Heading to the Chicago NATO Summit:
An Interim Assessment of Progress Towards a more Capable Alliance

Dr. Daniel Goure

Executive Summary

One of the most important issues to be addressed at the NATO Alliance’s upcoming summit in Chicago will be progress towards addressing significant capability gaps revealed by military operations in Iraq, Afghanistan and Libya. In his farewell speech in Brussels, former Secretary of Defense Robert Gates articulated a rather scathing critique of Alliance shortcomings in both Afghanistan and Libya. Gates warned that "If current trends in the decline of European defence capabilities are not halted and reversed, future U.S. political leaders – those for whom the cold war was not the formative experience that it was for me – may not consider the return on America's investment in NATO worth the cost.” Giving added impetus for such an assessment is the new U.S. defense strategy with its so-called pivot to the Asia-Pacific region and a corresponding reduction in U.S. forces in Europe.

The plans and proposals expected to be put forward in Chicago regarding improving NATO’s military capabilities rely to a large degree on improving access to existing or planned forces. There are some significant new investments in critical areas. However, any additional investments will likely have to come from savings achieved through a reduction in existing force structure and restructuring of residual capabilities.

Most observers agree that the Alliance can no longer afford to make promises that cannot be kept. The central issue for the Chicago Summit is whether or not NATO is on a path that will allow it to deploy credible, effective military forces able to meet the evolving threats of the 21st Century.

There are a number of capability areas where NATO can reasonably claim competence, even first class status. These include air superiority, mine warfare, indirect fires, anti-submarine warfare, special operations forces, carrier operations, and armor/anti-armor warfare. Yet as many commentators have pointed out, the Alliance faces the growing challenge of being able to generate, deploy and sustain relatively large conventional forces beyond the boundaries of Europe.

A qualitative assessment of recent national and collective decisions suggests that NATO has made some significant gains in such capability areas as strategic airlift, intelligence, surveillance and reconnaissance and joint and integrated command and control. In other areas such as missile defense, cyber security, logistics and medical support, helicopters and precision strike, there has been only limited progress or the data is lacking to support a conclusion.
Introduction

One of the North Atlantic Treaty Organization’s (NATO) most important summits will take place in Chicago during May, 2012. Much is to be decided there and much is at stake. The 28 nations of the NATO Alliance are going into Chicago with a number of stated objectives and desired goals. First, and foremost, this summit is intended to provide an update on the status of ongoing efforts to meet the Lisbon Capability Commitment goals established during the 2010 summit. Second, and related, there is supposed to be an announcement of a series of specific and practical measures intended to further NATO’s program for “Smart Defense.” Third, Alliance leaders will propose additional changes to the Alliance’s organization and operation intended to address issues that have emerged as a result of its recent operation in Libya. Fourth, the Chicago Summit will address the planned transition in Afghanistan, a subject with significant implications for the first three areas of discussion. Fifth, there is the ongoing challenge of NATO’s relationship with Russia, rendered more difficult by the decision to deploy a robust theater missile defense. Sixth and finally, there is the question of the nature of the trans-Atlantic relationship in light of the new U.S. defense strategy “pivot” to the Asia-Pacific region.

NATO has long recognized that it had critical capability deficits. For a time after the end of the Cold War, this appeared to matter less or even not at all. Even problems experienced during NATO’s intervention in the Balkans failed to cause much of a stir within the Alliance. But the question of whether the Alliance could meet the tests of post-Cold War conflicts was brought into high relief after September 11, 2001 and the initiation of Operation Enduring Freedom (OEF). Politically, NATO’s response after September 11 could well be characterized as heroic. Militarily, the effort to deploy and employ NATO forces in Afghanistan reconfirmed old capability gaps while revealing new ones. In addition to the emerging challenges posed by global terrorism and protracted counterinsurgency/stability operations, NATO also had to confront the threat posed by the proliferation of weapons of mass destruction, long-range delivery systems and advanced conventional weapons. The response to these challenges was the Lisbon Critical Capabilities Commitment.

On top of the ongoing operation in Afghanistan came the Libyan conflict. Libya demonstrated a number of the Alliance’s positive features. It also presented stark evidence of additional shortfalls in critical capabilities to conduct modern combat operations.

In his remarkable final speech to the NATO leadership in Brussels, outgoing U.S. Secretary of Defense Robert Gates sounded what can only be described as a clarion call for a radical change in the way NATO funds, organizes and employs its military capabilities. He argued that recent military operations demonstrate major deficiencies in NATO capabilities. “Despite more than 2 million troops in uniform – NOT counting the U.S. military – NATO has struggled, at times desperately, to sustain a deployment of 25- to 45,000 troops, not just in boots on the ground, but in crucial support assets such as helicopters, transport aircraft, maintenance, intelligence, surveillance and reconnaissance and much more.” He called on NATO to make “wise and strategic” investments in a set of capabilities critical to its ability to perform modern military operations.1
There were three aspects of Gates’ comments that made them particularly significant. The first, obviously, is who said them. The second was the specific areas of weakness he identified based on the Alliance’s operational experience in Afghanistan and Libya. Third, his remarks came with a warning:

The blunt reality is that there will be dwindling appetite and patience in the U.S. Congress – and in the American body politic writ large – to expend increasingly precious funds on behalf of nations that are apparently unwilling to devote the necessary resources or make the necessary changes to be serious and capable partners in their own defense.

Indeed, if current trends in the decline of European defense capabilities are not halted and reversed, future U.S. political leaders – those for whom the Cold War was not the formative experience that it was for me – may not consider the return on America’s investment in NATO worth the cost.²

At the time, the warning could be dismissed. But not now, after the publication of the new U.S. defense strategy with its strategic pivot to the Asia-Pacific region and impending U.S. defense budget cuts. Although the Obama Administration has stressed its continuing commitment to Europe, in general, and NATO, in particular, America’s ability to provide the same degree of support to NATO in future operations as it has in the past may be compromised by force structure reductions and force posture realignments. Simply put, there may not be the forces available as a result either of shrinking budgets or prior deployments to meet a NATO contingency.

Compounding the difficulty of resolving these issues, or simply the ability to make concrete progress on them, is Europe’s financial situation. It is generally recognized that the current economic and budgetary situation makes it impossible to increase defense spending. Just holding the line will be extremely difficult. Even maintaining current levels of defense spending appear doubtful. The British Secretary of State for Defence, Philip Hammond, framed the problem clearly: “... the simple truth is clear: across the alliance, aggregate defense expenditure is certain to fall in the short term and, at best, recover slowly in the medium term. ... More money is not going to be the answer.”³

The plans and proposals expected to be put forward in Chicago regarding improving NATO’s military capabilities rely to a large degree on improving access to existing or planned forces. There are some significant new investments in critical areas. However, any additional investments will likely have to come from savings achieved through a reduction in existing force structure and restructuring of residual capabilities.

Most observers agree that the Alliance can no longer afford to make promises that cannot be kept. The central issue for the Chicago Summit is whether or not NATO is on a path that will allow it to deploy credible, effective military forces able to meet the evolving threats of the 21st Century.
NATO Military Requirements: Lisbon, Libya and More

What critical capabilities does the NATO Alliance require? How should the responsibility to meet those requirements be addressed? Most important, what must be required of the individual members of the Alliance with respect to level of defense spending as well as the kinds of forces supported by their defense budgets?

The new NATO Strategic Concept that emerged in 2010 proposed a broad array of policy, organizational and process reforms. It also called for members to “cooperate more fully in capability development, to minimize duplication and maximize cost-effectiveness…. so that our taxpayers get the most security for the money they invest in defense.” When it came to investments in military capabilities, the Strategic Concept identified a number of priorities but only in general terms. These were:

- robust, mobile and deployable conventional forces;
- forces restructured away from traditional fixed territorial defense missions;
- the ability to sustain concurrent major joint operations and several smaller operations for collective defense and crisis response;
- the capability to defend populations and territories against ballistic missile attack;
- defense against the threat of chemical, biological, radiological and nuclear weapons of mass destruction;
- the ability to prevent, detect, defend against and recover from cyber-attacks;
- detection and defense against international terrorism.4

To this list of required capabilities and potential shortfalls identified at the Lisbon Summit and in the Smart Defense Initiative, there are those that emerged as a result of the Libyan operation. Secretary Gates’ June 2011 critique listed a number of these.

In particular, intelligence, surveillance, and reconnaissance assets are lacking that would allow more allies to be involved and make an impact. The most advanced fighter aircraft are little use if allies do not have the means to identify, process, and strike targets as part of an integrated campaign. To run the air campaign, the NATO air operations center in Italy required a major augmentation of targeting specialists, mainly from the U.S., to do the job – a “just in time” infusion of personnel that may not always be available in future contingencies. We have the spectacle of an air operations center designed to handle more than 300 sorties a day struggling to launch about 150. Furthermore, the mightiest military alliance in history is only 11 weeks into an operation against a poorly armed regime in a sparsely populated country – yet many allies are beginning to run short of munitions, requiring the U.S., once more, to make up the difference.5

A number of analyses have provided basis for making what is, in essence, the same critique put forward by Secretary Gates.6 In some instances, the U.S. provided virtually all the support in critical capability areas. In others, the U.S. contribution made the difference between success and failure.
American planes and drones flew about 27% of the 23,500 sorties as of Tuesday [September 13, 2011]. France was next, followed by Britain and Italy. Four-fifths of so-called intelligence and surveillance flights, either manned or unmanned, were American. The U.S. provided three-quarters of the midair refueling capability to keep European fighter planes over Libya. Without either, notes another official, "this operation would not have been possible." The Europeans don't have this kind of hardware. ...7

NATO leaders recognized that the Lisbon goals for transforming the Alliance’s conventional capabilities required a different approach to force planning and interoperability. In response, at the February 2011 Munich Security Conference, Secretary General Anders Fogh Rasmussen proposed a concept for “Smart Defense” which he described as a long-term strategy for “ensuring greater security, for less money, by working together with more flexibility.” The way to do this, he claimed, was to “pool and share capabilities, to set the right priorities, and to better coordinate our efforts.”8 Initially, Smart Defense was primarily an approach for meeting the capability goals identified at Lisbon rather than a separate set of requirements. Its role has been expanded to address the additional capability gaps revealed by the Libyan campaign. NATO describes the concept thusly:

Smart defense is based on capability areas that are critical for NATO, in particular as established at the Lisbon summit in 2010. Ballistic missile defense, intelligence, surveillance and reconnaissance, maintenance of readiness, training and force preparation, effective engagement and force protection – these are all on the list.

For the purposes of smart defense, the Alliance nations must give priority to those capabilities which NATO needs most, specialize in what they do best, and look for multinational solutions to shared problems. NATO can act as intermediary, helping the nations to establish what they can do together at lower cost, more efficiently and with less risk.9

In a speech outlining his vision for NATO in 2020, Secretary General Rasmussen referred again to many of these same critical capabilities.

In 2020, NATO must remain ready to respond to the full range of security tasks. We will still need to be able to put together complex joint operations at short notice. With high impact. And high precision. This means we will need flexible, rapidly deployable forces. And the right mix of military capabilities.

Libya was a strong reminder of what those capabilities are. They include air-to-air refueling. And the ability to gather information through surveillance and reconnaissance, so we can make accurate intelligence assessments and select and engage the right targets with precision-guided munitions.10

The Chicago Summit should reveal how NATO intends to flesh out the initiative with concrete measures. The current plan is to use the summit to turn Smart Defense into a long-term capability strategy. This strategy will consist of three major components: first, a tangible package of multinational projects to address critical capability shortfalls; second, longer-term
multinational projects that include missile defense, Alliance Ground Surveillance and air policing; and third, strategic projects for 2020 covering areas such as joint intelligence, surveillance and reconnaissance and air-to-air refueling.

Critics of Smart Defense rightly pointed out that it depended to an extraordinary degree on both the degree of political cohesion among NATO members and on structures and practices that would enable pooling and role specialization to result in usable military capabilities. In recognition of these concerns, Secretary General Rasmussen declared that “we need an initiative to complement Smart Defense. One that mobilizes all of NATO’s resources so we strengthen our ability to work together in a truly connected way. I call this the ‘Connected Forces Initiative’.” This initiative consists of three parts:

- training and education;
- expanded exercises, particularly involving the NATO Response Force;
- better use of technology, in particular investing in connectors to allow national systems to operate together. 11

Based on the discussion in this section of the paper, it is possible to identify a set of capability shortfalls that NATO must meet if it is to deploy credible military power in the future. The question that should be front and center at the Chicago Summit is what has the Alliance done to remedy those shortfalls and how much more remains to be accomplished?

**What is being Done and What remains to be Done?**

There are a number of capability areas where NATO can reasonably claim competence, even first class status. These include air superiority, mine warfare, indirect fires, anti-submarine warfare, special operations forces, carrier operations, and armor/anti-armor warfare. Yet as many commentators have pointed out, the Alliance faces the growing challenge of being able to generate, deploy and sustain relatively large conventional forces beyond the boundaries of Europe.

There is general agreement on a number of important capability areas where significant shortfalls exist. A brief discussion of each of these provides insight regarding the state of efforts to address these challenges and the remaining unfilled requirement.

- **Strategic and Tactical Airlift.**

As the U.S. Department of Defense has demonstrated in an almost unending series of mobility requirements studies, the definition of how much is enough when it comes to strategic and tactical airlift is subject to continuous change. There are different national objectives for airlift. NATO has generally envisioned its needs in relation to the need to deploy and sustain the NATO Response Force. However, as OEF has demonstrated, this standard may significantly understate the requirement.12
This is one area where the Smart Defense concept of pooling of assets appears to be viable. NATO has made substantial progress towards addressing strategic and tactical airlift shortfalls. Its member nations maintain a fairly large inventory of tactical airlift assets including C-130s which remain the backbone of the Alliance’s tactical airlift capability, as well as C-27s and Transall C-160s. In addition, seven NATO members have placed orders for 170 A400 long-range transports. To meet the current shortfall in heavy air transport, NATO supports two initiatives. The Strategic Airlift Interim Solution is an arrangement under which 14 nations have pooled their resources to charter six Antonov An-124-100 transport aircraft. The complementary Strategic Airlift Capability centers on the acquisition and operation of three Boeing C-17s by 10 member countries. In addition, a number of countries continue to participate in the Sealift Consortium which provides common funding with which to charter up to ten “roll-on/roll-off” ships.

- **Missile Defense.**

Currently, the Alliance and its member nations deploy only a limited missile defense capability based largely on systems intended primarily for air defense. The Active Layered Theater Ballistic Missile Defense (ALTBMD) program is designed to provide the planning and information capability to support development and deployment of a functioning ballistic missile defense for NATO based on national capabilities. ALTBMD will also allow NATO missile defense to be integrated with the new U.S Phased Adaptive Architecture, the first phase of which is now being deployed.

No NATO nation or consortium of countries has yet committed to developing missile defense capabilities beyond sensors and C3 systems. As one long-time observer of the NATO scene commented, “In sum, NATO members support a missile defense system built by the United States, with common decision making structures, but do not specify what they are going to contribute. Some European allies even doubt the urgency of a missile defense system.”

- **Cyber security.**

It is difficult to define what the requirement is for cyber defense capabilities or how well the Alliance is filling the need. To various degrees, individual NATO members are making investments in people, organizations, tools and training. The Alliance itself has undertaken a number of steps to improve its capabilities in this area. It has published a new policy on Cyber Defense that integrates cyber operations into NATO’s Defense Planning Process, sets out the framework for NATO assistance to allies, and defines standards for information sharing and situational awareness, collaboration and interoperability. In addition, by the end of 2012, NATO will stand up a Rapid Reaction Team as well as a Computer Incident Response Capability in the Consultation, Command and Control Agency.

Even a nation such as the United States with enormous resources and centralized command and control structures has found it challenging to create adequate cyber security capabilities. How much more difficult is it for an Alliance of 28 sovereign nations. Unfortunately, for a variety of reasons, the aggregate of cyber capabilities across the Alliance may well be less than the sum of the parts.
• **Joint and Integrated Command and Control System.**

Joint and combined operations require a highly integrated command and control capability. This is particularly true with respect to modern air combat. NATO’s largest and, arguably, most successful C2 program is its fleet of E-3A Airborne Warning & Control System aircraft. NATO members have invested in a wide array of command and control systems.

NATO is pursuing the creation of a backbone capability for integrated command and control. The NATO Air Command and Control System (ACCS) is intended to combine and automate at the tactical level the planning, tasking and execution of all air operations. The ACCS will provide a joint operating picture to a set of static and mobile control centers.

The keys to an effective, integrated command and control for NATO are personnel, training and exercises. Alliance members will need to devote a sufficient fraction of a shrinking force structure to this function as well as spend increasingly scarce resources to training activities and the conduct of exercises.

• **Intelligence, Surveillance and Reconnaissance.**

NATO has long-recognized the importance of intelligence, surveillance and reconnaissance (ISR). A number of NATO members maintain national airborne ISR capabilities, primarily manned but beginning to evolve towards mixed fleets of manned and unmanned systems. For example, the United Kingdom currently deploys a fleet of Sentinel aircraft, although that capability will be retired with the end of the British deployment to Afghanistan. The planned deployment of the Nimrod MRA4 ISR aircraft was cancelled as a result of the U.K. Strategic Defense and Security Review. The Royal Air Force is acquiring three RC-135 Rivet Joint signals intelligence aircraft to replace the retiring Nimrod R1, which is due to be retired in 2011. The Ministry of Defence has acquired a fleet of MQ-9 Reapers in response to an urgent requirement and is proceeding with its Watchkeeper program to deploy a fleet of Hermes 450 in support of the British Army. The Scavenger program envisions deployment of a future medium-altitude, long endurance unmanned aerial system.

NATO has moved forward to create a common Alliance Ground Surveillance (AGS) capability. The Alliance has decided to acquire five Global Hawk Block 40 unmanned systems equipped with advanced radar as the core of its capability. The AGS program also will have access to the United Kingdom’s Sentinel and the French Heron TP unmanned systems.

• **Helicopters.**

Vertical lift is one of the areas in which NATO as a whole maintains a large inventory of systems but with significantly limited utility beyond national borders. This is ironic in view of the fact that many of these systems – EH-101, NH90, Tiger, Apache and EH-145 – are world class. NATO members have been challenged to deploy sufficient rotary wing assets to support their forces in Afghanistan. This is particularly the case with respect to rotary wing transport. According to the European Defense Agency:
Many of the more than 1700 helicopters in the military inventories in Europe are not available for crisis management operations for two reasons: firstly, some crews are not trained to fly in more demanding environments (for example over deserts or in mountainous terrain); secondly, some helicopters are technically not equipped for these environments.\textsuperscript{14}

NATO is better served, it appears, in the area of attack helicopters. Both the United Kingdom and France deployed attack helicopters in Libya. British Army Apache helicopters and French Tiger and Gazelle combat helicopters engaged a range of ground targets. Overall, NATO members possess a rather formidable fleet of attack helicopters including also the Agusta A129.

There have been a number of proposals to fix the rotary wing gap. France has suggested a fund to support modernization of national helicopter fleets to allow for greater expeditionary use. Improved training to support deployments in complex environments should also be pursued.

- **Logistics and medical support.**

Good logistics is very much a matter of timely and accurate communications, centralized command and control and integrated supply chain management. Virtually all of these functions are resourced, deployed and directed at national levels. This results in extreme difficulty when it comes to moving and sustaining multinational forces. NATO has defined standards and developed a set of planning, data management and command and control tools.

The experience in OEF has underscored both the critical importance of logistics to the conduct of expeditionary operations as well as all its difficulties. The central role played by the U.S. military and its set of world-class logistics organizations (e.g., the Defense Logistics Agency, Army Materiel Command, and U.S. Transportation Command) to the operation of the logistics network for OEF cannot be underestimated. In addition, the role of private sector logistics providers such as Maersk Line Ltd and APL must be recognized.

Addressing shortfalls in logistics for expeditionary operations may prove one of the more difficult challenges confronting NATO. The decentralized character of the Alliance makes it difficult to integrate and manage logistics. It also makes it difficult to accurately assess requirements to support future operations as well as the extent of capability gaps.

NATO should pursue a number of initiatives to modernize its logistics capability. First, it needs to create the capability to establish a common logistics operating picture. Second, it needs to identify measures that would allow for greater integration of national logistic capabilities during an operation – essentially to design-in “plug-and-play” features. Third, examine ways to increase the support that the NATO Maintenance and Supply Agency (NAMSA) can provide to coalition forces. NAMSA should be able to do rapid contracting and even create contracting arrangements in peacetime to be activated when conflict ensues. Expansion of NAMSA’s Operational Logistics Support Partnership should also be considered.
• **Precision strike, SEAD and electronic warfare.**

The ability to conduct advanced precision strike campaigns depends on a blend of usable and timely information, modern delivery platforms able to deal with air defenses and accurate and appropriate weapons. As the Libya campaign demonstrated, one of the Alliance’s critical shortfalls is in the capabilities associated with ISR and the translation of that information into actual targets and strike plans.

As Libya also demonstrated, NATO currently deploys a significant air superiority and strike capability consisting primarily of a mix of F-16, F-18, Tornado, Typhoon, Mirage and Rafale aircraft. These can be armed with a variety of precision bombs and missiles such as Paveway, Brimstone, Storm Shadow, SCALP, HARM and Taurus KEPD.

Like the United States, NATO needs to modernize its capabilities for the suppression of enemy air defenses (SEAD) and for electronic warfare. Current SEAD/electronic warfare capabilities reside almost exclusively in a small set of aging, specialized platforms operated by the United Kingdom, Germany and Italy. Given growing budgetary strictures and evolving force structures it is not clear whether this capability will be maintained as these nations transition to an air fleet consisting of F-35s and Typhoons.

NATO members have accepted the need to invest in next-generation strike capabilities. A centerpiece of the Alliance’s capability to dominate future air environments and deliver precision strikes even in contested airspace is the F-35 Joint Strike Fighter program. A number of NATO countries – the United Kingdom, Italy, Canada, the Netherlands, Norway and Turkey – plan to acquire approximately 400 F-35s. This program will mark a significant enhancement of NATO’s aerial combat capabilities.

• **Aerial refueling.**

The Libyan operation underscored a well-recognized capability gap in aerial refueling. U.S. assets had to provide most of the refueling support for NATO aircraft. NATO members currently deploy a limited number of airborne tankers including C-130s, KC-135s, KC-767s and aging VC10s and Tristars.

A number of NATO members plan to modernize their aerial refueling fleets. France, Germany and Spain will acquire a variant of the A400. The United Kingdom will replace their VC10s and Tristars with the Airbus A330 MRTT. The new tanker aircraft will generally carry more fuel and be capable of more rapid offloads. Nonetheless, the character of future air operations (e.g., distance of operating theater from NATO airbases, number of aircraft sorties) can rapidly stress the capacity of the planned fleet of airborne tankers.
Concluding Observations

At the moment, NATO modernization and the program to meet the capability shortfalls identified over the past several years is a work-in-progress. There is clear evidence of improvements in some critical areas such as strategic airlift, aerial refueling, precision strike and ISR. In other areas, those that focus on ensuring sufficient critical enablers to support expeditionary operations, the picture is much less certain.

However, NATO is approaching a spending threshold that would deny it the ability to maintain even its existing expeditionary capabilities much less address capability shortfalls. Secretary General Rasmussen warned that, “There is a point where you no longer cut fat; you’re cutting into muscle, and then into bone.”\textsuperscript{15} Lt. Gen. Aarne Kreuzinger-Janik, the German Air Force chief of staff, warned that if European defense spending were to fall further, this would require additional force structure cuts that could result in “potentially even bigger gaps and shortfalls.”\textsuperscript{16} Another observer made the point even more starkly: “At the current pace of cuts, it is hard to see how Europe could maintain enough military capabilities to sustain similar operations (to Libya) in the future.”\textsuperscript{17}

Ultimately, new schemes for rationalizing defense capabilities across the Alliance cannot obviate the need for a defined minimum level of defense spending.

... (W)hile pooling, sharing, and cost-cutting exercises can ameliorate the consequences of a lean budget, it is clear by now that security and a responsible role in international affairs come at a price. Europe cannot pool and share its way out of this dilemma. In the end, one needs to buy things — planes, tanks, rifles, computers — and pay the people using them. The sooner Europeans come around to this insight, the more likely they will remain safe, independent, and influential actors in the international arena.\textsuperscript{18}

What would serve NATO leaders and defense planners well would be a focused Net Assessment. Such a process was proposed recently by Philip Hammond, British Secretary of State for Defence. Hammond laid out a three-step process for helping NATO grapple with its current budget problems.

- The Allies should first conduct a comprehensive assessment of the Alliance’s collective capabilities. “This needs to take account of what we know of reductions that are already planned, how these impact on current capabilities and how well these capabilities are supported and able to be sustained.”
- Comparing the results with NATO’s stated requirements would reveal what gaps exist.
- Then the Allies could “collectively direct the drive towards a number of capacity enhancing actions: greater pooling and sharing of capabilities; mission, role and geographic specialization; greater sharing of technology; co-operation on logistics; alignment of research and development programs; and more collaborative training.”\textsuperscript{19}
### Glossary of Terms

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<tr>
<th>Abbreviation</th>
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<tr>
<td>ACCS</td>
<td>Air Command and Control System</td>
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<td>AGS</td>
<td>Alliance Ground Surveillance</td>
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<td>ALTBMD</td>
<td>Active Layered Theater Ballistic Missile Defense</td>
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<td>C3</td>
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<td>NAMSA</td>
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<td>NATO</td>
<td>North Atlantic Treaty Organization</td>
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<td>OEF</td>
<td>Operation Enduring Freedom</td>
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<td>SEAD</td>
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### End Notes

2. Ibid.
5. Gates, op.cit.
7. "The Lesson of Libya: The U.S. was still indispensible even if we don’t want to admit it,” The Wall Street Journal, September 16, 2011
12. NATO Air Transport Capability: An Assessment, Joint Air Power Competence Center, August 2011
15. Secretary General Anders Fogh Rasmussen, “The New Strategic Concept: Active Engagement, Modern Defence”