A THREAT-BASED STRATEGY FOR NATO'S SOUTHERN FLANK

Sinan Ülgen and Can Kasapoğlu

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Ülgen has served in the Turkish Foreign Service in several capacities: in Ankara on the United Nations desk (1990–1992); in Brussels at the Turkish Permanent Delegation to the European Union (1992–1996); and at the Turkish embassy in Tripoli (1996).

He is a regular contributor to Turkish dailies, and his opinion pieces have been published in the *International New York Times*, the *Financial Times*, the *Wall Street Journal*, and *Le Figaro*. He was a member of the international security experts group set up by former NATO secretary general Anders Fogh Rasmussen and tasked with preparing a report on the transatlantic relationship in advance of NATO's September 2014 summit.

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Summary

NATO's Southern flank poses a set of unique challenges to the alliance, with complex and diverse threats from both state and nonstate actors. This environment calls for a policy response framework that reflects the heterogeneity of the landscape. Achieving this aim will require building on existing foundations, adjusting domestic narratives, and revisiting the questions of priorities and burden sharing. NATO allies will need to reach a political consensus to overcome the threat of an introverted Western world accompanied by adverse consequences for global and regional security.

Key Threats and Policy Responses

- **Hybrid warfare:** This threat requires multidimensional strategies for territorial defense, cooperative security, and crisis management.

- **Russia's anti-access and area-denial (A2/AD) buildup:** NATO should develop a new maritime strategy for the Southern flank, enhancing the capabilities of its Standing Maritime Group 2. NATO's deep-strike, precision-strike, and stealth capabilities should be leveraged through advanced air platforms and munitions in the Eastern Mediterranean.

- **Iran's ballistic-missile proliferation:** An effective response would combine enhanced missile-defense capabilities with deployment of F-22 fighter planes in Turkey.

- **State failure:** NATO should mitigate the consequences of security threats presented by Arab countries facing state failure and help partners address their governance challenges.

- **Radical and violent nonstate actors:** A key priority for NATO's response to violent extremism should be to develop a more effective counterterrorism strategy.

- **Proliferation of weapons of mass destruction among nonstate actors:** NATO should seek to upgrade its WMD proliferation surveillance capabilities and improve its awareness of chemical and biological threats.

Strategic Dilemmas Facing the Alliance

- Given its budgetary impact, a Southern flank strategy would require a potentially difficult-to-forge political consensus among NATO members.

- When devoting more resources to the Southern flank requires assigning fewer resources to the East, differences between NATO allies' threat perceptions can create a bottleneck. NATO's July 2016 Warsaw summit will provide a unique opportunity for the alliance to overcome this strategic vulnerability and deal constructively with the potentially divisive issue of priorities.

- This strategy will require burden sharing, a polarizing issue in the transatlantic relationship. To move beyond this, European policymakers should reshape their domestic strategic communications and underline the need for Europe to start reinvesting in its own security.

- The rise of populism in the West will impact the ability of the transatlantic alliance to project peace and stability in the world. This is the key obstacle to the elaboration of a forward-looking strategy to address the security challenges of Europe's South. NATO leaders must avoid entering into a domestically driven era of international policy inertia.

Introduction

Within a few days in November 2015, the threat perceptions of the members of the North Atlantic Treaty Organization (NATO) were upended. On November 13, Omar Ismail Mostefai blew himself up in the Bataclan nightclub in Paris. He left behind him 89 casualties. Mostefai was a French citizen who is believed to have traveled to Syria before carrying out the suicide bombing in the French capital.

Oleg Peshkov was a lieutenant colonel in the Russian Air Force. His bomber plane, a Sukhoi Su24, was shot down following its incursion into Turkey's airspace on November 25. It was the latest in a series of violations of Turkish airspace by Russian aircraft based in Syria.

These two episodes illustrate the changing nature of the threats for NATO allies emanating from the alliance's benighted Southern flank. The first instance relates to the now well-established threat of foreign fighters linked to the ongoing conflict in Syria, at NATO's doorstep. The second case shows the resurgence of Russia as an aggressive actor in the wake of its military buildup in Syria and increasing presence in NATO's Southern neighborhood.

NATO's Southern flank poses a set of unique challenges for the alliance, as the region is exposed to complex and diverse threats from a combination of state and nonstate actors. The alliance has to develop responses to a wide array of threat scenarios including human security shortfalls generated by civil wars and state failure, a proliferation of non-nuclear weapons of mass destruction (WMD) at the hands of armed nonstate groups, anti-access and area-denial (A2/AD) threats in the Levant posed by the Russian buildup in Syria, offensive strategic weapons capabilities emanating from Tehran's ambitious missile program, and the export of terrorism linked to the phenomenon of foreign fighters.

As a result, there can be no all-encompassing deterrence framework that the alliance can use to develop the right policy response. The policy approach needs to reflect the heterogeneity of the threat landscape.

A logical framework that maps out the threat topography of NATO's Southern neighborhood is necessary to help confront these challenges. This paper does that in two dimensions (see figure 1). The first dimension identifies the nature of the sources of threats and separates state actors from nonstate actors. The second dimension identifies the alliance's desired security objectives, which can be summarized as preemption and prevention. The immediacy of the threat is the main differentiating factor between these two concepts. Policies listed under preemption essentially aim to constrain or eliminate a threat that is already tangible or palpable. An example would be an attack on

civilians by suicide bombers linked to the self-proclaimed Islamic State or the ballistic-missile threat from Iran. Prevention concerns policy options that are more forward-looking and aim to eliminate potential more distant threats—for instance, efforts to strengthen state institutions in postconflict societies to accelerate a return to normalcy and good enough governance.

Against this backdrop, the capacity of the alliance to respond to the new configuration of threats facing NATO's Southern allies is a key consideration. There are various options available to NATO policymakers for populating the four quadrants of this matrix. For example, policy responses in quadrant A will aim to preempt threats emanating from state actors in NATO's Southern neighborhood. By contrast, policy responses in quadrant D will incorporate options designed to prevent threats from nonstate actors.

Figure 1: Threat Topography of NATO's Southern Flank
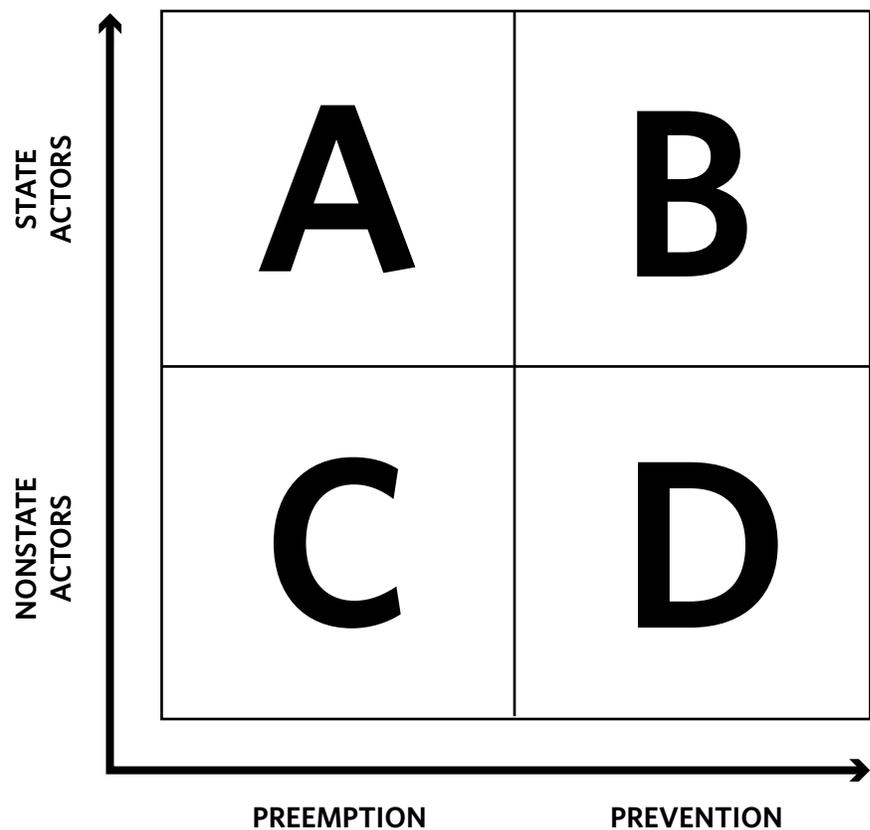

Policy proposals should not be read as exclusive, stand-alone strategies designed to fully counter the threats in their respective quadrants. More often than not, proposals will be only an important yet insufficient component of the overall response. In practice, a more realistic and effective counterstrategy would need to combine policy elements across the quadrants. So, even if

improving the effectiveness of the NATO Response Force is listed as a recommended policy response to hybrid warfare (quadrant A), a more realistic strategy to counter such a threat would involve drawing on tools such as capacity building in partner nations (quadrant B) and improved intelligence sharing (quadrant C).

NATO policymakers face a number of political obstacles in their attempt to improve the alliance's ability to deal with the security challenges of the Southern flank. An effective response will require reaching an understanding on a scaled-up and revised allocation of resources that takes into account the divergent interests of NATO allies, guided by differences in their threat perceptions. This will entail a frank discussion among the members of NATO's Eastern and Southern flanks.

But even more importantly, NATO should refrain from becoming hostage to the growing divisions in Western democracies ushered in by the rise of populist movements. If left untamed, these movements could easily cripple the ability of the transatlantic partners to ensure peace and stability in and beyond the alliance. Instead, NATO could act as a high-level platform for rejuvenating the political consensus needed to overcome the palpable threat of introversion that would adversely impact the future prospects of Europe's Southern neighborhood.

Preempting Threats From State Actors
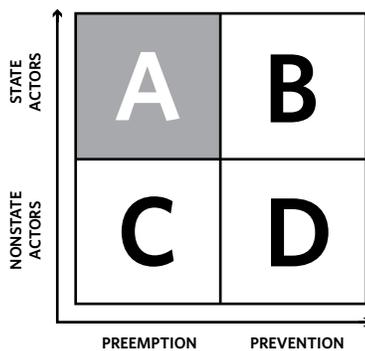
The Rise of Hybrid Warfare

Overview

In military theory, hybrid warfare is defined as a multimodal form of war that incorporates—and systematically mixes—irregular tactics, conventional capabilities, terrorist activities, criminal activities, and low-intensity conflict.[1] In most cases of hybrid warfare, conventional and unconventional elements and parameters are blurred into the same force structure in a given battle space. More generally, hybrid warfare involves the integration and fusion of regular and irregular approaches to war. Following Russia's destabilization attempts in

its conflict with Ukraine, the definition of hybrid warfare had to be revisited to also include information warfare as well as cyberconflict.

In the NATO context, the need to develop a more robust posture on hybrid war was linked to Russia's aggression in Ukraine. But the threat of hybrid warfare is not limited to the alliance's Eastern flank. With Russia's growing military presence in Syria, one cannot totally rule out the prospect of a low-intensity hybrid war affecting countries along NATO's Southern flank—most particularly Turkey, given the now-confrontational nature of the Ankara-Moscow relationship following Turkey's downing of a Russian plane in late November 2015. A more distant scenario would involve the threat of hybrid warfare linked to nonstate actors with state-like capabilities and aspirations, most notably the Islamic State.

Policy Response

Hybrid warfare challenges not only NATO's military capabilities and defense planning but also the alliance's political-military paradigms and strategic mind-set. Indeed, confronting such threats is not an easy task. An optimal strategy for defeating hybrid threats would combine efforts designed to disrupt and defeat the actors that pose these threats with a longer-term plan to tackle the root causes of the conflict.[2]

A robust response to the threat of hybrid warfare should include multidimensional strategies based on all three pillars of NATO's current Strategic Concept, which was published in 2010 and outlines the alliance's fundamental security tasks. Those pillars are territorial defense, cooperative security, and management. The NATO framework for countering hybrid warfare scenarios would need to be comprehensive and multifaceted, leveraging the alliance's vast array of assets and capabilities.

The alliance has varying degrees of competence and preparedness to fully address large-scale hybrid warfare scenarios. Given the organization's focus on hard security, NATO's role in the information warfare dimension is likely to be limited.

On cyberwarfare, the alliance is expected to broaden its ambit by recognizing cyberspace as a new operational domain at the NATO summit in Warsaw in July 2016. Thus, the Warsaw summit is to be a turning point for NATO's posture on cyberwar. Going forward, the alliance is expected to switch from a purely defensive stance focused on ensuring that key NATO assets and infrastructure are resilient to cyberthreats to the development of a more tangible deterrence posture that will involve elements of cyberwarfare.

In the military dimension, a key component of any potential allied response to hybrid warfare will be the NATO Response Force (NRF).[3] That is in no small part because of the pace of emerging crises in the Southern flank. A short deployment time is key to framing an efficient military strategy for the South.

When it was established in 2003, the NRF was designed to perform a wide array of missions including immediate collective defense, peace-support operations, and crisis management, as well as critical infrastructure and disaster relief. At its September 2014 summit in Wales, the alliance decided to upgrade its NRF capabilities to address the challenges emanating from both of its flanks, Southern and Eastern, under the Readiness Action Plan. At the same time, a Very High Readiness Joint Task Force (VJTF) was introduced into the NRF structure to establish a true spearhead asset for the alliance.[4] Since that summit, the NRF has been engaged in a comprehensive process to enhance its capabilities and develop larger, more flexible, and deterrence-focused assets including air, land, maritime, and special forces components.

The NRF's doctrinal structure and core tasks are important indicators of NATO's capabilities, as well as its gaps, in terms of countering hybrid warfare. The force reports to the supreme allied commander Europe, and its operational command is assumed by NATO's two joint force commands—in Naples, Italy, and Brunssum, the Netherlands—on a yearly rotational basis. In accordance with the decisions made at the Wales summit, the force's size will be increased to some 40,000.[5]

In the NRF structure, the VJTF is expected to hold a critically important place in confronting emerging challenges. The brigade-level dynamic force comprises five maneuver battalions (around 5,000 troops) supported by maritime, air, and special forces elements. Once the VJTF is fully operational, NATO plans to augment this unit with two additional brigades. The primary advantages of the force are its short deployment time and wide, flexible mission portfolio. Some units of the VJTF are planned to be deployable within forty-eight hours, while the whole unit, at full size, will be deployable in less than seven days.[6]

At the heart of the VJTF concept, NATO Force Integration Units (NFIUs) will play a central role in combating hybrid warfare. NFIUs are designed as small headquarters—around 40 personnel—to facilitate rapid deployment in necessary areas, support collective defense planning, link NATO forces with allies' national forces, and coordinate training exercises. NFIUs are not military bases, but they function as enablers of transportation, logistical, and support infrastructure for the rapid deployment of NATO forces. These small but effective hubs were established following the Wales summit, under the Readiness Action Plan.[7] Initial NFIUs were established in Bulgaria, Estonia, Latvia, Lithuania, Poland, and Romania in 2015. In 2016 and 2017, Hungary and Slovakia will host two additional NFIUs each. All existing units are expected to reach full capability before the Warsaw summit.[8]

These hubs are designed mainly to enable a rapid-reaction force deployment and a fast military buildup on the Eastern flank, to deter or defeat a Russian attempt at a fait accompli. Although such a geopolitical calculus is relevant given the activities of the Kremlin's little green men in Russia's so-called area

of privileged interests, NATO still needs a viable link between its rapid deployment capabilities and the Southern flank. The establishment of an NFIU in Turkey would facilitate such a link between the alliance's rapid-reaction capabilities and a possible deployment in the South. Additionally, building another NFIU with special amphibious or maritime capacities and strategic airlift scope in one of the Mediterranean members of the alliance, such as Italy or Spain, could help address hybrid warfare challenges in North Africa. Especially, given the strategic danger of the Islamic State and the group's rising activities in the Maghreb, there is no reason to rule out the possibility of a crisis that would necessitate a VJTF intervention with both amphibious and air-assault capabilities.

The VJTF's impressive initial response time and subsequent rapid deployment capabilities are of critical importance considering the hybrid challenges that the alliance faces. But hybrid warfare situations break out and escalate uncontrollably and insidiously. The gap between the response and deployment times of the VJTF (forty-eight to seventy-two hours) and the NRF (up to thirty days, or up to ninety days for follow-on forces) could potentially cause political and military setbacks during hybrid warfare crises, especially at the operational level. NATO therefore needs a shorter timeframe between the elite, brigade-size deployment of the VJTF and the follow-on, corps-level deployment of the NRF. NATO Secretary General Jens Stoltenberg's promise to enhance the NRF's capabilities is a very positive development for allied defense. However, the alliance should also minimize the NRF's response and deployment times so that the NRF can immediately support a possible VJTF deployment in case of an escalation. The emerging hybrid warfare challenges in the South would especially necessitate such a capability as the Southern flank is less endowed than the Eastern flank with agile and mobile assets and capabilities that can respond effectively to the challenges of hybrid war.

Russia and the A2/AD Challenge

Overview
Although the Russian Federation has been NATO's traditional Eastern flank challenger, Moscow's military deployments in Syria since September 2015 have compelled NATO policymakers to revisit Russia's role in relation to the Southern flank as well. In September 2015, NATO Supreme Allied Commander Europe General Philip Breedlove voiced his concerns regarding the Russian military buildup in the Levant. The top NATO commander for operations noted that the presence of very sophisticated air defenses and aircraft capable of air-to-air combat suggested the existence of a Russian anti-access and area-denial (A2/AD) bubble in the Eastern Mediterranean because the Islamic State does not fly any aircraft.[9]

For some time, Russia has been drastically improving its A2/AD capabilities in the Eastern Mediterranean in a way that negatively impacts NATO's overall security. Russian A2/AD capabilities in Syria are centered primarily on a set of advanced air-defense systems at complementary interception layers. At the high-altitude and long-range layer, Russians have deployed S-400 Triumf (SA-21 Growler) systems following the downing of a Russian Su-24 aircraft by Turkish combat air patrols in November 2015. New 40N6 surface-to-air missiles have given the S-400 a maximum range of 250 miles against certain platforms.[10] In light of obtained satellite imagery, it is understood that Moscow is using a complex surface-to-air missile site configuration in Syria to ensure a multilayered defense umbrella, with Pantsir-S1 and Pantsir-S2 systems deployed in close proximity to the S-400s.[11]

The Russian A2/AD buildup also includes SA-17 medium-range, self-propelled air defenses. Notably, following the Su-24 incident, this system was used to paint, or aggressively identify through radar lock-on, aircraft in Syria's northern airspace, forcing Washington to withdraw all its manned aircraft from Syria's northern corridor.[12] This robust, layered air-defense network is supported by advanced electronic warfare assets such as Krasukha-4 that can significantly affect ground-based radars, airborne warning and control systems, and spy satellites. These defenses can also provide 95–190-mile cover to flying Russian aircraft to avoid radar detection.[13]

Russia's Black Sea Fleet functions as the main enabler of the Russian A2/AD threat in the Levant.

Russia's Black Sea Fleet functions as the main enabler of the Russian A2/AD threat in the Levant. The fleet is armed with enhanced Kilo-class diesel-electric submarines, thousands of marines, and a robust surface contingent.[14] Russia has successfully capitalized on the civil war in Syria, which hosts the only Russian base—Tartus—outside the former Soviet Union. In addition, the Kremlin has managed to establish a new forward operating base in Latakia and thereby found a new way to project power into the Mediterranean from the Russian mainland.

In a further challenge to NATO allies' security, Russian forces are equipped with Yakhont antiship cruise missiles, which alone constitute a surface naval A2/AD zone.[15] This antiship military structure is reinforced by an anti-aircraft force consisting of double- and triple-digit surface-to-air missile systems as well as electronic warfare assets.[16] Furthermore, despite the limited withdrawal of some Russian aircraft from Syria as of mid-2016, Russia's Khmeimim air base offers invaluable infrastructure for further deployments. The Russian forces in Syria therefore remain capable of employing a combination of advanced fixed-wing aircraft, surface-to-air missile systems at different interception layers, antiship cruise missile assets, and naval deployments to pose a formidable A2/AD envelope.

Moscow has also deployed manned and unmanned intelligence-surveillance-reconnaissance (ISR) systems in Syria. As one expert indicated,

competent ISR is a major pillar of effective A2/AD operations, as these systems are essential for cueing attacks by other forces such as aircraft, ships, or land-based missile batteries against over-the-horizon (OTH) targets. Information gathered by these systems can be meshed with that from overhead imagery (which does not need a forward operating base) to increase overall targeting effectiveness.[17]

The Kremlin's *Slava*-class missile cruiser deployments in the Levant pose an additional A2/AD challenge to the alliance. Since the downing of the Su-24 fighter by Turkey in November 2015, Russia has been operating missile cruisers with advanced air- and missile-defense systems in the Eastern Mediterranean. Initially, the *Moskva* missile cruiser was deployed off the Latakia coast following the incident.[18] Subsequently, *Moskva* was relieved by the *Varyag* missile cruiser, another vessel of the same *Slava* class, in early 2016.[19] These cruisers are equipped with the naval version of the S-300 missile line and constitute a significant threat to NATO's manned and unmanned aircraft in the Eastern Mediterranean.[20] The Russian military has also demonstrated its attack capabilities from naval platforms during its intervention in the Syrian civil war. The journal IHS *Jane's World Navies* reported in February 2016 that

> in early December [2015] Russia launched its first-ever submarine-launched cruise missile (SLCM) strikes on targets in Syria. 3M-14 Kalibr missiles were fired from the Mediterranean into Syria by the Project 636.3 improved Kilo-class diesel-electric submarine (SSK) Rostov-na-Donu. The SLCM strikes complete a triumvirate of long-range conventionally armed missile strike capability demonstrations undertaken by the Russian military in recent months. Long-range precision conventional strike is a new mission for the Russian military, reflecting the shift in its mission since the Soviet days. Traditionally Russian long-range missiles have either been nuclear armed, or designed for anti-air or anti-ship roles.[21]

Russia's forces in Syria are also equipped with menacing offensive capabilities. A set of advanced aircraft capable of air-to-air combat, such as the Su-30 and Su-35, remain in Syria despite the Kremlin's rhetoric of its supposed withdrawal from the country.[22]

More importantly, as of mid-2016 the Russians have started to deploy their SS-26 Iskander ballistic missiles in Syria, a development that would directly threaten NATO's Southern flank in two ways.[23] First, this ballistic missile remains at the core of Moscow's violations of the Intermediate-Range Nuclear Forces Treaty, which bans ground-launched missiles capable of delivering nuclear warheads at a range of between 300 and 3,400 miles. Although the SS-26 is officially reported to have a range of some 250 miles, experts believe that its range could be as long as 430 miles.[24] In such a case, a deployed SS-26 Iskander missile could theoretically target a NATO member capital on the Southern flank: Ankara in Turkey.

Second, a SS-26 missile follows a spiral trajectory in the terminal phase and can fly a depressed trajectory below an altitude of 30 miles, and its reentry vehicle can make maneuvers of up to 30g during the midcourse and terminal phases. All these technical attributes would stress any missile defense systems and make it extremely hard to intercept SS-26s.[25]

Russia's A2/AD capabilities have considerably constrained NATO allies' power projection in the region. The efforts of the anti–Islamic State coalition have been hindered by the obstacles placed on the Turkish Air Force, which can no longer engage over Syrian airspace, even to strike Islamic State targets. Meanwhile, these Russian capabilities can provide an advantage to Moscow in scenarios of hybrid warfare on NATO's Southern flank, as they would significantly enhance the offensive abilities of Russia's airpower.

From a broader political-military standpoint, the Russian forward deployments in Syria have gone well beyond the scope of a temporary intervention. Syria is now being transformed into a long-term Russian bastion. The profile of the Russian deployments has shown a significant resemblance to the Russian outposts in Kaliningrad and Armenia. The Kremlin sees Russian bastions as geostrategic expeditionary nodes that ignite a vicious cycle between the protracted conflicts and Moscow's military hegemonic outreach. Under the Gerasimov doctrine, which describes Russia's nonlinear approach to warfare, these strongholds function as jumping-off points for the Kremlin's little green men. Russia is on the verge of becoming NATO's permanent Southern flank neighbor, or risk factor, in the next decades, regardless of the outcome of the Syrian civil war.

Policy Response

As a policy response to Russia's A2/AD tools, NATO should consider improving its naval capabilities on the Southern flank. Essentially, the alliance needs a transformation in its doctrine and operational assets. In other words, NATO should develop a new maritime strategy tailored for the Southern flank.

In 2011, the alliance adopted its Maritime Strategy, which is based on the four main pillars of deterrence and collective defense, crisis management, cooperative security, and maritime security. The strategy also highlights NATO's key maritime functions such as nuclear deterrence and sea-based ballistic missile defense.[26] However, although the document underlines the importance of "maintaining the ability to deploy, sustain and support effective expeditionary forces through the control of sea lines of communications," it does not openly stress A2/AD challenges. Following the 2016 Warsaw summit, the overall security situation on the Southern flank will necessitate a renewed Maritime Strategy with a focus on proposed options for countering the A2/AD threat.

Furthermore, NATO's Standing Maritime Group 2, which has overall responsibility for providing maritime support to NATO missions around the Mediterranean, needs more capabilities and a significant numerical increase

in its fleet. That effort should start with the principal naval component of NATO's ballistic missile defense capacities, which consist of the four Aegis ballistic missile defense–capable vessels currently deployed in Rota, Spain.[27] NATO's deep strike, very long-range precision strike, and stealth capabilities should also be fostered through advanced air platforms and munitions in the Eastern Mediterranean. Such a force posture should be supported by an advanced architecture of command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR).

Iran's Missile Proliferation

Overview

Another state that poses a security challenge to the NATO alliance is Iran. The July 2015 Joint Comprehensive Plan of Action (JCPOA), widely known as the nuclear deal with Iran, placed certain limits on the country's nuclear program and introduced enhanced transparency measures for that program in return for the lifting of international sanctions. But the agreement did not ban Iran's ballistic-missile proliferation, and all sanctions with regards to ballistic missiles will be lifted "eight years after the JCPOA Adoption Day (18 October 2015) or . . . [on] the date on which the [International Atomic Energy Agency] submits a report confirming the Broader Conclusion, whichever is earlier," according to the relevant United Nations (UN) Security Council resolution.[28]

Tehran already has an impressive arsenal of ballistic missiles and has been gradually developing its missiles program. As of mid-2016, Iran could theoretically target the entire Albanian, Bulgarian, Croatian, Greek, Hungarian, Romanian, Slovak, Slovenian, and Turkish territories as well as some parts of the Czech Republic, Italy, and Poland—all countries in the NATO alliance. The Washington-based Center for Strategic and International Studies estimates the approximate ranges of Iran's solid- and liquid-fuel, medium-range ballistic missiles at between 1,200 and 1,900 miles.[29] The center also draws attention to Tehran's intermediate-range ballistic missiles currently under development, such as the Shahab-5 (or Toqyān 1) and the Shahab-6 (or Toqyān 2), both with ranges of between 1,900 and 3,100 miles.[30] Should these missiles or similar systems be introduced into the Iranian inventory, Tehran could target the entire European territory of NATO, including Britain in some scenarios.

Iran's ballistic-missile arsenal, including more accurate shorter-range systems, also poses a significant threat to NATO members' bases and forward-deployed assets in the Middle East. Under programs such as forward operating sites, main operating bases, and cooperative security locations, the United States has forward deployments in Bahrain, Kuwait, Oman, Qatar, Turkey, and the United Arab Emirates (UAE).[31] Recently, Jordan has allowed the use of its bases to support Operation Inherent Resolve to target the Islamic State in Iraq and Syria.[32] France has been operating a base in the UAE since 2009;

the United Kingdom (UK) has forward deployments in Bahrain, Oman, and Qatar; and Turkey has forward-deployed troops in Northern Iraq and is to establish permanent bases in Qatar and Somalia.

Finally, the ballistic missile threat stemming from Iran has triggered a new arms race in the Middle East and unsettled NATO's partners in the region. Military geostrategic factors play a key role in the threat perceptions of the Gulf Cooperation Council (GCC). The constrained geography is tantamount to a small battle space that skews the balance between reaction time and battle space in favor of the aggressor in the case of a missile strike. GCC countries would have only seven to fifteen minutes' warning time to detect and confront an air or missile attack.[33] Furthermore, the narrowness of the maritime environment makes sea-based air and missile defense difficult.[34] As a result, Gulf Arab monarchies have been boosting their defense spending and keeping their defense budgets at high levels of gross domestic product (GDP) for years.[35] Even in the wake of the July 2015 nuclear deal with Tehran, Israel, a partner in NATO's Mediterranean Dialogue, still perceives a high-level threat from Iranian missile proliferation.

The ballistic missile threat stemming from Iran has triggered a new arms race in the Middle East and unsettled NATO's partners in the region.

Policy Response

To effectively counter the ballistic-missile threat from Iran and provide more effective non-nuclear deterrence, NATO needs to upgrade its strategic toolbox with a set of advanced capabilities. The first order of business should be to enhance the alliance's missile defense capacities as the critical component of a deterrence-by-denial strategy.

Since the early 1960s, the NATO Integrated Air Defense System (NATINADS) has been an indispensable element of the allied strategic posture. At the 2010 Lisbon summit, leaders of the alliance agreed to initiate a ballistic missile defense capability to augment NATO's core task of collective defense. At the 2012 Chicago summit, alliance leaders declared that NATO had achieved an interim ballistic missile defense capability. Taking the NATINADS as a baseline, the alliance is now developing the NATO Integrated Air and Missile Defense System with four major components: surveillance; active air defense; passive air defense; and battle management command, control, communications, and intelligence.[36]

These capabilities are to support NATO's two specific missile defense missions. The Theater Ballistic Missile Defense focuses on protecting deployed NATO forces against short- and medium-range missiles, while a second mission focuses on protecting NATO European territory, populations, and forces. The ballistic missile defense architecture entitled the European Phased Adaptive Approach is underpinned by the X-band radar in Kürecik, Turkey;

Aegis Ashore sites in Romania (as of 2016) and Poland (as of 2018); and ballistic missile defense–capable Aegis vessels in Rota, Spain.[37]

As robust as this architecture may appear, gaps remain in NATO allies' capabilities to defend against ballistic missiles. A short-term remedy could be provided by repositioning the Patriot ballistic missile defense system in Turkey, with a view to eventually turning this into a permanent ballistic missile defense presence. Although a Patriot deployment would provide only a point defense capability against short-range ballistic missiles, it would send a firm political-military signal to potential aggressors. In parallel, NATO should consider undertaking missile defense drills designed specifically to address the ballistic-missile threats affecting the Southern flank.

To complement the deterrence-by-denial option, NATO should also envisage enhanced capacities to provide deterrence by reprisal specifically for the Southern flank. This objective can realistically be met through the deployment of F-22 Raptor fighter planes, possibly in İncirlik, Turkey, as part of a new Southern flank reassurance initiative.[38] NATO has already adopted assurance measures under its Readiness Action Plan. But these were aimed mainly at deterring Russian aggression on the Eastern flank.[39] In addition, the alliance has deployed an airborne warning and control system to Turkey in the framework of tailored assurance measures for supporting Ankara due to the rising tensions with Russia on the Southern flank.[40] The next step should be the adoption of enhanced assurance measures for the South.

Preventing Threats From State Actors
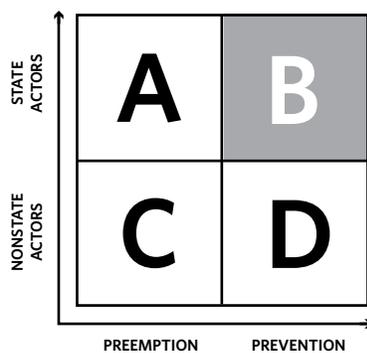
State Failure

Overview
Beyond specific threats from individual countries, NATO must also confront the broader danger of state failure. A nation-state's success or failure is defined by how effectively it provides, organizes, and regulates political goods and

services for its citizens, including the supply of human security and the rule of law. A failed state that is a breeding ground for instability, gruesome corruption, internal violence, and crumbling legitimacy endangers world order and global stability. It threatens the foundation of the international system, which relies on the ability of states to govern their own space and soil. When governments lose control over their borders—when public facilities are increasingly neglected and economic opportunities are available only for a privileged few—failure looms, preceding the outbreak of war.

The Arab Spring that erupted in late 2010 was a euphoric experience, a source of exuberant optimism, which seemingly promised a shared purpose for the Middle East's isolated youth. Unfortunately, the hope to establish democracies in the region was short-lived. The setback of the protests demonstrated that it is much easier to make a dictatorship collapse than to install a democratic replacement. Five years after the Arab Spring, the global order has not witnessed the anticipated flowering of democracy, and a non-negligible number of Middle Eastern countries have plunged into a state of destruction.

At the root of this crisis of governance is the inability to foster an overriding social contract. In many of these Arab states, the short window of opportunity ushered in by the Arab Spring has failed to edify the social and political norms necessary to shift from a model based on coercion to a contract based on participation. The resulting increase in social entropy is unshackling not only the foundations of nation-states but also the regional order. The violent escalation between Sunni and Shia sects remains as disruptive as ever, and jihadists are gaining strong footholds throughout the region.

The chaos in Syria and Iraq spawned a more pressing enemy: the Islamic State. This militant group is accentuating the fragility of state structures in the Middle East, and its unchecked expansionism has the potential to lead to full state collapse, particularly in Syria and Iraq, the territories that the group covets as a protostate. The resulting internal strife, combined with the weakness of state structures, is leading to humanitarian disasters such as the Syrian refugee crisis, which has security and political implications for many NATO countries.

Policy Response

The alliance's policy response to the complex challenges introduced by the phenomenon of state failure should combine measures aimed at mitigating the consequences of security threats with efforts to help partner nations address their governance failures. Building partner capacity refers to a broad set of missions and programs to achieve key security goals including mitigating conflict, enhancing coalition participation, building institutional linkages, and managing regional security challenges.[41]

In the NATO context, these activities fall under the core task of cooperative security. At the 2014 Wales summit, the alliance endorsed two initiatives, the Partnership Interoperability Initiative and Defense and Related Capacity

Building, to foster a partnership strategy. The Partnership Interoperability Initiative aims to deepen NATO's ties with partner nations so that these countries can contribute to future alliance and alliance-led operations, as well as the NATO Response Force. Through the Defense and Related Capacity Building framework, the alliance aims to project stability without deploying large combat forces. The initiative covers a broad range of defense- and security-related training, advising, assisting, and mentoring activities.[42]

NATO's 2015 Counter-Terrorism Policy Guidelines, which superseded the 2002 Partnership Action Plan Against Terrorism, underline the key goal of enhanced engagement and cooperation with partner nations to fight terrorism, a frequent consequence of state failure.[43] NATO also has the potential to capitalize on the Mediterranean Dialogue and the Istanbul Cooperation Initiative to advance its agenda of cooperative security.

For the past two decades, NATO has been involved in a range of cooperative security initiatives. NATO began such operations to support the UN in the Western Balkans following the outbreak of the first major conflicts in the former Yugoslavia in the 1990s. This trend has been followed by other crisis-response operations not triggered by the alliance's Article 5 mutual-defense clause, such as those in Afghanistan and Libya.[44] The alliance's current Strategic Concept provides the necessary framework for non–Article 5 crisis-response operations. As the document states,

> NATO has a unique and robust set of political and military capabilities to address the full spectrum of crises – before, during and after conflicts. NATO will actively employ an appropriate mix of those political and military tools to help manage developing crises that have the potential to affect Alliance security, before they escalate into conflicts; to stop ongoing conflicts where they affect Alliance security; and to help consolidate stability in post-conflict situations where that contributes to Euro-Atlantic security.[45]

NATO's full of spectrum operations covers a wide array of missions to support other states, ranging from disaster relief following the 2005 earthquake in Pakistan to critical infrastructure protection in Ukraine.[46]

NATO already enjoys a solid common political understanding and contractual foundation for pursuing an effective partnership strategy that would incorporate security-sector reforms for partner nations on the Southern flank. This institutional outreach can nonetheless be reinforced through tailored components. NATO's capacity-building efforts should in particular focus on training and advisory missions for military police, cultivate counterterrorism intelligence capabilities, and address chemical and biological threats stemming from nonstate actors with state-like aspirations.

Given the ongoing conflicts in the Middle East, the Southern Mediterranean provides an opportune environment for cooperation with partners aimed at preventing state failure. Building on the Mediterranean Dialogue, NATO could expand military-to-military cooperation with the countries of the Southern

Mediterranean and scale up training and education missions.[47] A case in point is the Tactical Memorandum of Understanding signed with Morocco in 2009 with a view to securing Moroccan participation in the counterterrorism mission Operation Active Endeavor.[48] Joint management of the security and humanitarian spillovers of the Libya crisis would provide a real impetus to these efforts.

Yet the prospects for greater cooperation between NATO and the Mediterranean Dialogue countries will remain limited in the foreseeable future because of the recalcitrance of Arab countries' leaders to involve NATO in areas that encroach on internal security. These states are more willing to cooperate with the alliance and take part in initiatives that address external security shocks such as growing radicalization in Libya or sea-based terrorism but much less eager to carve out a role for the transatlantic organization to establish deeper institutional links with their security or military establishments.

A key issue affecting the overall impact of NATO's efforts to provide support for better governance in partner nations is the future of the relationship between NATO and the European Union (EU).[49] In an ideal world, these two organizations would work together as mutual force multipliers. The division of labor between NATO and the EU has historically been shaped with NATO focusing on security-sector reform, defense-capacity building, counterterrorism, and WMD capabilities and the EU concentrating on other key areas of governance reforms and capacity building, especially rule-of-law missions and law-enforcement training. But close cooperation is necessary, particularly in less secure geographies and in low-intensity conflict environments, where future EU missions will need the protection of NATO assets.

A closer NATO-EU relationship is also motivated by the changing security landscape. An April 2016 European Commission communication presented a broad perspective on countering the rising hybrid threats in the East and the South by using a comprehensive toolbox aimed at protecting critical national infrastructure, boosting cybersecurity, building resilience against radicalization and violent extremism, protecting public health and food security, and improving defense capabilities.[50] Yet as illustrated by *The Military Balance*, published by the International Institute for Strategic Studies, the EU's military capabilities to meet the challenges in the South are inadequate and should depend on NATO:

> Across the continent [of Europe], policymakers were in 2015 preoccupied with the uncomfortable reality that while the threats and risks to European security had increased during recent years, the means to address them had not recovered from the long cycle of defence cuts that began after the Cold War and accelerated after the 2008 financial crisis. . . . In fact, concern over 'hybrid' warfare is likely to trigger closer coordination between NATO and the EU. Its complexity,

and the fact that its exponents might apply all levers of power, blending economics, information operations, diplomacy, intelligence, and conventional and irregular military force, has highlighted the requirement for clarity over both indicators of and responses to hybrid warfare.[51]

At present, the NATO-EU relationship is hampered by the intractability of the dispute over the divided island of Cyprus. Despite its division, Cyprus became an EU member in 2004, leading to institutional difficulties surrounding the EU-NATO relationship stemming from the nonrecognition of Cyprus by NATO ally Turkey. These difficulties have significantly constrained the possibility of closer political dialogue between the two organizations on emerging conflicts and crisis management, also handicapping proactive efforts to address or mitigate the threat of state failure.

Given that expectations are positive for a settlement of this issue later in 2016 under UN-led negotiations, the political framework underpinning NATO-EU relations could and should be revised to reflect the changing security landscape and foster more effective crisis-management capabilities through an enhanced comprehensive approach.

Preempting Threats From Nonstate Actors
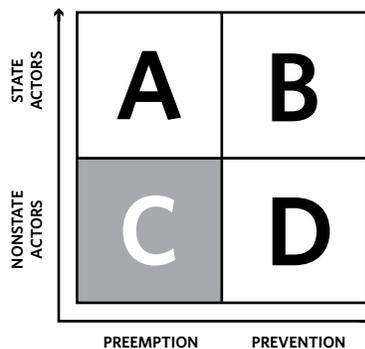
Violent Extremism

Overview

NATO's Southern flank is exposed to a myriad of security challenges linked to the emergence of radical and violent nonstate actors. Such a threat landscape presents grave challenges not only to NATO member nations but also to partner countries.

Historically, the militant group al-Qaeda constituted the core of the nonstate threat assessment. But the threat topography is complicated by the morphing of this terrorist entity, which now comprises a franchise terrorist

network and subnetworks including associated forces, affiliates, adherents, and al-Qaeda–inspired groups and individuals. In this complicated structure, the Levant region is primarily exposed to al-Nusra activity, while the Maghreb and Sahel regions have been suffering from the threat of al-Qaeda in the Islamic Maghreb as well as mergers of different al-Qaeda–affiliated factions such as al-Mourabitoun and the Movement for Unity and Jihad in West Africa.[52] The alliance's Southern flank is exposed to the al-Qaeda terrorist threat along the Eastern and Southern Mediterranean coasts. While Syria functions as a hub for the Levant basin, Libya plays the same role for the Maghreb and Sahel. This overall pessimistic picture is augmented by other al-Qaeda affiliates in Yemen and the Horn of Africa.

More recently, the center of attention has shifted to the Islamic State, whose emergence has compounded the threat perception map for NATO allies. This terrorist group has also been acting as a foreign fighter magnet and trainer, with long-term implications for the security of NATO allies. The list of attacks sponsored by or linked to the Islamic State carried out in allied nations is becoming longer, and the number of casualties is increasing. As of mid-2016, open-source intelligence evidence suggests that the number of foreign fighters in Iraq and Syria more than doubled between 2014 and 2015, rising from some 12,000 militants from 81 countries in 2014 to 27,000–31,000 from 86 countries in 2015. Of these fighters, some 5,600 are estimated to have traveled to Syria and Iraq from NATO nations.[53] In addition, the Islamic State has increasingly targeted civilians in Western Europe and in Turkey, as illustrated most egregiously by the 2015–2016 terrorist attacks in Paris, Brussels, and Istanbul.

At the same time, the extremist ideology espoused by the Islamic State has been influential in the radicalization of Muslim communities in several NATO nations. And the Islamic State is known to have been developing and acquiring a range of weapons of mass destruction and, particularly, chemical and biological weapons.

The Islamic State's declaration of its so-called caliphate in June 2014 marked a milestone in the group's geopolitical existence and modus operandi. The declaration triggered a need to exercise control over a territory and provide an adequate level of governance.[54] In that sense, the Islamic State is a different nonstate actor from al-Qaeda, which has no territorial ambitions.[55] The link to a territory is a source both of strength and of vulnerability for the Islamic State. Territorial control allows the group to leverage the economic and human resources at its disposal. But the Islamic State must also divert resources to protect its territory from its enemies.

In his opening remarks to the Berlin Security Conference in 2015, Deputy NATO Secretary General Alexander Vershbow stated that to address the Islamic State threat in the South, preventing the group from gaining new territory and forcing it to roll back its control of terrain would be key elements of a

strategy.[56] Yet success in the fight against the Islamic State on the ground could paradoxically increase the risks for NATO Southern flank countries, at least until the group is fully eradicated.

The first consequence of successfully combating the Islamic State would be a heightened risk of retaliation, especially in countries where the group is known to have established active and dormant cells. In other words, a territorial squeeze could compel the Islamic State to seek revenge by perpetuating more terrorist attacks on NATO soil.

Success in the fight against the Islamic State on the ground could paradoxically increase the risks for NATO Southern flank countries, at least until the group is fully eradicated.

Second, as a reaction to its loss of territory in Syria and Iraq, the Islamic State may decide to move its power base to keep its territorially driven, hybrid character. In this respect, Libya could be the next stop for the terrorist network. For some time, open-source reports have suggested the Islamic State has been increasing its activity in Libya.[57] In doing so, the terrorist group can sustain its revenues through Libya's oil fields and reach new recruitment sources for its terrorist campaigns in a fragile or failed state. Such a major move to Libya could alter the threat landscape in the Mediterranean, including for nations on NATO's Southern flank, such as Italy and Spain.

Policy Response

Admittedly, even the best antiterrorism, counterterrorism, and security intelligence efforts cannot fully eliminate the mounting terrorism problem, which will require not only the eradication of the Islamic State's caliphate but also a return to normalcy in the countries exposed to civil strife. However, a more robust counterterrorism strategy could mitigate current risks and lower the frequency of attacks.

NATO already has the necessary framework to initiate a well-balanced counterterrorism strategy for the Southern flank. The 1999 Strategic Concept considered terrorism one of the alliance's main security risks and challenges.[58] NATO invoked Article 5, the alliance's raison d'être, for the first and only time to date following the September 11, 2001, terrorist attacks in the United States. Based on that Article 5 decision, in 2001 NATO launched Operation Eagle Assist and subsequently Operation Active Endeavor as the alliance's first two counterterrorism operations.[59]

At the 2002 Prague summit, NATO adopted its first military document that focused specifically on terrorism, the Military Concept for Defense Against Terrorism. This document not only defined defense against terrorism as an integral part of allied forces' missions but also identified four key roles in countering the threat of violent extremism:

• Antiterrorism: a combination of defensive measures to reduce vulnerability to terrorism;

- Counterterrorism: a combination of offensive measures to reduce terrorists' capabilities to inflict damage to individuals, forces, and properties;

- Consequence management: a combination of reactive measures to mitigate destructive effects of terrorist activity once it is perpetrated;

- Military cooperation: efforts to optimize the fight against terrorism through cooperation and by harmonizing intervention procedures with civilian authorities.[60]

Furthermore, the document determined a wide array of options for the alliance's counterterrorism missions such as Operation Active Endeavor.[61] NATO has developed a sufficiently good operational framework to successfully conduct this type of mission. Yet significant gaps remain in relation to human intelligence, intelligence sharing, and terrorism risk modeling, which are equally critical components of a counterterrorism strategy.

The role of human intelligence in counterterrorism cannot be overemphasized. Counterterrorism missions are able to penetrate target organizations through human intelligence capabilities. But developing these capabilities is a laborious and risky process. Besides, human intelligence activities require a very good knowledge of local human terrain supported by cultural and linguistic skills.[62] Yet NATO has no mandate to directly collect intelligence or produce raw intelligence. Mainly, the alliance's functions are limited to assessment and interpretation, unless NATO forces are deployed on the ground.[63]

A viable way forward for the alliance is to boost intelligence sharing so that it can compensate for its shortfalls. It has already taken steps in this direction. Following the 9/11 attacks, NATO established a Terrorism Threat Intelligence Unit, which according to the alliance "draws on civilian and military intelligence resources, from both NATO and Partner countries, in order to provide assessments to the North Atlantic Council and NATO staff."[64] As collecting intelligence directly is not in the primary portfolios of NATO intelligence bodies, they generally act as intelligence pools and assessment or fusion units. In this regard, in the post-9/11 period, the alliance has put an emphasis on developing stronger ties with agencies like the European Police Office (Europol) and the International Criminal Police Organization (Interpol), boosting intelligence sharing with partners, and developing additional technical intelligence capabilities to combat terrorism.[65]

With regard to bolstering intelligence sharing with partner nations, the Euro-Atlantic Partnership Council/Partnership for Peace Intelligence Liaison Unit in Mons, Belgium, plays an important role. In addition, in the NATO structure, the Intelligence Fusion Center in Molesworth, UK, is responsible for producing intelligence to support operational-level decisionmaking and military planning.[66]

Nevertheless, NATO is in acute need of standardizing its intelligence-sharing efforts. Each member nation—even each intelligence agency of those nations—has different strategic cultures and subcultures, follows different procedures when dealing with classified information, and focuses on different security intelligence priorities and data protection regulations. There is also a need for tailor-made approaches to intelligence sharing with partner nations that are at the forefront of counterterrorism efforts. Such approaches should take into account partners' specific security environments and individual capabilities for intelligence collection and analysis.

In addition, although NATO has no mandate for collecting intelligence directly and working on raw intelligence products, it could use its interpretation mandate more effectively to develop an efficient terrorism risk assessment model for the alliance, with a special focus on the Southern flank. To fulfill this objective, different NATO bodies should work on evaluating the most likely targets of possible terrorist attacks, conducting a vulnerability and consequence risk assessment for the likely targets, and predicting the expected modes of possible terrorist activities. With this model, alliance decisionmakers could be provided with holistic risk modeling that evaluates threats according to several variables such as target type, attack type, and the severity of the potential damage.[67]

Without a doubt, intelligence is a vital area for NATO to pursue both offensive and defensive missions when confronting violent extremism. To address the terrorist threat located in and emanating from the Southern flank, NATO should adopt a set of intelligence categories, ranging from strategic intelligence in the broadest context to military intelligence at the specific operational level to human intelligence at the tactical level. An equally important objective should be to improve the operational effectiveness of the fusion centers, which will be conditional on creating an enhanced framework of intelligence sharing with partner nations. The ultimate aim should be to upgrade the amount of actionable intelligence collected by and from partner and member nations.

Preventing Threats From Nonstate Actors
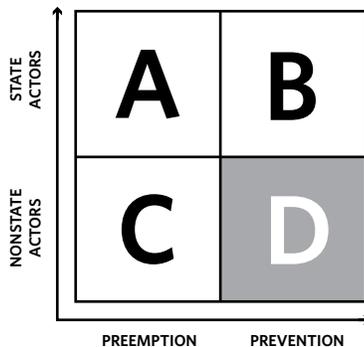
Proliferation of Weapons of Mass Destruction

Overview

A major threat that certain states and, particularly, nonstate actors pose to the NATO alliance is the proliferation of WMD, from nuclear to biological to chemical weapons.

Theoretically, states pursue chemical and biological warfare capabilities for two main reasons. First, while nuclear weapons necessitate advanced technological and industrial capabilities and tightly controlled materials, the production of chemical and biological weapons is cheaper, is easier to hide, and could depend on commercially available materials.[68] Second, in the absence of robust nuclear capabilities, chemical and biological weapons could be used to maintain intrawar deterrence. In military literature, the term "intrawar deterrence" refers to the "process of explicit or tacit bargaining within an ongoing war that still has key limits or thresholds that have not been crossed," according to one security expert.[69] WMD, particularly nuclear weapons, are optimal tools to provide intrawar deterrence due to their massive destructive capabilities.

The main tenets of this analysis could be extended to cover rogue nonstate actors such as the Islamic State that harbor territorial ambitions. Following the terrorist attacks in Paris in November 2015, French Prime Minister Manuel Valls underlined the danger stemming from "chemical or bacteriological weapons" that could be used by the radical extremist network.[70] In the UK's 2015 National Security Strategy and Strategic Defense and Security Review, the country's most important publicly available official security and defense document, British defense planners estimated that the Islamic State was actively seeking to acquire chemical, biological, and radiological capabilities.[71] As early as 2002, NATO's Military Concept for Defense Against Terrorism had already underlined the risk of WMD terrorism.[72]

Many recent discoveries have helped paint an alarming picture concerning the potential access of violent extremists to WMD. In 2014, a laptop captured

from an Islamic State–linked Tunisian strategic weapons expert revealed some of the caliphate's plans. The computer allegedly contained a nineteen-page document for weaponizing bubonic plague from infected animals for biological warfare purposes, coupled with a fatwa, or religious ruling, issued by the jihadist cleric Nasir al-Fahd legitimizing the use of WMD.[73]

Another potential biological threat is Ebola. The pathogen has become very attractive for violent extremists who pursue WMD capabilities other than nuclear weapons. During the 2014 Ebola outbreak in Africa, the British Secret Military Scientific Research Unit assessed the possibilities of bioweaponization of the Ebola virus by the Islamic State.[74] The UK Ministry of Defense released two documents under freedom of information requests, albeit highly redacted for declassification reasons, that highlighted the caliphate's biological warfare intentions and emphasized the dire consequences of a potential Ebola attack on civilian populations.[75]

Alongside biothreats, terrorist networks are also improving their chemical warfare expertise and capabilities.

Alongside biothreats, terrorist networks are also improving their chemical warfare expertise and capabilities. In June 2014, the Islamic State overran two bunkers close to Baghdad that were used as chemical weapons depots during the era of former Iraqi president Saddam Hussein. Of these facilities, bunker 13 was reported to house 2,500 rockets filled with the lethal nerve gas sarin as well as some 180 tons of sodium cyanide, which is highly toxic and is used as a precursor for tabun, a chemical warfare agent. Another facility, bunker 41, reportedly held some 600 containers of mustard gas residue and 2,000 empty artillery shells contaminated with the same chemical agent.[76] It should also be highlighted that Syria's chemical weapons disarmament program is fairly problematic, as a significant proportion of Syrian President Bashar al-Assad's chemical agents remains intact.[77]

Violent extremists have already deployed the chemical weapons to which they have access. In September 2014, the Islamic State used chlorine to launch a chemical attack in Iraq. Around the same time, in northern Fallujah, the group showed more sophistication in its use of chemical warfare by employing chlorine gas and vehicle-borne improvised explosive devices that claimed the lives of 300 Iraqi soldiers. Apart from chlorine, the Islamic State also uses mustard gas in its violent campaign. The militants attacked the positions of Kurdish peshmerga forces in Iraq with 4.7-inch mortars tipped with mustard warheads.[78] The use of mustard gas–tipped artillery is of critical importance, as it points to the improving chemical warfare capabilities of the terrorist network.

In addition, a number of technological developments have increased the risk of the proliferation of biological and chemical weapons. For instance, geotagging images has made it easier for any ill-intentioned Internet user or group of users to harvest "pathogens from nature to the specific source of virulent disease outbreaks," in the words of WMD experts John Caves and Seth Carus.[79]

Advanced bioreactors could be obtained easily and used to multiply the strains necessary for developing biological warfare assets. These assets can now be delivered much more easily than in the past by technologically advanced and commercially available agricultural sprayers. Furthermore, an increasing understanding of proteomic and genomic information and genetic modification could allow attackers to dangerously manipulate bioagents to make them more resistant to defensive, medical countermeasures.

Likewise, advancing encapsulation and nanotechnology contribute to the potential delivery of chemical weapons, making them even more dangerous than ever. Chemical materials are much more commercially available now than in the past, and microreactors provide important production capabilities. More importantly, current life science trends are expected to enable a combination of different chemical and biological agents to be merged into single weapons.

In sum, in the coming decades, these agents will become more accessible, more destructive, and more sophisticated in their delivery.[80]

Policy Response

NATO's outlook on global WMD proliferation and threats is not new. At the Washington summit in 1999, leaders of the alliance launched the WMD Initiative to integrate political and military aspects of the alliance's work in responding to the proliferation of these weapons. NATO's WMD Non-Proliferation Center at NATO headquarters in Brussels was then set up in 2000. Subsequently, in the post-9/11 period, NATO initiated the Multinational Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Battalion as well as the Joint Assessment Team in 2003, and these units were declared fully operational at the Istanbul summit in 2004. These two initiatives are part of the Joint CBRN Defense Task Force. And in 2007, NATO's Joint CBRN Defense Center of Excellence in Vyškov, the Czech Republic, was activated.[81]

The major conceptualization success of the alliance on the changing nature of the WMD threat was achieved at the 2006 Riga summit, which produced the Comprehensive Political Guidance setting out the framework and priorities for developing NATO's capabilities in future years. Subsequently, in April 2009, NATO leaders endorsed the Comprehensive Strategic Level Policy for Preventing the Proliferation of WMD and Defending Against CBRN Threats. The policy states that

> the spread of WMD and their means of delivery and the possibility that terrorists will acquire them are the principal threats facing the Alliance over the next 10-15 years. Therefore, the Alliance seeks to prevent their proliferation through an active political agenda of arms control, disarmament and non-proliferation; as well as by developing and harmonising defence capabilities; and, when necessary, employing these capabilities consistent with political decisions in support of non-proliferation objectives.[82]

The alliance's abilities to address biological threats were significantly improved with the establishment of the Deployment Health Surveillance Capability in Munich, Germany. Operating under the umbrella of the NATO Center of Excellence for Military Medicine, the capability focuses on defending deployed NATO forces against biological warfare threats and infectious diseases.[83]

The WMD threat emanating from nonstate actors also found its place in NATO's 2010 Strategic Concept. The document states that "terrorism poses a direct threat to the security of the citizens of NATO countries, and to international stability and prosperity more broadly. Extremist groups continue to spread to, and in, areas of strategic importance to the Alliance, and modern technology increases the threat and potential impact of terrorist attacks, in particular if terrorists were to acquire nuclear, chemical, biological or radiological capabilities."[84] This observation led the political leadership of the alliance to commit itself to "further develop NATO's capacity to defend against the threat of chemical, biological, radiological and nuclear weapons of mass destruction."[85]

In light of the specific and immediate challenge of the palpable potential for non-nuclear WMD proliferation on its Southern flank, NATO should seek to complement its proliferation surveillance capabilities and improve its situational awareness of chemical and biological threats on a global scale. At present, NATO carries out only theater-level chemical and biological weapons assessments, and only in relation to deployed NATO missions. But going forward, NATO should substantially broaden its preemptory screening and should seek to upgrade its disease and epidemic surveillance capabilities at a global level, as harvesting pathogens from nature has become much easier for nonstate groups and even individuals. An option could be to establish more robust cooperation and intelligence sharing with the World Health Organization.

Beyond these measures designed to mitigate the threat, NATO should also review its deterrence strategy against violent nonstate actors that have demonstrated the potential to use non-nuclear WMD. For more than a decade, NATO has been cognizant of WMD threats other than nuclear weapons in the hands of nonstate actors. Yet, the alliance has so far favored defensive measures and consequence-management tools as the elements of its counter-WMD approach, with precious few concrete steps for the development of a more comprehensive and effective deterrence strategy.

> **NATO has favored defensive measures and consequence-management tools as the elements of its counter-WMD approach. It should review its deterrence strategy against violent nonstate actors that have demonstrated the potential to use non-nuclear WMD.**

The most likely culprit for this lack of reasoning is an understanding that deterrence does not work against terrorist groups. That may have been the case in relation to terrorist entities such as al-Qaeda that are mainly in the business of exporting terror.[86] But the Southern flank is now witnessing an exception to this perceived rule, with the emergence of the Islamic State as a territorial protostate. Following the NATO defense ministers' meeting in February 2016,

in his press conference, Stoltenberg used the term "non-state actors with state-like aspirations" to address the need to tailor NATO's defense and deterrence to counter such entities.[87]

Therefore, the alliance must consider whether it can formulate a proper deterrence strategy against the Islamic State. What should be the proper retaliation strategy in case of a non-nuclear WMD attack against a NATO country perpetrated by a nonstate actor with state-like aspirations?

NATO could retaliate with conventional weapons. The question then is whether the threat of a conventional retaliation would be sufficient to deter a WMD attack in the first place. It may not be possible to engineer such a response immediately. Preparations on a vast scale may be necessary to launch an exacting retaliation campaign. A retaliation in kind—namely, with the use of chemical or biological weapons—is also out of the question. All NATO members are parties to the Chemical Weapons Convention and Biological Weapons Convention. More importantly, using these weapons is prohibited by the 1925 Geneva Protocol, which binds all NATO nations.

Could tactical nuclear weapons be used in such a scenario as a retaliation strategy? Some NATO nations' individual nuclear posture documents have already addressed this uneasy question. For example, the 2010 U.S. Nuclear Posture Review underlines that

> after the United States gave up its own chemical and biological weapons (CBW) pursuant to international treaties (while some states continue to possess or pursue them) the United States reserved the right to employ nuclear weapons to deter CBW attack on the United States and its allies and partners. . . . The United States is now prepared to strengthen its long-standing "negative security assurance" by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the [Nuclear Non-Proliferation Treaty] and in compliance with their nuclear non-proliferation obligations. . . . Given the catastrophic potential of biological weapons and the rapid pace of bio-technology development, the United States reserves the right to make any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat and U.S. capacities to counter that threat.[88]

In brief, the United States considered nuclear weapons as a response against chemical and biological attacks after it renounced its own chemical and biological weapons capabilities. Additionally, the U.S. policy of nuclear response against non-nuclear WMD threats has traditionally centered on the concept of calculated ambiguity. In this context, the main objective was to deny an adversary that was planning a chemical or biological attack on the United States a comfort zone with regard to the scope of the response.[89]

Both London and Paris have adopted a policy of no use against non-nuclear countries, with certain caveats. According to the UK's National Security Strategy and Strategic Defense and Security Review,

the UK will not use, or threaten to use, nuclear weapons against any Non-Nuclear Weapons State party to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). This assurance does not apply to any state in material breach of those non-proliferation obligations. While there is currently no direct threat to the UK or its vital interests from states developing weapons of mass destruction, such as chemical and biological capabilities, we reserve the right to review this assurance if the future threat, development or proliferation of these weapons make it necessary.[90]

Despite the apparent intent of the Islamic State to develop or acquire non-nuclear WMD, as well as the nuclear postures of key individual NATO allies that do not necessarily rule out a nuclear response to a WMD attack, NATO's overall nuclear position remains wedded to the principle of negative assurance. The 2012 NATO Deterrence and Defense Posture Review included the following statement on the alliance's nuclear forces:

> Allies acknowledge the importance of the independent and unilateral negative security assurances offered by the United States, the United Kingdom and France. Those assurances guarantee, without prejudice to the separate conditions each State has attached to those assurances, including the inherent right to self-defence as recognised under Article 51 of the United Nations Charter, that nuclear weapons will not be used or threatened to be used against Non-Nuclear Weapon States that are party to the Non-Proliferation Treaty and in compliance with their nuclear non-proliferation obligations. Allies further recognise the value that these statements can have in seeking to discourage nuclear proliferation. Allies note that the states that have assigned nuclear weapons to NATO apply to these weapons the assurances they have each offered on a national basis, including the separate conditions each state has attached to these assurances.[91]

Furthermore, while NATO officially declares that the fundamental purpose of the alliance's nuclear forces is deterrence, official statements on nuclear policy—the Strategic Concept and the Deterrence and Defense Posture Review—fall short of suggesting a certain level of ambiguity with regard to the allied response to non-nuclear threats facing member nations.[92] Nor does the 2009 Comprehensive Strategic Level Policy for Preventing the Proliferation of WMD and Defending Against CBRN Threats mention any caveat on using NATO's nuclear forces as a deterrent against non-nuclear WMD threats. It is legitimate to question whether this lack of ambiguity is the right posture for NATO going forward against the background of a rising WMD threat in the alliance's Southern neighborhood.

Set against the argument of nuclear ambiguity is the reality that the exceptional use of even low-yield nuclear weapons would cause immense material, humanitarian, and environmental damage to states that already suffer from the instability triggered by violent extremists. Also, these groups are generally well embedded in local populations, so finding a viable target set with no or minimal risk of collateral damage may not be a simple task. Meanwhile, even if it were retained for extreme scenarios, the threat of nuclear retaliation to a WMD

attack by a nonstate actor could compel a host state to do its utmost to protect its own chemical or biological agents from being seized by violent extremists. This particular change in NATO's nuclear posture could build even stronger incentives against the proliferation of WMD and their precursors.

The Politics of Launching a Southern Flank Strategy

The political framework that the alliance would need to underpin its response to the widening security vacuum on its Southern flank is in place. To implement the variety of policy initiatives that can help NATO better manage these threats (see figure 2), alliance partners can rely on the 2010 Strategic Concept. Of particular relevance is the Comprehensive Approach, which compels the alliance to develop strategies and capabilities for cooperative security and crisis management to improve NATO's ability to adapt to the changing security landscape.

Figure 2: Policy Initiatives for NATO's Southern Flank

	PREEMPTION	PREVENTION
STATE ACTORS	• Improve ballistic missile defense capabilities • Establish a NATO Force Integration Unit (NFIU) in Turkey • Establish an additional NFIU with special amphibious or maritime capacities and strategic airlift in Italy or Spain • Launch a Southern flank reassurance initiative • Shorten the deployment gap between the Very High Readiness Joint Task Force and the NATO Response Force • Improve naval capabilities in the Eastern Mediterranean • Devise a renewed maritime strategy with a focus on proposed options for countering the anti-access and area-denial (A2/AD) threat	• Build capacities in partner nations on the Southern flank by focusing on training and advisory missions for military police, cultivating counterterrorism intelligence capabilities, and addressing chemical and biological threats • Explore the political feasibility of a renewed NATO-EU cooperation framework
NONSTATE ACTORS	• Adopt a more effective counterterrorism strategy • Boost intelligence sharing, including with partner nations • Standardize intelligence sharing among NATO allies • Develop an allied terrorism risk assessment model with a special focus on the Southern flank • Improve the operational effectiveness of fusion centers	• Improve situational awareness on a global scale regarding chemical and biological threats • Ensure more robust cooperation and intelligence sharing with the World Health Organization • Review the strategy for deterring violent nonstate actors • Introduce a policy of nuclear ambiguity vis-à-vis violent nonstate actors

When the Strategic Concept was drafted, the threat landscape facing the alliance was altogether different. Since the early 2010s, not only has Russia's mounting aggression changed the outlook for NATO's Eastern flank but the Southern flank has also started to be exposed to a multitude of destabilizing trends. The core structure of the Strategic Concept is nonetheless still relevant to enable NATO policymakers to develop a strategic response to the negative developments affecting the alliance's Southern neighborhood. This is undoubtedly an advantage that NATO policymakers should leverage when new policy responses are elaborated.

> **To the extent that more resources for the Southern flank mean fewer resources for the Eastern flank, differences between the threat perceptions of the NATO allies can create a real bottleneck.**

NATO could easily base its strategy for the Southern flank on the Strategic Concept. The operationalization of such a strategy would nonetheless need to combine efforts to enhance current capabilities with initiatives to invest in new capacities. For instance, NATO has already developed monitoring capabilities with respect to chemical and biological weapons. But at present, these capabilities are limited to the theater of operations that coincide with NATO missions. The next step should be to upgrade this monitoring beyond the purely tactical level. Similarly, NATO already has a framework for intelligence sharing among its allies as well as with its partner nations. The next phase should involve an improvement of this critical endeavor, for instance by standardizing intelligence requests and responses. The alliance can therefore implement a range of measures under a Southern flank strategy without triggering difficult debates at the political level, given the superficial impact of these measures on defense budgets.

A Southern flank strategy built on these mechanisms would need to be complemented by measures that would unavoidably have a budgetary impact and would therefore necessitate a political consensus. The improvement of NATO's ballistic missile defenses and the overhaul of NATO's maritime strategy for the Eastern Mediterranean as a necessary response to Russia's A2/AD strategy in Syria fall into this category.

This observation leads to the political dilemmas facing NATO policymakers in their bid to enhance the ability of the alliance to genuinely manage the security challenges of the South. Given the impact of austerity measures on allies' defense budgets and the lack of a more cohesive effort in many allied nations to fulfill the target of spending 2 percent of GDP on defense, the development of additional capabilities will require a difficult trade-off.[93] In addition to the ongoing debate on how many resources are to be allocated to NATO, the current environment of fiscal duress is likely to generate tension over where resources should be channeled.

To the extent that there is an actual trade-off and that more resources for the Southern flank mean fewer resources for the Eastern flank, differences between the threat perceptions of the NATO allies can create a real bottleneck. The Eastern flank and Baltic countries that continue to perceive a threat from

Russia would legitimately seek to skew future alliance assets and capabilities toward the aim of strengthening NATO's traditional deterrence posture. But for Southern flank countries, the threat landscape is more diffuse and more complex. They would hence seek to pull NATO in the direction of a capabilities-development strategy, fully reflecting the versatility of the alliance's Comprehensive Approach.

The Warsaw summit in July 2016 provides a unique opportunity for NATO to overcome this strategic vulnerability and deal constructively with this potentially divisive issue of priorities.

Reaching an agreement on a strategy for the Southern flank will also require revisiting the perennial question of transatlantic burden sharing. Given Europe's exposure to the expanding arc of instability and insecurity to its South, a sounder European commitment to replenish the NATO pool of assets and capabilities would be welcome. In Warsaw, U.S. security policymakers are likely to remind their European counterparts about the unbridged gap between U.S. and European contributions to transatlantic security, with the United States accounting for 73 percent of total allied defense spending.[94]

To overcome this increasingly polarizing issue in the transatlantic relationship, European policymakers have to reshape their strategic communications with their domestic audiences. The new narrative should underline the need for Europe to start reinvesting in its own security. In a world where the nexus of U.S. strategic priorities is shifting away from the old continent and its neighborhood, the only option for those nations seeking more effective management of their current and potential security environment is renewed and sustainable investment in defense and crisis-management capabilities.

European policymakers have to reshape their strategic communications with their domestic audiences. The new narrative should underline the need for Europe to start reinvesting in its own security.

The alliance can act as a multiplier of this effort. But first an enabler is needed. For many allies, the onset of the refugee crisis, coupled with the emergence of Russian assertiveness as well as the growing threat of violent extremism, provides the necessary backdrop to change and improve the politics of security and defense in Europe. For other allies as well, this conclusion may be ineluctable, with no imminent prospect of a return to stability in Europe's Southern neighborhood.

But the most difficult and insidious challenge facing the development of a robust NATO response for addressing the threats affecting its Southern flank is much broader than alliance politics. The domestic political orders of many Western nations are affected by the rise of populist parties with simplistic messages about economic and security challenges. These atavistic propositions have gained traction in many polities, as illustrated by the surprising popularity and resilience of the electoral platform of Republican presidential candidate Donald Trump in the United States and the lead positions of far-right parties in Austria, France, and the Netherlands.

Even if these movements do not eventually rise to power, they are unavoidably set to impact domestic landscapes and political discourses. The politics of the containment of populism are shifting the political center closer to the agendas of these movements. At the same time, there are no simple or short-term solutions to these shocks to the political system, which rely on accumulated social discontent generated by the adverse impact of globalization.

The political and ideological battles that are being triggered at the domestic level in many key Western countries are set to impact the overall ability of the transatlantic alliance to project peace and stability beyond its borders. The risk for the foreseeable future is the emergence of an introverted Western world, incapacitated by its inability to respond to the populist challenge. It is this political environment that is the real threat to the cohesion and robustness of the alliance as well as the key obstacle to the elaboration of a forward-looking strategy to address the security challenges of the South.

The task facing NATO leaders is to overcome this very real risk of a domestically driven era of international policy inertia. NATO's role would once again be transformed. This unique platform for transatlantic dialogue could then be leveraged to regenerate a sense of policy leadership and be used as an institutional counterweight to domestic political trends that will seek to entrench a reactive and ultimately counterproductive ideology of international isolationism.

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