems, etc.

3. *Enhance the role of defense planning/force generation in getting nations to commit usable capabilities.* Establish that only deployment-capable forces—land, air, or maritime—should be offered in response to NATO requirements, whether for Article 5 or non-Article 5 missions. The distinction between Article 5 and

non-Article 5 deployability requirements has been reduced due to an enlarged NATO area and greatly reduced national forces. Defense planning should emphasize ready-to-deploy medical units capable of supporting more than one Ally by means of pre-operation agreements,

4. *Use the existing ACO command structure for deployments.* NATO's Military Command Structure under ACO needs to be more deployable and operationally usable for sustained missions like KFOR and ISAF. The Alliance must realize greater utility from its command structure investment. NATO needs an appropriate mix of fixed commands and deployable, highly capable command elements embedded within fixed commands. Deployable elements should be capable of joint C2 for several months, beyond which they should be designed to serve as the nuclei from which expanded commands such as those for KFOR and ISAF are built for long-term operations. The principal structure of such long-term headquarters must be designed by ACT, tested by ACO, and approved by HQ NATO. This would avoid the steep learning curves, ad hoc designs, wasted resources, and confusion associated with standing up a unique new headquarters, such as IFOR/SFOR, KFOR, and ISAF, while trying to execute operations. Meanwhile, fixed headquarters of the Command Structure often go understaffed and under utilized.

5. *Develop Alliance-wide doctrine, concepts, and interoperability standards for force identification and fratricide prevention.* NATO leaders should press for investment in shared combat identification technologies across all SOF and land forces, with future efforts extending to air and naval forces. ACT should be tasked to provide rapid and widest dissemination of lessons learned related to combat identification and fratricide prevention. A system for rapid, Alliance-wide (including partners) dissemination of counter-IED lessons learned should be standard for all operations. ACT should also set standards for NATO forward air controller training that blend successful target engagement with fratricide avoidance.

6. *Revamp NATO education and training programs to support more-integrated multinational concepts, doctrine, and planning.* NATO should task ACT to develop a cohesive NATO education system incorporating all NATO schools under its oversight, including the NATO Defense College. The goal should be to make every program available via distant learning to members, and most available to partners. In parallel, ACT should work with members and partners to incorporate NATO concepts and doctrine into national doctrine and link NATO and related national education systems. The NATO educational system should also establish ties to the EU's new European Security and Defense College network. The two hubs of ACT's multinational integration education strategy should be the NATO Defense College and the NATO School at Oberammergau, Germany. These schools should teach courses in the multinational aspects of deployment planning, logistics concepts, and operational doctrine development.

7. *Create a group of retired senior NATO officers to provide annual reports on progress.* Deployability, sustainability, and usability of NATO forces is so important that the Secretary General should consider establishing an Advisory Group on Deployability made up of retired senior officers. They would be charged with preparing an annual public report on progress toward NATO goals in this area.

### B. C4ISR Interoperability Initiatives

1. *Resource in full the NATO Network Enabled Capability (NNEC).* NNEC is the Bi-SC top capabilities priority with the goal of providing NATO an Information Age military through programs to train personnel, embed information-sharing processes, and provide forces with deployable enabling technologies in the areas of command and control, intelligence, logistics, and joint force integration. The NAC should task ACT to prioritize development of the operational concepts, requirements implications, architectural specifications, and implementing strategies needed to stand up NNEC as the operational backbone for all Alliance forces. NC3A should assist

in deploying and operationalizing enabling processes and technologies below its primary customer, ACO, down to at least brigade level.

2. *Establish Alliance-wide integration of C4ISR into a NATO Joint ISR Hub.* NATO should regard C4ISR as the operational framework binding NATO and national forces together into an interoperable, agile, and cohesive whole. Nations should concentrate on compliance with both CIS system architectures and ISR platform standards across the NATO Force Structure. NATO should invest similarly in the systems equipping the new NATO command structure. NATO must encourage members and partners to prioritize scarce investments toward national systems at the tactical and operational levels that are able to link into NATO's strategic-operational networks. In particular, NATO should encourage members and partners to invest in NATO interoperable standards for all new organizations and systems intended for NATO networks, including robotic vehicles, deployable CIS, deployable C2 elements, electronic warfare suites for ships, aircraft, and land forces, air traffic management, logistics, and medical tracking systems. All such systems should be capable of feeding essential information to every NATO user for real-time situational awareness. Function-specific software, such as supply chain management systems, collaborative planning tools, joint decision support systems, intelligence dissemination, and cultural understanding suites, should be cloud-based and accessible to any networked force. In the Defense Planning Process and in operational planning, NATO must enforce NATO architecture/standards on essential CIS to at least brigade level. Units should be certified for C4ISR interoperability prior to deployment into a theater of operation.

3. *Establish open architecture for sharing intelligence.* Expand the role of IFC Molesworth to provide more and faster access to all information of use to operational forces. NATO should extend JISR dissemination to all levels where it is desired, with suitable protections. NATO should revise its intelligence estimates

process to provide more genuine and timely intelligence to planners and operators across NATO and capitals.

### C. Comprehensive Approach Initiatives

1. *Set up a Comprehensive Approach Center of Excellence (CACOE).* NATO must accelerate implementation of the CA, especially with regard to stabilization operations. A CA center of excellence should be stood up, possibly in Denmark, where the concept was born. A CACOE, networked with other COEs and overseen by ACT, should be used to bring the concept of civilian and military cooperation into all NATO planning and operating concepts. It should provide input to all NATO education and training programs, doctrine development, and exercises. It should offer to assist members and partners in constructing similar programs. It should build a reservoir of best practices, lessons learned, and tactics, techniques, and procedures (TTPs) for both military and civilian CA practitioners, including PRTs. All this information should be rapidly available online to everyone across NATO agencies and commands, as well as among members and partners, from the highest to the lowest level. The CACOE should especially be poised to provide reachback expertise to deployed commands and units engaged in stabilization and reconstruction (S&R) tasks. The CACOE should invite resident representatives from the EU, UN, OSCE, and other agencies, such as the World Health Organization (WHO) and World Bank (WB), and from non-governmental organizations (NGOs).

2. *Define civilian CA requirements and develop a small NATO Civilian Response Corps available for all NATO operations.* NATO cannot raise all or even much of the civilian capacity required to conduct S&R operations utilizing CA. However, it should catalogue available civilian expertise from among its own resources that could plan alongside military planners and accompany forces when they deploy to maintain a close relationship for CA operations. Members and partners should be invited to fill civilian requirements from their own resources by including requirements in a further modification of the DPQ.

NATO's readiest source of sizable civilian capacity remains international partner organizations, both governmental and non-governmental. The CACOE would also assist NATO in standardizing NATO reporting requirements for PRTs and rationalize NATO support to police missions, including broad security-sector reforms (e.g., judicial and penal systems and investigative forensics).

3. *Improve the performance of provincial reconstruction teams.* NATO should charge ACT to develop a model for PRTs from on-site observations, lessons learned, and after action reports/interviews. ACT's model should be broad and accompanied by a suite of common doctrine, concepts, training regimes, relevant standards, and a core structural design based on best practices from the field. ACT should establish teams to conduct, with nations, pre-deployment PRT certification, the criteria for which could be agreed in advance with ACO. Certification requirements should be expanded to partners. Finally, NATO and the members involved should devise tailored operational goals for each PRT prior to deployment.

4. *Develop better coordination for NATO civilian contributions.* NATO member civilian contributions in ISAF are not well coordinated. A civilian coordination staff cell is needed in each complex operation to facilitate integrated results and advise NATO on closing the operational gaps in government and contractor civilian engagement.

5. *Standardize Alliance stabilization and reconstruction force requirements.* NATO has been engaged in S&R operations since 1995, and members have developed a high sense of the capabilities and forces required. Some nations, such as Germany, have even designated a large part of their force structure to specialize in stability operations. NATO should analyze national S&R force designs to identify the most effective and efficient models for multinational operations based on adaptability and flexibility. The core of a standard design should be forwarded to member defense planners and NATO staffs and become a

criterion of the Defense Planning Process for S&R improvement priorities. This work is another logical task for ACT.

6. *Improve coordination with NGOs and create new public-private partnerships.* NATO should take steps to facilitate greater cooperation with responsible NGOs by reducing excessive classification of information, maximizing communications flows, and creating NGO-friendly operating procedures. Public-private partnerships offer exceptional opportunities for the Alliance to engage citizens and take advantage of the extraordinary energies and talents available from civilian coalitions in CA environments. As shown in Haiti relief and other stressed situations, civilian coalitions often can generate knowledge management capabilities and outreach to dispersed stakeholders more rapidly than governments. The Alliance should develop a portfolio of policies and structures to take advantage of these public-private, whole-of-government and transnational capabilities.

7. *Enhance NATO strategic communications.* NATO must invest in state-of-the art systems that are more responsive in providing NATO strategic communications capability. Such systems consist not only of technology but also, and even more importantly, of skilled people and sound processes and procedures. NATO must also resource quality education programs that utilize social media to inform its own forces as well as host-nation populations via a two-way cultural awareness strategy that gains and sustains public support/knowledge of NATO operations. Adjunct to this initiative, NATO strategic communications must reach out in parallel globally to inform audiences among allies, partners, neutral parties, and potential adversaries to provide the NATO side of newsworthy events related to operations. Finally, NATO's investment should include requisite technologies and social media to achieve rapid dissemination of information.

### D. SOF Interoperability Initiatives

1. *Enhance integrated NATO SOF, consider creating a SOF Command, and expand to partners engaged in NATO operations.* Much has already been accomplished to bring together the SOF capabilities of members and partners, including the establishment of the NATO SOF Coordination Center (NSCC) at SHAPE. However, more can be done. NATO should build on NSCC's initial efforts to develop and strengthen common NATO SOF doctrine, and rapidly disseminate TTPs, lessons learned, and best practices regimes across the SOF community. These same TTPs, lessons, and practices should be reviewed with an eye to passing them on to conventional forces that may benefit from SOF breakthroughs. In keeping with paragraph 46 of the Strasbourg-Kehl Summit Declaration, the NAC should examine and make a decision on creating a special SOF command within ACO.

2. *Elaborate future SOF roles in NATO planning.* SOF missions include special reconnaissance, military assistance and training of indigenous forces, and direct action. Most NATO SOF (other than the United States, UK, and France) concentrates on the reconnaissance mission. However, the training mission has grown exponentially, and mission requirements for direct action also have increased. NATO should task its SOF headquarters to define future NATO SOF requirements by mission category, in particular, the training mission. It should also determine what requirements can be filled by the several European SOF forces that are very small, and those that are solely responsive to member interior ministries. The goal is to determine how members can best contribute with forces that typically enjoy the highest level of investment, but may need pooled sustainment or to be given niche roles.

3. *Take on the issue of technology transfer for crucial SOF systems.* The NAC, along with the DPC and CNAD, should lend its collective political capital to resolving the tough issues that stymie the sharing of SOF technologies, which are as essential to force protection as to mission accomplishment. Together, they

may start a flow that will gain momentum. The NSCC has made important progress in enhancing tactical and operational intelligence sharing that should be expanded, and lessons learned should be made available to other NATO commands. Ultimately, NATO should seek to open the best SOF technologies to all forces.

## IV. Reengagement in Defense Diplomacy

NATO has the inherent capacity to use what might be called "defense diplomacy" to help shape the environment in an increasingly unpredictable and dangerous world. These operations are what the U.S. military would call the "phase zero" mission. In many ways, this mission may be the most cost effective and important of all NATO missions.

NATO is already deep in the defense diplomacy business. During the past decade and a half, NATO has: helped PfP countries reform and strengthen their armed forces to get many of them ready for NATO membership through Membership Action Plan (MAP) programs; developed greater interoperability with several global partners; developed the Mediterranean Dialogue and the Istanbul Capabilities Initiative; strengthened the militaries of troubled states; and sought greater cooperation with Russia. A set of initiatives is suggested below for each of the three elements of defense diplomacy.

The first element of defense diplomacy is to build the capacity of NATO's many partners so that NATO will have broad international support when needed. NATO's partners are evolving as the PfP changes and other partners emerge. These partnerships fall into five categories:

- PfP nations that aspire to become members of the Alliance
- PfP nations that have significant defense capabilities but are not seeking NATO membership
- PfP countries that have niche capabilities but are unlikely to become members soon

- Troop-contributing partners that are not European and will not become members
- International organizations such as the UN, EU, OSCE, and AU.

Specific initiatives should be designed for each category with the common goal of greater political consultation, military interoperability, and civilian contributions.

The second element of environment shaping through defense diplomacy is enhancing regional stability. By strengthening democracies where they exist, promoting economic growth, and providing the right kind of military assistance, NATO nations can prevent conflict from breaking out. This is part of what the Alliance has called the 3D approach, combining diplomacy, development, and defense. These tools need not be reserved for post-conflict situations; they can help keep the peace.

The third element of defense diplomacy is the use of military cooperation to persuade former or potential adversaries to cooperate more closely with the Alliance and eventually bring them into closer partnership.

### A. Partner Interoperability Initiative

1. *Create a new partnership category for PfP non-aligned countries.* Sweden and Finland in particular are fully engaged in several NATO operations and are directly affected by challenges to the Baltic States. Non-aligned states with PfP status and significant military capabilities, if they agree, might be given a new status with virtual NATO membership. They might be given non-voting membership in the NAC and full consultation rights under Article 4. Their military personnel could be given access to NATO training and educational facilities as if they were NATO members. They could be brought into NATO planning for operations that would affect their security. One goal would be to maximize military interoperability.

2. *Work with PfP members to develop niche capabilities.* Many of the remaining PfP states have small military budgets and limited

military capabilities. NATO should consult with these countries to find areas where their militaries can specialize and contribute to the common defense.

3. *Enhance military interoperability with non-European partners.* NATO should hold an annual interoperability conference with key non-European coalition partners such as Australia, Japan, and South Korea to develop closer military cooperation. NATO schools and training programs should be open on a priority basis to key global partners.

4. *Establish a NATO-EU institutional partnership for civilian-military cooperation.* This initiative should exploit all useful political paths to move toward more integrated NATO-EU operational planning, coordinated decisionmaking, and cooperative execution. NATO and the EU should develop formal and informal opportunities for cooperative security sector reform (SSR) and defense reform missions, essential and complementary missions in which the EU and NATO each have respective expertise. Both organizations should work together and with host-nation MOD and military staffs on institutional reconstitution under civilian control. In addition, the Alliance should seek agreement with the EU on common planning for police and SSR tasks related to NATO crisis response and other military missions. Together, they can also negotiate common NATO-EU standards for police operations and police training. Finally, NATO and the EU should develop complementary plans for a deployable civilian capacity. NATO should include operational requirements for civilian capabilities within its Defense Planning Process and ask members to submit their inputs along with their military responses to the DPQ. NATO will need to share this information appropriately with the EU. The EU could eventually be invited to submit its contributions, for NATO planning, in a like manner in order to provide for reforming and reconstituting national security structures in failed states.

5. *Create NATO-partner unit-level training initiatives.* NATO has gained considerable experience with many partners in unit-to-

unit operations in Bosnia, Kosovo, and Afghanistan. It is time to open opportunities to build on those lessons through combined NATO-partner training and exercises at the command and staff level, senior NCOs, and the appropriate tactical level to enhance interoperability and reduce blue-on-blue incidents. While NATO countries already participate in pre-deployment training with global partners, this cooperation should expand to include joint exercises with all countries scheduled to deploy to the same geographic region. Best practices, including doctrine and tactics, should be a part of this training. This kind of activity could be conducted in operational theaters as well as by distant learning, modeling, and simulation. NATO could extend PfP programs to MD and ICI partners, building PfP-like relations with interested militaries, using operational need to establish priority countries.

6. *Establish an EAPC-like group with membership limited to those countries contributing to a current NATO operation.* Membership would change depending on the operation and engagement of those partners. Thresholds for participation would be established and could include combat forces, substantive civilian personnel presence in running or assisting a PRT, civilian workers building infrastructure, etc. Limiting membership would permit implementation of intelligence sharing and briefings containing relevant information. Most NATO partners understand that there is a price for admission and may be far more willing to increase engagement in these operations if they are considered part of a "special" group. It would be prudent to include the relevant UN organization (e.g., UNAMA), the EU, if engaged, and other key international organizations with which NATO engages routinely in the specific operation.

7. *Create NATO-Ukraine and NATO-Georgia Councils.* Upgrading the NATO-Ukraine and NATO-Georgia Commissions would put these countries at the same level of NATO partnership as Russia. Pending the outcome of Ukrainian national elections in 2010–2011, the offer of a Council relationship similar to Russia could be the best means to deepen cooperation and trust with any future Ukrainian leadership.

Georgia's transition from an Individual Partnership Action Plan to implementation of Annual National Program (ANP) suggests both Georgian and NATO interests would be best served by a Council-level relationship over the period leading to potential NATO membership.

### B. Military Training and Defense Reform Initiatives

1. *Coordinate military assistance to key countries.* NATO countries can do a better job of harmonizing member military assistance and training to key countries. The IS, in coordination with the Strategic Commands, should facilitate members' sharing of information and working to coordinate bilateral assistance, perhaps through regular meetings open to interested members. The goal should be enhanced bilateral assistance by creating synergies and avoiding redundancies. Participation in particular programs could include NATO partners with assistance programs with those key countries. As part of this approach, NATO should facilitate identification of members' and partners' excess military equipment (e.g., the U.S. Excess Defense Articles program) available to be donated or sold at favorable prices to partners willing to engage in NATO operations.

2. *Establish a NATO security sector reform capability.* NATO can develop a standing capability to advise nations on security sector reform, drawing from its experience with the MAP program and lessons learned with defense reform in Afghanistan. A group of civilian and military advisors offered by nations and organized under ACT as an external resource could deploy to countries that seek NATO's advice on the establishment of NATO standard defense reforms.

3. *Create an African Union crisis response unit.* NATO members might collaborate to create a helicopter-mobile and networked African Union rapid response team capable of intervening in regional crises. The initiative would require the provision of military equipment and considerable training.

4. *Establish a NATO operational concept for police and rule of law reconstitution in failed states.* NATO operations have suffered

from the absence of a well thought out program to reconstitute local police forces and legal institutions. NATO lacks police and police trainers, so this essential task increases force requirements. The NAC should task ACT and the Center of Excellence for Stability Police Units (COESPU) in Vicenza, Italy, to analyze and recommend how NATO should be supported for law enforcement police reconstitution. Whether from its own members' capabilities or from another international institution, such as the EU or UN, the Alliance should know prior to operations where police and legal system reconstitution will come from. Solutions that amalgamate contractors, lead-nation sponsorship, and international institutions have proven too slow and have a poor record of effectiveness.

5. *Define requirements in defense planning for new types of formations to train and rebuild local militaries.* ACT should develop initiatives to amend and expand the Defense Planning Process to define requirements for multiple deployable training units to rebuild militaries of failed states. The DPP should also be modified to better develop the capability of any partner to participate in all Alliance missions, including humanitarian relief, S&R, and counterinsurgency operations. Finally, NATO should bring the DPP model to bear in building partner capacity to support security sector reform, especially for the African Union Standby Force, ICI, and MD partners. The proven DPP approach can enhance NATO's relationship with the UN, which frequently calls on nations within the European theater and NATO's Pacific partners to take the lead in these types of programs.

### C. Military Cooperation with Former Adversaries Initiatives

1. *Strengthen the NATO-Russia Founding Act.* One way to seek a reset in NATO-Russian relations is to jointly rededicate the relationship to the goal of the 1997 Founding Act on Mutual Relations, Cooperation and Mutual Security between NATO and the Russian Federation. A meaningful rededication to the goal of "a stable, peaceful and undivided Europe, whole and free, to the

benefit of all its people" should include the political courage by both parties to amend the provisions of the Act to make the NATO-Russia Council (NRC) a genuine forum for consultation and cooperation. A useful place to start would be to ask the NRC to develop a common threat assessment that could be agreed to by both the Alliance and Russia.

2. *Raise the profile of the Russian flag officer billet at SHAPE and establish a Russian flag officer billet at ACT.* NATO and Russia should renew military relations in areas that would complement a rejuvenated NATO-Russia Council. If security clearance issues can be resolved, NATO and Russia should agree to raise the profile of the Russian flag officer billet at SHAPE by more active engagement in ACO staff actions, including seeking Russian military input wherever possible. In parallel, NATO and Russia should establish a Russian flag officer billet at ACT to engage in select transformation matters, develop reciprocal education, training, and exercise opportunities, and foster confidence and security building though programs to share appropriate information and observe agreed military activities.

3. *Accelerate the cooperation between NATO and Serbia.* NATO and Serbia should deepen their dialogue under IPAP/EAPC and agree to enter into an intensified dialogue soon. MAP should be an early goal. Bilateral efforts with Romania, Bulgaria, France, and the United States should be accelerated. Serbia should be encouraged to accept at Lisbon closer ties to NATO, perhaps through special partner liaison positions at ACT and/or ACO, as a way to focus on operational matters rather than political tensions.

4. *Develop NATO ties with China.* NATO should remain open to new partnerships, including with China, a country with strategic interests in regions that are also of interest to NATO members, such as South Asia, the Middle East, and Africa. Initiatives should be explored for the exchange of important operational information such as search and rescue and air traffic procedures in disaster relief operations. Eventually, there could be of value to both NATO and China in educational exchanges and the observation of exercises on a reciprocal basis. NATO might also help members coordinate arms sale and technology transfer policies toward China.

# Part Two—Defense Reforms and Efficiencies

NATO has been pursuing defense reforms since the Cold War ended. The process of reform for new missions received a strong impetus in 1999, when NATO adopted a new strategic concept as well as the Defense Capability Initiative (DCI). In 2002, NATO crafted the Prague Capabilities Commitment (PCC) to help chart future NATO force goals and created the NATO Response Force (NRF) and the Allied Transformation Command (ACT). In 2006, NATO's Riga Summit called for improved capabilities for new expeditionary missions and issued the Comprehensive Political Guidance (CPG), which spelled out in considerable detail how NATO forces and capabilities needed to improve. The CPG called for flexible forces for the full spectrum of missions as well as better capabilities in multiple specific areas. Owing to such guidance over the past decade, NATO forces have improved in key respects.

But the pace of military reform across NATO needs to accelerate in order to realize greater actual mission capability from defense investments. This is most critical for many European NATO members. How can this be accomplished in a sustained period of slow growth or even declines in defense spending? Budgetary constraints are unlikely to disappear soon. Across Europe, total military investment budgets are only about one-third of the U.S. DOD investment budgets. NATO's best course is to dedicate itself and its members to reforms and affordable, low-cost measures that enhance the efficient application of scarce resources. Reforms and judicious lower-cost initiatives such as those presented below can be potent capability multipliers. The goal should be to field, within existing budgets and resources, significantly greater capabilities for current missions than otherwise would be the case. If successful, NATO would have greater capacity to assure

protection of Alliance borders and provide desired support to national homeland security, while also performing high-demand NAC missions and expeditionary operations beyond Europe.

At least 10 possible reform measures can create efficiencies that will allow NATO to stretch its defense resources. These reforms can be pursued by reorganizing current manpower and units, transferring assets from one area to another, investing in low-cost force multipliers, trimming redundant and duplicative assets, and enhancing near-term readiness while delaying expensive modernization of non-deployable forces. Many of these proposals have been implemented successfully in the past and could be pursued in new ways. While the focus is on preparedness of NATO conventional forces, effectiveness-enhancing measures should apply to such important new missions as irregular warfare, stabilization and reconstruction, and the civilian capabilities required to implement the Comprehensive Approach concept. If all 10 reforms were pursued in concert, the consequence would be a more effective NATO within the budgets and resources likely to be available. But they do not have to be pursued simultaneously. NATO and its members have the option of treating them as a catalog of affordable, high-leverage measures that can be selected individually in whatever combination is desired.

## Force Structure Economies

### *Reform Measure 1: National Force Restructuring*

This measure seeks to increase the number and diversity of NATO combat forces that are usable for deployment missions. It does so by calling on nations to restructure their forces to make them more deployable and sustainable. Specific deployability targets already have been agreed, but they are arguably too low, apply to only limited forces, and lack the comprehensive scope necessary to ensure that forces can in fact perform their missions once deployed—given essential enablers, logistics, and other resources such as medical support. Even the limited targets already in place are not fully met by nations. There is much yet

to do. More comprehensive targets should be defined and formalized at the Heads of State level. The cost of restructuring can be offset by appropriately reducing investments in low-priority infrastructure projects, legacy systems modernization, and, in some cases, manpower and readiness of national forces designed only for territorial defense.

### *Reform Measure 2: New-Era Rationalization of Force Structures*

This measure seeks to enhance NATO military preparedness by fostering organizational reforms and innovations in key niche areas. Rather than expecting all national militaries to be prepared for all missions, it encourages some countries to focus on role specialization and niche-area capabilities. For example, it might encourage new members to focus on critical combat support missions and other areas where they could have a relative advantage. This measure also pursues enhanced SOF assets, improved stabilization and reconstruction assets, and stronger civilian surge capabilities.

## Better Use of National Funds

### *Reform Measure 3: Common Funding and Pooling Arrangements for Equipment*

The pooling of limited national assets to generate a more affordable and usable aggregate capacity in such capabilities as strategic and tactical transport (air, land, and maritime), medical support, logistics center operation, and even UAV support may be the most cost-effective reforms available to the Alliance. NATO pooling arrangements are both formal and informal. NATO's common infrastructure program has purchased AWACS, a common CIS structure, and now AGS. NATO infrastructure funding is under-resourced and nearly out of money. The funding needs to be significantly increased. With regard to informal arrangements, consortia of NATO members and partners have produced new pooling arrangements for airlift—the 12-nation Strategic Airlift Capability (SAC), based on the multinational acquisition of several C-17 aircraft, and the 18-

nation Strategic Airlift Interim Solution (SALIS), engaged in a multinational contract for use of An-124 airlifters. Given the budget problems inherent in today's common infrastructure program, NATO should be supportive of more such pooling arrangements among members and partners. Multinational pooling initiatives should concentrate on enlarging NATO access to air transports and fast-deployment cargo ships, and on pursuing multinational logistic support assets.

### *Reform Measure 4: Common Funding for Operations*

Currently, most NATO operations are funded by Alliance members on a "costs lie where they fall" basis. This longstanding practice has the effect of making it harder and more expensive for individual nations to muster the resources and domestic political support to participate in expeditionary missions or contribute forces to the NRF. Common NATO funding for all transport of troops and equipment to a distant theater would be a useful place to start enhanced common funding for operations.

## Multinational Effectiveness

### *Reform Measure 5: Networked Forces*

Network enabled forces produce a "step change" in operational effectiveness, achieving better multinational force integration, clearer and more timely situational awareness, and enhanced flexibility in responding to operational change, whether to take advantage of opportunities or to react to threats. The number of new missions and proliferation of Information Age technology make reliable and secure networks essential to both mission accomplishment and force protection. The top priority of NATO strategic commanders is to field networked forces as described in the NATO Network Enabled Capability (NNEC) concept. That will require members and partners to give investment priority to information networks for their units, headquarters, and systems, both manned and unmanned. Information networks that realize more agile, flexible, and responsive forces support all military functions, from command and control and intelligence to logistics, search-and-rescue, and

civilian-military operations. Network enabled capabilities must ultimately extend to the lowest tactical levels. Renewing NATO and member commitment to connecting forces and systems via the NNEC initiative should be among the highest priorities in seeking greater capabilities from present forces and constrained defense investments.

### *Reform Measure 6: Force Interoperability*

Interoperability across the NATO Force Structure is crucial to operational effectiveness and remains an enduring NATO requirement. The systems most critical to making forces interoperable are those providing for or interfacing with multinational command and control and intelligence, including reconnaissance and surveillance. Interoperable C4ISR creates the operational conduits that allow multinational forces to share information about friendly and enemy forces and the operational environment. However, interoperability will not result from information-sharing alone. It requires that forces from all member nations and partners share common doctrine for a wide range of multinational missions (e.g., from major combat to stabilization operations and irregular warfare). NATO must foster greater doctrinal and procedural harmony by engaging in designed multinational training, education, and exercise programs, and by encouraging member information-sharing on national practices. Fostering greater transatlantic doctrinal harmony should be a key part of this measure, as should improved doctrine for all members in the area of joint operations among ground, air, maritime, space, cyberspace, and special operations forces. Finally, the new frontier of interoperability between manned and unmanned systems needs to come under the mantle of interoperable force employment.

## More Efficient, Effective Commands

### *Reform Measure 7: NATO Command Structure Reforms*

Over the past 20 years, the NATO Command Structure (NCS) has undergone major reforms, mainly through consolidation. Whether a still smaller command structure is militarily desirable

is a matter for analysis. But steps could be taken to improve the readiness and capacities of current joint force commands to carry out future missions and operations. This reform should look at options to create a deployable C2 capability within the NCS for large as well as smaller operational contingencies. Initially deployed C2 elements should be under the close control of the JFCs for training and validation. Ways must also be found to transition from initial C2 to a better-established and sustainable C2 capability, based on a standard design for continuity of operations. Finally, while ACT is a functional, not an operational, command within the NCS, its role as catalyst for an improving and vigorous NATO military is critical to future mission success. ACT needs to assert its several roles in shaping NATO's future and become far better appreciated by NATO as well as member nations.

### *Reform Measure 8: Headquarters Reform*

The Secretary General has no real authority over the structure of NATO Headquarters, the assignment of its personnel, or significant budget decisions. While there are few cost savings that might flow from Headquarters reform, there are significant efficiencies. The Secretary General should be seen as the CEO of NATO Headquarters and should be given much greater authority over organizational structure, personnel, and budget allocations.

## Support from Beyond NATO

### *Reform Measure 9: Division of Missions between NATO and the EU*

NATO and the EU recently have been drawing together in their security and defense policies, and operational experience in the Balkans and Afghanistan shows that much can be achieved on the ground. However, a great deal could be done to improve cooperation and strengthen the capacity of both organizations to respond. Based on their areas of long experience and acknowledged expertise, NATO and the EU should work toward a division of mission emphasis, priority areas for

investment, and development of complementary capabilities. For example, NATO might take the lead in security missions in the Middle East, while the EU takes the lead role in Africa. Likewise, the EU could intensify its efforts on European armaments cooperation, and NATO could concentrate on improving transatlantic technology transfer processes and information-sharing modalities. With regard to implementation of the Comprehensive Approach concept for both organizations, the EU could design ways to provide its civilian expertise to NATO military operations, while NATO looks to revitalize agreements to provide NATO military assets to EU operations.

### *Reform Measure 10: Greater Armaments and Industrial Cooperation*

On both sides of the Atlantic, recent years have seen a major consolidation of defense industries, coupled with European collaboration on such common projects as the Eurofighter, plus transatlantic collaboration in creating subsystems for new weapon systems. The issue now is whether U.S. and European governments can take steps to foster improved collaboration among European countries and on a transatlantic basis. This measure seeks, for example, ways to lessen U.S. and European export controls on multinational sales of new technologies and weapons, plus establishment of a high-level dialogue between industry leaders and NATO via a reinforced NATO Industrial Advisory Group.