The security landscape had dramatically changed for the North Atlantic Treaty Organization (NATO) as it moved into the 21st Century. Having adapted and evolved since its inception, NATO looked poised to extend its security umbrella to Eastern Europe and points beyond with the demise of the Soviet Union and the emergence of non-state actor threats. However, renewed concerns over the security challenges presented by recent Russian revanchism, emerging cyber threats, and the persistent burden-sharing debates have all contributed to questions about NATO's relevance and credibility. In order to maintain its legitimacy as a security provider with diminished fiscal means, NATO must first focus its deterrence and reassurance efforts by leveraging NATO’s Allied Land Command in building landpower capabilities. Additionally, NATO must mature its cyber defense capacity by investing in key organizations such as the NATO Allied Command Transformation and the Cooperative Cyber Defense Center of Excellence. Lastly, NATO must enforce the pledge that members will spend 2 percent of Gross Domestic Product on defense, while finding additional burden offsets such as collaborative technology development from military platforms.
Abstract

The security landscape had dramatically changed for the North Atlantic Treaty Organization (NATO) as it moved into the 21st Century. Having adapted and evolved since its inception, NATO looked poised to extend its security umbrella to Eastern Europe and points beyond with the demise of the Soviet Union and the emergence of non-state actor threats. However, renewed concerns over the security challenges presented by recent Russian revanchism, emerging cyber threats, and the persistent burden-sharing debates have all contributed to questions about NATO’s relevance and credibility. In order to maintain its legitimacy as a security provider with diminished fiscal means, NATO must first focus its deterrence and reassurance efforts by leveraging NATO’s Allied Land Command in building landpower capabilities. Additionally, NATO must mature its cyber defense capacity by investing in key organizations such as the NATO Allied Command Transformation and the Cooperative Cyber Defense Center of Excellence. Lastly, NATO must enforce the pledge that members will spend 2 percent of Gross Domestic Product on defense, while finding additional burden offsets such as collaborative technology development from military platforms.
Maintaining NATO’s Relevance in the 21st Century

Renewed concerns over the security challenges presented by recent Russian revanchism, emerging cyber threats, and persistent burden-sharing debates have all contributed to questions about the North Atlantic Treaty Organization’s (NATO) relevance moving forward in the 21st Century. In light of the changing global landscape, it is time to re-look how NATO provides for the collective defense of its members. The NATO alliance is one of the world’s hallmark international institutions. It is a political and military pact of 28 members that provides a forum for consultation on security matters and provides members with assistance in developing capacity to resist armed attack. Most importantly, the alliance collectively bears the responsibility for and benefits from the collective defense of Europe and North America. This is manifested in the landmark Article 5 of the North Atlantic Treaty where an armed attack on one member is an attack on all members.

Some may argue that because NATO has been successful in adapting to past challenges, the current strategic concepts within NATO will allow it to maintain its credibility. However, the complexity and volatility of the security environment compounded by the fiscal realities of its members necessitates that NATO focus on key areas in order to effectively adapt to meet the challenges it faces. First, NATO must focus its deterrence and reassurance efforts by leveraging NATO’s Allied Land Command (LANDCOM) in building landpower capabilities. Second, NATO must mature its cyber defense capacity by investing in key organizations such as the NATO Allied Command Transformation and the Cooperative Cyber Defense Center of Excellence. Lastly, NATO must enforce the pledge that members will spend 2 percent of Gross Domestic Product on defense, while finding additional burden offsets such as
collaborative technology development from military platforms. Like much of its history, NATO will need stronger leadership from the U.S. and traditional European powers like Germany now more than ever before. The stakes are high because a world without NATO is more unstable.

**NATO History and Maturation**

In order to understand what NATO is facing in the 21st century, it is important to review the history that has shaped the alliance. The North Atlantic Treaty was signed in April 1949 to form an alliance that bridged the U.S., Canada, and parts of Europe with similar political and economic ideals (commonly referred to as the West). The Alliance’s creation was part of a broader effort to serve three purposes: deterring Soviet expansionism, forbidding the revival of nationalist militarism in Europe through a strong North American presence and encouraging European political integration.¹ On the heels of the Second World War, NATO’s inception provided a much needed security component to the European Recovery Program (the Marshall Plan, 1947-1951) that would enable the recovery of society within the continent of Europe. This was especially pressing with the looming presence of an emerging Soviet empire.

**Soviet Union Expansionism**

The actions of the Soviet Union at the conclusion of World War II did little to assuage the security concerns of the countries emerging from the high costs of that war. “Communists aided by the Soviet Union were threatening elected governments across Europe.”² In juxtaposition to the Western ideals shaping the recovery of Western European countries, the Soviets had aggressively pushed their communist agenda across Eastern Europe. The Soviet Union had formal and informal means to make the Brezhnev doctrine effective within its sphere and make the West pay heed to the
The Soviet’s heavy involvement in the political affairs of satellite communist countries allowed them to stem further Western influence in Europe. For instance, the overthrow of the democratically elected Czechoslovakian government by its communist party in 1948 highlighted the Soviet Union’s ability to direct the course of politics and the security environment. The Soviets not only did this through bilateral treaties, but also by supervising and monitoring the ruling communist parties, the secret services, and the top military echelons of its satellite countries.

President Harry Truman solidified efforts to enact a credible deterrence to Soviet ambitions under the auspice of the Truman doctrine which made countering Soviet influence a key component of U.S. foreign policy through the National Security Council Report 68. After 1951, economic aid through the Marshall plan was transformed into military aid in order to equip NATO. West Germany was re-armed in 1954, as NATO’s military shield against the Soviet Union. While this revitalized Western European rearmament was a positive step, the weariness of these new allies could have led to uncertainty in its effectiveness against potential Soviet transgressions. This doubt was exacerbated by the Korean conflict. To mitigate this, NATO consolidated its military command structure to form the Supreme Headquarters Allied Powers Europe (SHAPE) with U.S. General Dwight D. Eisenhower as the first Supreme Allied Commander Europe or SACEUR. Shortly thereafter, NATO placed Great Britain’s Lord Ismay as the first Secretary General under the new civilian secretariat. Thus, emplacing the roots of a cohesive political and military alliance in Europe.

**Strong American Presence**

With SHAPE and the civilian structure in place, the Truman administration’s efforts enabled the Allies to focus on rebuilding their economies. From a military
perspective, the U.S. made assurances that it would keep ground troops in Europe and would link its nuclear deterrent to securing its Allies, especially Germany, against nuclear blackmail emanating from the Soviet Union. With this commitment, the U.S. was able to achieve two critical components. First, deter the Soviet threat with the strategy of "massive retaliation" where the U.S. would respond to an attack by the Union of Soviet Socialist Republics with nuclear weapons. Second, it assured the Allies of their American partner’s resolve with the presence of American forces in Western Europe. This assurance not only addressed security concerns from the Soviets, it also helped assuage the fears of another rise in military power from previous belligerents such as Germany or Italy. This collective defense capability generated a spirit of cooperation that was bolstered by significant American resources.

However, this U.S. commitment was not without detractors and problems that went on through periods of Soviet Union deterrence and détente. Some of those challenges stemmed from the burden-sharing debate. Several scholars such as Melvin Krauss “felt that Europeans did not fully pull their weight and spent too much on welfare and not enough on defense.” Domestically, U.S. defense spending was significant in the 1950’s and 1960’s but this takes into account the overall costs of U.S. commitments globally and not just regionally like its European Allies. Although not an easy endeavor, all NATO members increased their spending on defense by three percent in the 1970’s. The financial strain coupled with inter-alliance tensions from members concerned about internal security concerns have worried the alliance throughout its existence, particularly between Greece and Turkey over the Cyprus dispute. However, NATO persevered and even flourished as both a military and political alliance.
Greater Political Integration of Europe

While NATO's forces continued improvement in their conventional force readiness and modernized their nuclear capabilities in the 1970’s and 1980’s, the situation in the Soviet Union would bring about significant change within the alliance. The signing of the Intermediate-Range Nuclear Forces Treaty between the U.S. and Soviet Union, coupled with the influence of Mikhail Gorbachev as the Soviet leader signaled that the Cold War was coming to an end.\(^\text{13}\) For NATO this meant its political strategy of strength through cooperation had worked whereas the Soviet backed Warsaw Pact had disintegrated since the Soviets chose long-run reform internally over a short-run control externally.\(^\text{14}\) The dismantling of the Soviet Union allowed NATO allies to either pursue the disestablishment of the alliance because the significant threat posed by the Soviets had eroded or follow a path towards greater integration of nations with the aims of collective defense and security. The NATO countries chose the latter.

The existing members sought to expand the umbrella of security and stability from its traditional western Trans-Atlantic area to regions of fledgling liberated nations. This was accomplished through the establishment of cooperation and partnership outreach programs and frameworks such as the Euro-Partnership Council, the Mediterranean Dialogue, and the Partnership for Peace program. “NATO Planners hoped that by removing once and for all any uncertainty about the security of former Warsaw Pact countries, and then by creating a special relationship with Russia, stability for all of Europe would be achieved.”\(^\text{15}\) The NATO expansion provided the former Soviet bloc countries like Poland, the Czech Republic and Hungary with a path towards stability concluding with full NATO membership in 1999. This enabled the Western nations to act on the “impulse to remove the stain of the Yalta decisions of 1945 which
set the stage for the division of Europe.” The NATO Allies can certainly point to some successes if the aim of NATO expansion was to extend the integration of more countries into the collective defense and security umbrella of Europe from a political and military perspective. Yet, NATO expansion ultimately threatened Russia and contributed to instability in Eastern Europe.

The Kosovo conflict in particular, demonstrated NATO resolve in maintaining a secure environment in a former Eastern Bloc nation that had reached the boiling point of ethnic strife. However, while these former communist nations looked to the West for security, NATO simultaneously attempted to include Russia in stabilization and collective security efforts. These efforts were made to assuage Russian perceptions of NATO encroachment within its traditional sphere of influence in Eastern Europe and mitigate the long held suspicions of NATO’s intent. One such effort made was through the NATO-Russia Council, which was established to enable individual NATO member states to work with Russia as equal partners on security issues of common interest. These NATO-Russia cooperation frameworks and the NATO-Russia Founding Act attempted to reassure Russia that it was an integral part of European security as the alliance looked to the 21st century. Although Russia may not have had the military and economic means to exert significant influence, these consultations provided a venue to allow Russia to express its opinion in European security matters.

21st Century Evolution of NATO

Stemming from cataclysmic events of the terrorist attacks of 9/11, the “definition of security had radically expanded to include the individual’s freedom from the violent extremism bred by instability and nation-state failure.” The threat posed by these violent extremist organizations had shaken the alliance. It marked the only time that
Article 5 had been invoked in response to the attacks on U.S. soil. As then Senator Richard Lugar stated in the months following September 11, 2001, “the terrorist attacks on the U.S. of last September have graphically demonstrated how vulnerable we are. And when I say ‘we,’ I mean the West in general, including Europe.”\(^{19}\) Indeed the sources of instability that affected NATO countries now extended far from its collective borders. NATO would have to evolve from an institution of collective defense to one of crisis management and stabilization that would imply the need to have a projection capability to deal with the non-state threats emerging from areas like the Middle East. While NATO sees these as common challenges, a common approach that brings unity within the alliance has not emerged. Current and future challenges in the 21st century will require NATO to continue its evolution in order to meet its demands.

Current Status and Challenges

Moving into an era where Article 5 type threats can come from beyond Europe, NATO must be able to act beyond Europe in order to fulfill its mission today.\(^{20}\) Thoughts like this have shaped the strategic thinking of NATO since the early part of the 21st century. If the Western world must cope with threats coming from both state and non-state actors, then NATO allies and partners must be prepared to answer the call. The most recent NATO Strategic Concept provided the blueprint for how NATO has moved forward to counter the threats. However, there are several recent challenges to NATO’s ability to effectively implement its current concept. In addition to terrorism, ghosts of past geo-politics with respect to Russia have resurfaced, threats from cyber-attacks pose grave concerns for national security not to mention the growing divide in burden sharing among Allies. If it does not rise to meet the current situation then NATO’s credibility and relevancy will wane in light of these challenges.
NATO's Strategic Concept and the Missing Updates

In 2010, NATO adopted a new strategic concept at the Lisbon Summit in an effort to address the modern security environment. The core values and principles of NATO remain to safeguard the security and freedoms of the alliance members through political and military means. The ways in which NATO would counter modern threats was through collective defense, crisis management and cooperative security. Collective defense addresses the fundamental basis for Article 5 because NATO will deter and defend against any threat of aggression to individual Allies or the Alliance as a whole.\(^{21}\) This tenet is the essence of why the Alliance was created in 1949. As outlined previously, NATO countries fear another large scale conventional war similar to those which had defined Europe for much of its story. Crisis management addresses the urgency needed by the Alliance to counter emerging non-state threats from terrorism, peace-keeping issues, and mass migration of displaced people. Cooperative security builds on the outreach programs built in aftermath of the end of the Cold War. Partnerships, collaborations and forums for inclusion are at the core of the Article 4 of the North Atlantic Treaty. Article 4 enables Allies to consult together whenever any one of the members perceives its security, independence or territorial integrity is threatened.\(^{22}\)

While the concept acknowledges that in essence NATO must be prepared to conduct operations across the wide spectrum of missions, some of the base assumptions used in the strategic concept are incomplete or have significantly changed. In outlining the security environment, the concept states “the Euro-Atlantic area is at peace and the threat of attack against NATO territory is low.”\(^{23}\) While the description of the environment does go on to state that a conventional threat cannot be ignored, it is
an understatement given the recent aggression displayed by Russia in Georgia, Crimea and portions of Ukraine.

The Geo-Political Landscape with a Revanchist Russia

Despite concrete and credible attempts to bring Russia into the collective security umbrella, its leadership has continued to view the U.S. and NATO as a security threat instead of a guarantee of security. “Since the beginning of 2014, President Putin has sought to undermine the rules-based system of European security and attempted to maximize his power on the world stage.” Indeed this aggressive foreign policy has created significant uncertainty, the sort of uncertainty that NATO exists to quell. Yet these actions were never out of the realm of possibility and many predicted recent Russian actions as a strong likelihood given NATO’s actions in extending the Alliance and partnership to Eastern European countries which are vital to Russia’s geo-political standing. “During the Cold War, the Soviet Union had a two-pronged diplomatic strategy for Europe. First Moscow, hoped to de-couple Europe from the U.S., Russia is now in a better position to attain this goal than ever before. Second, Moscow hoped to see a NATO diluted militarily.” This can certainly describe Russia’s national strategy today. The fact that this possible outcome was described in 2001 certainly lends credence to Russia’s long term foreign policy aims. Additionally, Russia’s 2016 National Security Strategy asserts “that the United States and its allies are seeking to contain Russia in order to maintain their dominance of world affairs, which Russia’s independent foreign policy challenges.” This validates Western perceptions that Russia views NATO as a danger rather than a partner in security.

Not only has Russia expressed these aims, it has demonstrated the military means to carry out these policy objectives. The collapse of the Soviet Union left a
hollow force as its focus centered on economic and political reform. Today, Russia’s conventional military capabilities are far more impressive than at any point during the first two decades following the Soviet collapse.\textsuperscript{27} The means are menacing but it is these capabilities coupled with the hybrid warfare tactics Russia employs that threaten NATO countries, particularly those along the Eastern flank bordering Russia. From use of long range precision fires, to surrogate fighters, to cyber-attacks, Russia’s actions have exacerbated this insecurity. “Russia’s aggressive foreign policy toward Ukraine and the Baltic States amplifies a general sense of unease among NATO eastern flank members…exacerbated by Moscow’s illegal occupation of Crimea and direct support for combined Russian separatist forces in eastern Ukraine.”\textsuperscript{28} These aggression actions have taken many forms but one facet of particular concern is Russia’s maturation of special operations capability.

Russia has been effective at operating in what has become commonly known as ‘gray zone’ or that area which is deliberately designed to remain below the threshold of conventional military conflict and open state war.\textsuperscript{29} The military means best suited to operate in this zone is Russia’s Spetznaz GRU. Their missions in Crimea and the Donbas region of Ukraine have ranged from direct action, special reconnaissance to covert action. Additionally, the creation of a special operations command has strengthened Russia’s special operation forces capabilities and increased its ability to deploy them at a high speed to a conflict zone.\textsuperscript{30} Their tactical missions produce strategic or political outcomes. When these types of forces are deployed, they have had destabilizing effects on the NATO allied governments and placed them on their heels when it comes to a strong and cohesive response. This is intensified with the concurrent
employment of misinformation intended to shape and influence domestic and international opinion. In Crimea and Donbas, propaganda by state-controlled Russian television is aimed at disrupting Ukrainian normal information structure.\textsuperscript{31} Russia’s ability to exert centralized control over these information mediums gives it an advantage particularly when contrasted with the varied reactions and perceptions of NATO nations, where finding consensus makes it challenging to counter these information campaigns.

Russia is showing no signs of slowing its misinformation efforts. Recent accusations of Russia spreading false emails to Lithuanian Parliament members and media outlets claiming recently deployed soldiers from the German Army had raped an underage girl highlight another challenge that NATO must counter.\textsuperscript{32} The persistent threat of Russian misinformation poses a significant challenge to maintaining the credibility of NATO in Eastern Europe. However, as Thor Bukkvol points out, Russian hybrid warfare in general, will probably look different from case to case. Each country needs to identify what its vulnerabilities may be during a potential conflict with Russia.\textsuperscript{33} While the focus for each country may be different, there are some common susceptibilities. One of those areas is in cyber capabilities.

\textbf{Cyber Threats}

Indeed, no challenge that NATO has had to face has been as unpredictable as cyber terrorism. The North Atlantic Treaty Organization is particularly exposed to cyber-attacks from criminal groups, terrorists, or hostile states due to its increasing involvement in crisis response operations.\textsuperscript{34} The dependency on information systems by the military has grown to the point that in some areas, operations cannot be conducted effectively, if it all, without these systems. This is due to the interdependency of the cyber domain within traditional war-fighting domains of land, air and sea. Cyberspace is
not just about information systems. It is a “global domain consisting of the interdependent network of information technology infrastructures and resident data, including the internet, telecommunications networks, computer systems, and embedded processors and controllers.”35 Again, Russia has deftly leveraged its capabilities to attack vulnerable components of European and American cyber operations.

A positive measure taken by the Alliance stems from the 2014 Wales Summit where leaders officially proclaimed cyber as a domain which facilitated cyber defense to be a part of NATO’s core tasks in collective defense.36 This recognition paves the way for efforts to be taken in earnest to combat cyber-attacks. The North Atlantic Treaty Organization’s Cooperative Cyber Defense Center of Excellence (Cyber Center) is an example of these efforts. Established to build a collaborative environment where NATO Allies and partners can build synergy to combat cyber-attacks, it has produced some nascent but tangible products moving forward. Of note, there is an invaluable resource recently published by the Cyber Center. The Tallinn Manual 2.0, is one of the most comprehensive guides for how international law applies to events in cyber space. The manual also provides expert analysis that paves the way for nations to develop cyber norms.37 Initiatives and efforts like those undertaken by the Cyber Center are just one dimension for countering the cyber threat. Concrete steps are needed to defend the networks and systems used by NATO military forces.

The U.S. Department of Defense’s endeavor to improve the cyber security of our Allies and partners through the Partner Mission Environment has begun to bear fruit, particularly with regards to information sharing in order to have DoD information “visible, accessible, understandable, trustworthy, secure, interoperable, and made available to
appropriate MPs [Mission Partners]...to the maximum extent allowed by law or DoD policy." The secure and accessible exchange of information is crucial to mission effectiveness. However, interoperability challenges continue to hamper the path to a more effective and efficient employment of NATO capabilities. These interoperability challenges are only one facet of the larger burden-sharing problems that plague NATO and undermine its importance in providing regional and global security.

The Burden-Sharing Debate

Secretary of Defense James Mattis emphatically stated at the NATO Conference in Munich in February 2017, “I owe it to you all to give you clarity on the political reality in the United States... America will meet its responsibilities, but if your nations do not want to see America moderate its commitment to the alliance, each of your capitals needs to show its support for our common defense.” The argument for fairer burden sharing is not new but calls for alliance members to renew their pledges with concrete efforts have gotten stronger. In 2006, members pledged to commit 2 percent of their gross domestic product on defense spending. This is not an insurmountable goal given the 3 percent spent by members over thirty years ago. However, an underwhelming 5 of the 28 members have met this goal to date. Compounding the unmet 2 percent goal is the fact that the U.S. accounts for “73 percent of the NATO spending, much of which is dedicated to high-demand, low-density capabilities such as intelligence, surveillance, and reconnaissance, air-to-air refueling, ballistic missile defense, and airborne electronic warfare,” for use in training and operations.

The impacts reach beyond the fiscal implications of running the organization, its missions or the military capabilities this spending can produce for the alliance. “The defense capacity of each member country has an important impact on the overall
perception of the Alliance’s credibility as a politico-military organization.”42 The alliance members realize they must reverse the tide of over-reliance on the U.S. It is critical that traditional powers such as Germany and France set the example for other nations going forward. Germany has been a point of contention because of the continued reluctance to commit more of its resources to defense spending despite being an economic leader in Europe. Previous arguments from those who downplay the burden-sharing imbalance called attention to the intangibles of burden sharing in Europe, particularly with Germany. The costs of rebuilding post World War II, the domestic and international desire to keep Germany’s military might low and then the subsequent costs of reunification all pointed to strong reasons why Germany could not do more for NATO. Scholars in the past even highlighted the burden of hosting around 400,000 allied forces, the burden of maintaining a standing army of 500,000 men, the cost of the Berlin Brigade which Germany financed as counter-arguments to calls for Europe, and specifically Germany to pledge further money.43 Given the current security environment, Europeans cannot dwell on the sense of relative calm enjoyed at the end of the twentieth century. Rather, it must confront the myriad of challenges head on.

Despite its economic issues, the Alliance is looking to draw more funding out of its members and is also looking at ways to get the most effective and efficient outcomes out of that spending. To ensure the resources that are allocated make impactful contributions to NATO, the organization has developed the Smart Defense Initiative to encourage members and partners to “work together to develop, acquire, operate and maintain military capabilities to undertake the Alliance’s essential core tasks agreed in NATO’s Strategic Concept. That means harmonizing requirements [and] pooling and
sharing capabilities.” This collaborative approach for defense spending aims to mitigate an individual country’s military development plan that produces a particular specialty by default rather than by design so that members concentrate on their national strengths and agree to coordinate planned defense cuts with the Allies. Tangible results have been demonstrated in critical areas such as medical support and countering improvised explosive devices where nations have shared research and development or materials that help drive the costs of developing these capabilities down. Efforts like Smart Defense and creating centers of excellence to pool capacity and capability for NATO are encouraging signs but more can be done in critical areas to ensure future credibility and legitimacy of NATO.

Recommendations for NATO into the Future

Facing the challenges posed by an aggressive Russia, the assault occurring within the cyber domain and the perpetual quarrel of burden sharing among members, NATO must remain focused on a few important aspects within its alliance. First, place additional emphasis on conventional land force capability to provide an effective deterrent against Russian provocation. Landpower and enabling competencies have proven credible in the past and will do so in the future. Second, expand cyber situational awareness and mature defensive capacity, particularly with those nations bordering Russia. Lastly, continue pressure for nations to meet the 2 percent spending goal but also acknowledge and encourage intangible commitments such as research and development options and interoperability to improve efficiencies and effectiveness.

Focus on NATO’s Landpower

“NATO needs to return to the basics, dust off old manuals from the Cold War, and to think through what is really required to successfully defend Eastern Europe. Only
then will NATO be able to provide a realistic deterrent to Russia.” For military professionals, this statement may harken images of U.S. doctrine aimed at the defense of the Fulda Gap in central Germany against the invading Soviet Army. It may not be useful to think of the current situation in Eastern Europe in terms of Cold War Soviet containment policy but there is an aspect derived from the previous statement that can provide an effective deterrent to further Russian aggression. That deterrent comes from landpower and the application of land forces to the environment. As the U.S. Army Doctrinal Publication 1 states, “Landpower is the ability by threat, force or occupation-to gain, sustain, and exploit control over land, resources, and people.” Engagement in the operational environment by land forces allows military commanders to shape and influence the conditions that enable the attainment of intended strategic objectives or political outcomes. This is more relevant to a political-military structure like NATO where land forces are the concrete expression of the Alliance’s political will and intentions.

Landpower is the form of power that is arguably the most recognizable and best understood by U.S. friends and adversaries. This is especially relevant given the significance of land forces within Europe from both the historical context and within the current events previously outlined. G.K. Cunningham points out, “Landpower is more than military forces deployed to far-flung places…it is a conglomerate of elements, each interacting so that the whole is greater than the sum of its parts.” While landpower incorporates more than just armies in a traditional sense, it is the presence of land forces that provides the tangible display of commitment and resolve in order to achieve desired outcomes. One organization within NATO was created to be the promoter for landpower. In 2012, LANDCOM was established to “be the leading advocate for
Soldiers and Land Forces in NATO, responsible for ensuring their effectiveness and interoperability. A key function of LANDCOM is to retain and incorporate lessons learned from NATO’s involvement in Afghanistan as part of the International Security Assistance Force. The invaluable contributions, particularly those by coalition soldiers, marines and special operation forces, to operations in Afghanistan need to be built upon as a stepping stone to advancing interoperability and expertise in the projection of forces into contingency areas. This will also enable NATO's land forces to retain lessons learned from the human dimension aspect of counter-insurgency operations in order to be better equipped to handle the hybrid warfare threats posed by Russian forces or Russian-backed separatists, particularly in dense population centers.

In NATO’s vision for NATO Forces 2020, ensuring NATO has modern, tightly connected forces that are equipped, trained, exercised and commanded so that they can operate together with partners in any environment is a top priority. As a result, NATO created the Connected Forces Initiative (CFI) as a way to achieve the interoperability and cooperation outlined in this vision. The Connected Forces Initiative “combines a comprehensive education, training, exercise and evaluation program with the use of cutting-edge technology to ensure that Allied forces remain prepared to engage cooperatively in the future.” Using the CFI as an approach to achieving interoperability is a logical path. Leveraging LANDCOM as the primary organization to achieve synergy and cooperation would be most effective in providing swift and tangible results.

LANDCOM can build operational capability of land forces through iterative multinational exercises. Operation Atlantic Resolve exercises, under the U.S.
Department of Defense’s (DoD) European Reassurance Initiative, provide the example of effective capability development of NATO partners. These exercises also provide key components of the U.S. and NATO strategy for deterring further Russian aggression. Allied nations must prioritize their finite resources and energies on where they can get the most out of their investment. Landpower provides that return on investment. While landpower will remain critical to NATO success, it cannot afford to ignore the growing cyber threat to its ability to conduct operations.

**Greater Cyber Defense Cooperation**

The NATO alliance has taken positive steps in addressing the dilemma faced from cyber-attack. Recently, a December 2016 Joint Declaration signed by the President of the European Council, the President of the European Commission, and the Secretary General of NATO highlights progress towards finding collaborative ways to improve cyber awareness and defense capabilities. The European Union and NATO will exchange concepts on the integration of cyber defense and conduct respective missions and operations to foster interoperability in cyber defense requirements and standards. These declarations will help mature the ability to defend the networks and provide a cohesive response to further attacks. The challenge will be to provide the commitment of resources to realize these goals. The U.S. must continue to take the lead in expanding cooperation within the cyber domain. The advancements made within its own capacity and capability through the development of U.S. Cyber Command have allowed the U.S. to be a lead proponent of cyber defense. As a recent Heritage Foundation study noted, more can be done “through sharing experience, expanding contingency planning, increasing training and exercises.” This is especially urgent with
regards to the U.S. and Baltic countries cooperation given the adverse focus Russia puts on these nations as a cyber battleground with NATO.

While the U.S. cannot invest in all organizations committed to cyber defense, the NATO Allied Command Transformation (ACT) and the NATO Cooperative Cyber Defense Center of Excellence organizations play critical roles in the development of cyber security. The former is particularly important for the standardization and interoperability of networks while the latter is critical for cooperative cyber technologies, strategy, operations and law. As the NATO 2020 report points out, “the Center of Excellence should do more, through training to help members improve their cyber defense program. Over time NATO should plan to mount a fully adequate array of cyber defense capabilities, including passive and active elements.” The relevancy of NATO will in large part be shaped by its ability to act decisively within the cyber domain. For too long, NATO’s adversaries have used cyber capabilities against NATO countries to great effect. It is important that NATO continues to emphasize its cyber efforts as a top priority despite concerns over additional expenditures. Undoubtedly bearing this cost will intensify the great burden sharing debate. Therefore, it is imperative to keep the pressure on NATO members to honor the 2 percent commitment in addition to finding additional offsets.

Burden Sharing Offsets and Building on Smart Defense

As noted previously, the Smart Defense initiative provides a venue for NATO countries to come together and outline defense modernization requirements in a collaborative environment. Critical to this is identifying not only weaknesses and vulnerabilities but finding individual strengths and multipliers. Unique history, experiences and abilities bolster the alliance as a whole. Harnessing the best each
member has to offer will require nations to put aside individual choices made in the name of national sovereignty for the sake of effective and efficient investment. Any investment strategy must be political, not military, in nature.

There have been some notable successes in pooling resources and multinational collaborative programs, NATO’s Airborne Warning and Control System (AWACS) being the best known.\textsuperscript{57} In addition to the AWACS program, capabilities related to conventional defense forces are needed to help diminish the issue of imbalance between U.S. and other NATO member defense spending. This is particularly evident with regards to land force enablers such as rotary wing aviation support, missile defense and ISR. As an example, the Eurocopter Tiger development offers an opportunity to NATO countries to build a European platform for the defense of Europe. The Tiger has seen limited combat during French and German operations in Afghanistan and Libya but should hostilities erupt between NATO and Russia, the Tiger will be stalking Russian tanks.\textsuperscript{58} A proven weapon system developed by European partners can help political leaders raise domestic support and should continue to be encouraged.

There is also an opportunity to expand on the momentum behind the Smart Defense Initiative into other facets of capability development and beyond. For the U.S. this means expanding the relationship with NATO ACT. Taking steps to help Allies invest in innovation and modernization will help bridge capability gaps experienced by the imbalance of NATO defense spending. The U.S. Department of Defense should increase funding for science and technology exchanges with the foreign offices of U.S. defense laboratories in order to work with foreign innovators and create additional joint
projects. An integral piece of the U.S. National Security Strategy in the 21st Century is fostering an innovative spirit to help maintain the technological competitive advantage the U.S. has demonstrated over its adversaries. Preserving this technology offset in concert with NATO Allies will not only advance its interests; it would also advance the NATO Alliance’s interests as well. Now is the time for more American leadership within NATO, not less.

Conclusion

Since its inception, NATO more than any other alliance has evolved with the changing security environment. It matured both the political and military structures that have found ways to build consensus and face multi-prong dilemmas from existential threats of sovereignty to security challenges that threaten individual citizens’ lives. At its core, NATO has always been able to employ a strategy that deterred foes and reassured its friends and allies. Whether the Soviets, Russians or cyber terrorists, the power of unity within NATO has keep Western ideals and interests moving forward. However, if NATO does not adapt to the evolving threat and make credible commitments in resourcing across the alliance, then its relevancy and legitimacy will continue to be called into question. Focusing on NATO’s landpower, investing in cyber capabilities, committing to spending goals and finding additional burden-sharing offsets will help ensure its relevance endures. As former SACEUR, General James Jones highlights, “if the U.S. shapes the future constructively with its allies and friends, democratic freedoms in the world will thrive.” An alternative world, without NATO presence and the values its stands for, is a world that is unstable and insecure.
Endnotes


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9 Schmidt, “Fifty Years of NATO as History: Perspectives on the Tasks Ahead,” 3.


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