

THE HENRY M. JACKSON
SCHOOL OF INTERNATIONAL STUDIES

UNIVERSITY *of* WASHINGTON

TASK FORCE REPORT



NATO and Russia: Strengthening the Alliance
and Improving Resilience

2018



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Executive Summary

The North Atlantic Treaty Organization (NATO) and the Russian Federation, which will be referred to in this paper as Russia, have a long history of contention that stems from the Cold War and is present to this day. After the fall of the Soviet Union, the future of NATO-Russia relations went through a period of cautious optimism. But after the 2014 Russian annexation of Crimea, dialogue between NATO and Russia deteriorated. With significant challenges ahead, the Alliance should analyze its capabilities and ready itself with a multi-faceted defense.

Background

NATO is a political and military alliance that includes 29 member states which exists to promote democratic values, prevent conflict, and provide collective defense. NATO has changed its role since the fall of Soviet Union to focus on promoting peace under Article 2 of the Washington Treaty. NATO is currently leading Resolute Support in Afghanistan, a mission to provide training, advice, and assistance to local security force and institutions. The Alliance has been active in Kosovo since 1999 and has maintained its presence in order to prevent casualties and address the political deadlock regarding northern Kosovo. In addition, NATO has been active in the Mediterranean Sea since the 9/11 terrorist attacks. First, under Operation Active Endeavor and currently Operation Sea Guardian, NATO enforces counter-terrorism measures and supports capacity building to provide a safe maritime environment. These are several areas in which NATO is active but the Alliance is now dealing with Russian threats that it should fully address.

Areas of Focus

This paper will focus primarily on five current challenges NATO faces in a rapidly evolving environment. This will include conventional warfare, hybrid warfare, energy security, WMDs, and political challenges. NATO is now confronted with a hybrid method of infiltration and disruption from Russia that requires careful analyses and proper responses.

Over the past decade, Russia has shown an increased willingness to use conventional and proxy forces to intimidate, influence, and control nations along NATO's eastern border. Russian President Vladimir Putin has brought the prospect of territorial conquest to modern-day Europe. NATO leadership should be conscious of Russia's recent military exercises and efforts to modernize their conventional military forces. Consequently, NATO should reevaluate deterrence policies in the Eastern Baltics.

Technological advancements have yielded new domains for threats—such as cyber—that Russia uses for various attacks, espionage, and disruption. Russia has taken a combined approach in all these areas to create a range of capabilities that allow for intervention on different fronts. NATO should continue to update its cyber-defense systems and create improved protocols for preventing attacks as well as to react to perpetrators with swift justice.

Energy import dependency varies greatly between NATO member states. The Baltic region is reliant on Russian petroleum imports for 75-100% of its energy. Therefore, a hypothetical energy embargo by Russia would be disproportionately devastating to that region. Given the tendency of Russia to use energy as an instrument of foreign policy, continued Russian energy dominance may threaten the Alliance's ability to conduct operations in contested North Atlantic Treaty areas. Decreasing this Russian leverage and requires a carefully planned response framework as well as a diversification of energy sources. It is imperative that member states possess the capability to maintain critical infrastructure functions in the absence of primary exporters.

Recent threats from Russia have raised the need for NATO to reanalyze its position regarding WMD threats. This report investigates the Alliance's current positions and actions to counteract Chemical, Biological, Radiological and Nuclear weapons threats, and the future of weaponry that may be classified as WMDs in the future.

In looking at the political relationship between NATO and Russia, it is imperative to recognize that promoting diplomacy and transparency are of the utmost priority. Within NATO, there are 29 sovereign states with 29 separate interests, but belief in the consensus and collective security hold the Alliance together. Between NATO and Russia, there are decades of history, trust building, and cooperation, but recent acts of aggression have challenged that partnership. NATO should move towards a functioning Russian partnership while maintaining the integrity of the Alliance.

Policy Recommendations

Conventional Warfare:

NATO should bolster current Baltic defense capabilities to effectively counter increased Russian military activity in the region.

Hybrid:

Coordinate with other institutions to reduce the risk of Russian influence on ethnic minorities in the Baltic States. Expand existing policies to include cybersecurity and modern cyber threats to encourage their implementation in the security framework of member states.

Energy Security:

Increase cooperation with the EU by supporting key mutual energy directives and create a contingency plan that will sustain energy use until alternative sources can be found.

Weapons of Mass Destruction:

Refocus existing nuclear policies to defend against reemerging Russian aggression and reorient NATO sectors towards greater chemical, biological, and even cyber threats posed by Russian action around the world

Political Challenges:

Retain the enlargement mechanism and the willingness to invite other countries to join the Alliance. NATO should continue relations with Russia via the NATO-Russian Council for the purpose of proactive transparency.

NATO Conventional Forces

Liam Lawrence

Introduction

Over the past decade, Russia has shown an increased willingness to use conventional and proxy forces to intimidate, influence, and control nations along NATO's eastern border. Following Western efforts to foster relationships with former Soviet satellite states, such as Armenia, Azerbaijan, Belarus, Georgia, and Ukraine, Russia has mobilized its military presence along its Western border. Concerned by Russian involvement in Georgia, Ukraine, and the most recent ZAPAD and snap military exercises, NATO's Baltic members have called for the Alliance to reaffirm their commitment to Article 5 and to provide military aid in the event of a conventional attack. If NATO intends to ensure the security of their Baltic members, the Alliance should reassess their conventional deterrence and defense platforms. Recently, NATO members have begun rotating infantry battalions to Estonia, Latvia, and Lithuania, however these forces are relatively small compared to that of Russia.

This section will seek to evaluate the current conventional threat from Russia in the Eastern Baltics and how NATO should respond. When discussing the security of the Baltic region, NATO members must answer several questions. Should additional NATO forces be deployed to the Baltic region? If yes, what form should these forces take and why? How can these forces support regional defenses? And how can these forces be utilized to minimize Russian escalation of military threats in the region? For the purpose of this paper, conventional warfare is to be defined as armed conflict between two or more states, with the use of conventional weaponry (excluding nuclear weapons) and battlefield strategy. The following portion of this report will aim to answer these questions and provide clear policy recommendations to ensure the security of NATO's Baltic members.

NATO and Russia in the Eastern Baltics

Russian Capabilities

Hard power has long been at the forefront of both Soviet and Russian thinking.¹ For this reason, the military has been a central focus in order to consistently improve combat readiness, reaction speed, and rapid intervention forces.² In 2008, Russia launched a military reform and modernization program. Since then, the country has remained steadfast in these modernization efforts.³ Putin has reaffirmed this desire for greater military readiness⁴ and in 2010 Russia announced the State Armaments Program which “aims to replace 70 percent of Russia’s military equipment by 2020,” including their high-precision conventional weapons.⁵ From 2007 to 2016, Russia’s military expenditure rose from approximately thirty-seven billion dollars to just over seventy billion.⁶ In terms of their annual GDP, the percentage spent on military expenditure increased from 3.75% to 5.4% between 2012 to 2016.⁷ In addition, Russia’s defense budget rose from twenty-five billion dollars in 2006 to fifty billion in 2009, and up to ninety billion in 2013.⁸ Russia has an unwavering dedication to both qualitative and quantitative improvements to defense.⁹

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- 1 Henrik Praks, “Hybrid or Not: Deterring and Defeating Russia’s Ways of Warfare in the Baltics -- The Case of Estonia”, NATO Research Division Publication, December 2015: 6.
 - 2 Ibid.
 - 3 Richard Sokolsky, "The New NATO-Russia Military Balance: Implications for European Security," Carnegie Endowment for International Peace, March 13, 2017, , accessed February 16, 2018, <http://carnegieendowment.org/2017/03/13/new-nato-russia-military-balance-implications-for-european-security-pub-68222>.
 - 4 Dave Johnson, "ZAPAD 2017 and Euro-Atlantic security," NATO Review, December 14, 2017, accessed February 16, 2018, <https://www.nato.int/docu/review/2017/Also-in-2017/zapad-2017-and-euro-atlantic-security-military-exercise-strategic-russia/EN/index.htm>.
 - 5 Deputy Assistant Secretary of Defense Michael R. Carpenter, "Russia’s Violations of Borders, Treaties, and Human Rights" (address, Hearing of the United States Senate Committee on Foreign Relations Opening Testimony, February 5, 2018), June 7, 2016, https://www.foreign.senate.gov/imo/media/doc/060716_Carpenter_Testimony.pdf, 3.
 - 6 "Military expenditure by country, in constant (2015) US\$ m., 1988-1996 ," chart, in *STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE*, 20, Data for all countries from 1988–2016 in local currency (SIPRI Databases). <https://www.sipri.org/databases/milex>.
 - 7 "The World Factbook: RUSSIA," Central Intelligence Agency, January 23, 2018, , accessed February 5, 2018, <https://www.cia.gov/library/publications/resources/the-world-factbook/geos/rs.html>.
 - 8 Kris Osborn et al., "Here's What Would Happen If Russia and NATO Went to War (or World War III)," The National Interest, March 1, 2017, , accessed February 5, 2018, <http://nationalinterest.org/blog/the-buzz/heres-what-would-happen-if-russia-nato-went-war-or-world-war-19630>.
 - 9 Sokolsky, "The New NATO-Russia Military Balance:”

Russia has not shied away from the prospect of “old-fashioned” territorial conquest in Europe, nor from military involvement in the rest of the world.¹⁰ In the 2008 Russo-Georgian War, Russia deployed aircraft and ground troops in Georgia, which led to the occupation of Abkhazia and South Ossetia. Their conventional forces bombed several towns, and essentially “pulverized the small Georgian army.”¹¹ In 2014, Russia launched a military invasion in Crimea, eventually leading to the Peninsula’s annexation. Eastern Ukraine has also been subject to “covert Russian military activities.”¹² Still today, Russia exerts their military presence abroad, most noticeably in Syria where Russian forces have allied with and sustained President Bashar al-Assad.¹³

Russian Exercises

Since Russia’s invasion of Georgia in 2008, Putin has carried out nine annual exercises that range anywhere from 8,000 to 100,000 participating troops.¹⁴ Russia’s yearly drills, referred to as KAVKAZ (South), ZAPAD (West), VOSTOK (East), or TSENTR (North), are meant to draw attention to the weaknesses within command, control, communication, computers, intelligence, surveillance, and reconnaissance (C4ISR). Russia’s next annual exercise will take place in 2018 in their eastern military district. In addition, Russia uses “snap” exercises to “test a military’s ability to mobilize and deploy with immediacy.”¹⁵ After Putin declared his intent to increase military readiness in 2013, there was a significant push to increase “no-notice snap exercises.”¹⁶ These exercises are often similar in size and scope to Russia’s annual exercises, but in some instances have been even larger.¹⁷ Despite Russia’s increase in military exercises and their frequency, the Russian Ministry of Defense stands by the claim that these exercises are purely defensive.¹⁸ However, these various operations remain a serious concern to NATO, as they allow

10 Praks, “Hybrid or Not,” 1.

11 "A Scripted War." *The Economist*. August 16, 2008. <http://www.economist.com/node/11920992>.

12 Vira Ratsiborynska, “When Hybrid Warfare Supports Ideology: Russia Today”, NATO Research Division Publication, November 2016.

13 Kathrin Hille, Erika Solomon, and Najmeh Bozorgmehr, "Russia’s military operation in Syria nears end, say Assad and Putin," *Financial Times*, November 21, 2017, , accessed February 5, 2018, <https://www.ft.com/content/49c9e8d4-ce95-11e7-9dbb-291a884dd8c6>.

14 Johnson, "ZAPAD 2017."

15 Ian Brzezinski and Brzezinski and Nicholas Varangis, "The NATO-Russia Exercise Gap... Then, Now, & 2017," *Atlantic Council*, October 25, 2016, accessed February 5, 2018, <http://www.atlanticcouncil.org/blogs/natosource/the-nato-russia-exercise-gap-then-now-2017>.

16 Johnson, "ZAPAD 2017."

17 Ibid.

18 Ibid.

Russia to enhance their military capabilities while simultaneously undermining the regional peace and stability around the eastern Baltic region.

While NATO does acknowledge Russia's exercises and supports the sovereign right of all nations to exercise their conventional forces, the Alliance has become more critical of Russia's commitment to the Vienna guidelines, agreements, and international obligations. The Vienna document, a politically-binding agreement,¹⁹ aims to enhance the transparency of military activities by implementing "an annual exchange of military information, on-site inspections and notifications of certain types of military activities."²⁰ Unfortunately, Russia has begun to evade these Vienna requirements,²¹ especially when it comes to transparency.²²

For one, Russia is implementing far more large-scale snap exercises.²³ Because these exercises do not have to be reported under the Vienna Convention,²⁴ it allows Russia to evade observations of their drills by OSCE members. Furthermore, Russia consistently exceeds the number of troop participants and geographical scope of their exercises than what they record prior to their occurrence.²⁵ For instance, in their most recent ZAPAD-17 exercise, Russia reported around 12,000 participating troops, whereas foreign analysts projected the actual number of troops to be closer

19 NATO, "NATO's role in conventional arms control," May 22, 2017, accessed March 5, 2018, https://www.nato.int/cps/su/natohq/topics_48896.htm.

20 The Vienna document was created in 1990 in order to strengthen "confidence-and security-building measures" among the fifty-seven members within Organization for Security and Cooperation in Europe. Ariana Rowberry, "The Vienna Document, the Open Skies Treaty and the Ukraine Crisis," Brookings, July 28, 2016, accessed February 5, 2018, <https://www.brookings.edu/blog/up-front/2014/04/10/the-vienna-document-the-open-skies-treaty-and-the-ukraine-crisis/>.

21 Three requirements of the Vienna Document include, "42 days prior notification of certain military activities, specifically those exceeding 9,000 troops, 250 tanks, 500 armored combat vehicles or 250 pieces of artillery", mandatory OSCE monitoring on "all military activities exceeding 13,000 troops, 300 tanks, 500 armored combat vehicles and 250 pieces of artillery," and that all members "will carry out no more than one military activity every three years involving more than 40,000 troops, or 900 tanks, or 2,000 armored combat vehicles or 900 pieces of artillery." Ibid.

22 Col. Tomasz K. Kowalik and Dominik P. Jankowski, "The dangerous tool of Russian military exercises," CEPA, May 9, 2017, accessed February 5, 2018, <http://cepa.org/EuropesEdge/The-dangerous-tool-of-Russian-military-exercises>.

23 Carpenter, "Russia's Violations." 3.

24 Jens Stoltenberg, "Press conference by NATO Secretary General Jens Stoltenberg following the meeting of the NATO-Ukraine Commission at the level of Defence Ministers," NATO North Atlantic Treaty Organization, delivered June 15, 2016, https://www.nato.int/cps/en/natohq/opinions_132488.htm?selectedLocale=en.

25 NATO Secretary General Jens Stoltenberg, "Press point by the NATO Secretary General Jens Stoltenberg following the meeting of the NATO-Russia Council," NATO, October 26, 2017, , accessed February 5, 2018, https://www.nato.int/cps/su/natohq/opinions_147976.htm.

to 60,000 to 70,000.²⁶ Russia has made sure it has below the quantity of troops in which requires a “mandatory invitation of foreign observers under the Vienna Convention.”²⁷ It also compartmentalizes its large scale exercises into smaller, spread out clusters that stay within the Vienna requirements. Ultimately, this has allowed Russia to evade transparency commitments outlined in the Vienna document, and has prevented NATO from being given adequate warning as to when an exercise will take place.

Another concern regarding Russia’s exercises is the way in which they have been used to disguise preparations for real attacks against sovereign nations. In 2008, Russia utilized their KAVKAZ exercise to mask a conventional attack in Georgia. Similarly, in 2014, Russia carried out a snap exercise of 150,000 troops in its Western military district, which directly borders Ukraine.²⁸ This exercise in Ukraine served as a distraction while Russia invaded Crimea. Russia’s ability to seamlessly transform an exercise into a military attack—enshrined in their *maskirovka* conventional doctrine—poses a tangible risk to the eastern Baltic states.²⁹

Thus far, NATO’s response to Russia’s snap exercise has been measured. However, the mounting scale and intricacy of their Western-focused ZAPAD series, near NATO’s eastern border, has caused the Alliance to question their deterrence and defense measures. Alongside Russia’s objective to “project a related sense of risk to neighbors,” is their desire “to provoke exploitable reactions by NATO and individual nations,” further stressing the importance of a strengthened, yet balanced NATO stance and response.³⁰ NATO should prevent Russia from creating a “new normality” in its ongoing exercise campaign, and from letting Russia evade international law and place a serious threat against NATO’s Baltic countries.³¹

26 Johnson, "ZAPAD 2017."

27 Ibid.

28 Lee Litzenberger, "Beyond Zapad 2017: Russia's Destabilizing Approach to Military Exercises," War on the Rocks, November 27, 2017, , accessed February 5, 2018, <https://warontherocks.com/2017/11/beyond-zapad-2017-russias-destabilizing-approach-military-exercises/>.

29 "Russia's biggest war game in Europe since the cold war alarms NATO," The Economist, August 10, 2017, , accessed February 5, 2018, <https://www.economist.com/news/europe/21726075-some-fear-zapad-2017-could-be-cover-skulduggery-russias-biggest-war-game-europe>.

30 Johnson, "ZAPAD 2017."

31 Praks, “Hybrid or Not.” 6.

Russian Ideology and Interests

NATO cannot develop a successful strategy without a careful study of Russian goals and objectives. This section will give an overview of Russian beliefs and strategies that have persisted overtime, in order to underscore why NATO's eastern Baltic members do face a viable threat from Russia.

Under Putin's presidency, Russia has revived a mission to assert geopolitical influence and dominance on its western border. However, this assertive policy is not new and has long been influenced by Eurasian theories.³² Eurasian theories offer an ideological explanation for Russia's imperialist and expansionist strategies. While the fall of the Soviet Union caused a brief hiatus in Eurasian policy, it re-emerged in 1990 as Neo-Eurasian theory with an emphasis on "reunit[ing] all the countries of the former USSR into one powerful Russia"³³ and reviving *Russkij Mir*, "Russian World"—establishing the country as a protector of ethnic Russians abroad.³⁴ In following this ideology, Russia has shown a willingness to violate "the most basic principles of the global order—sovereignty, independence, and territorial integrity within internationally recognized borders," all of which seek to expand their sphere of influence.³⁵

The threat of Russian aggression has serious implications in the former-Soviet states³⁶ of Estonia, Lithuania, and Latvia, which have a sizeable number of ethnic Russians within their borders.³⁷ Because these ethnic Russians are not equally integrated within these countries, the areas which have a greater concentration of ethnic Russians, are likely targets for a Russian invasion.³⁸

32 Eurasia, known to be the "sacred space" of Russia, is an area partly in Asia and Europe, and was acquired through Russian conquest and colonization. Ratsiborynska, 5.

33 Ibid.

34 Praks, "Hybrid or Not." 2.

35 Carpenter, "Russia's violations." 1.

36 The countries that made up the former Soviet Union are Armenia, Moldova, Estonia, Latvia, Lithuania, Georgia, Azerbaijan, Tajikistan, Kyrgyzstan, Belarus, Uzbekistan, Turkmenistan, Ukraine, Kazakhstan, and the Russian Federation. Joseph Kipro, "What Countries Made Up The Former Soviet Union (USSR)?" WorldAtlas, May 24, 2017, accessed February 5, 2018, <https://www.worldatlas.com/articles/what-countries-made-up-the-former-soviet-union-ussr.html>;

37 In both Latvia and Estonia, ethnic Russians make up about a quarter of their populations.

38 Justin Burke, "Post-Soviet world: what you need to know about the 15 states," The Guardian, June 09, 2014, accessed February 5, 2018, <https://www.theguardian.com/world/2014/jun/09/-sp-profiles-post-soviet-states>.

The Zero Sum Game

Russia believes it is in a zero-sum game with the West,³⁹ and regardless of whether Putin had planned to stay in a zero-sum scenario, he has been locked into this position with his aggressive rhetoric and pervasive conventional exercises.⁴⁰ In an analysis of the current NATO-Russia state of relations, NATO Secretary General Jens Stoltenberg reaffirmed Russia's zero-sum strategy in dealing with the Alliance. He begins by saying that "when you have the right rules but minimal trust, you move from [a] zero-sum situation to a win-win situation."⁴¹ However, without both sides maintaining a respect for rules, there is no trust and the once possible win-win situation shifts purely to a zero-sum. Despite international rules in place today, such as those within the Vienna Convention, the state of dialogue has worsened as Russia has violated these conventions.

Russia still maintains its devotion to a zero-sum way of thinking, but has looked to smaller scale territorial gains, like Crimea, and to frozen conflicts that do not necessitate an immediate NATO response. The Kremlin intervened in Ukraine, Belarus, Georgia, and Moldova when these countries had announced a desire for greater cooperation with the West. All are now in ongoing frozen conflicts. Russia has been careful not to cross NATO's "red line" by only invading weaker adversaries not included in the alliance, but these actions continue to test NATO's resolve.⁴² As long as NATO focuses on their Baltic members, Putin will likely look to other "cheap victories" away from this area to prevent triggering an Article 5 response.⁴³

39 A zero-sum game is defined as "a situation in which one person or group can win something only by causing another person or group to lose it". "Zero-sum Game." Merriam-Webster. Accessed February 19, 2018, <https://www.merriam-webster.com/dictionary/zero-sum%20game>.

40 This is one common theme we've learned through our time with NATO affiliated speakers.

41 Jens Stoltenberg, "'Zero-Sum? Russia, Power Politics, and the post-Cold War Era" - Session at the Brussels Forum with participation of NATO Secretary General Jens Stoltenberg," NATO, March 20, 2015, , accessed February 5, 2018, https://www.nato.int/cps/su/natohq/opinions_118347.htm.

42 Sokolsky, "The New NATO-Russia Military Balance."

43 Ibid.

Case Study: Crimea

Russia's annexation of Crimea proved to be a turning point in NATO-Russia relations and Euro-Atlantic security.⁴⁴ The crisis began in 2013 when a pro-West coalition overthrew Ukrainian President Viktor Yanukovich.⁴⁵ Fearing a westernized Ukraine, Putin initiated immediate action by leveraging "mobility, speed of action, surprise, and the capability to command forces securely at the small-unit level," all of which were facilitated by troops' familiarity with the language and culture in the area, as well as their close proximity to Ukraine.⁴⁶ In a militarily weak Ukraine, Russia was able to successfully mask troop movements with a snap exercise and rapidly captured the peninsula.⁴⁷ Crimea "came to symbolize everything the Putin regime feared about the West," specifically "the encroachment of the European economic and political model in the traditional Russian sphere of influence, Western support for an anti-Putin regime change, and the potential loss of Russian military assets in the Crimean port of Sevastopol."⁴⁸ Through the annexation of Crimea, it becomes clear that Russia is capable of making opportunistic decisions and has the military readiness and conventional means to do so.

NATO accused Russia of an illegal annexation of Crimea, but Russia continues to assert its claim that NATO expansionism is at fault. The Kremlin justified its actions by equating NATO's invasion of Kosovo to Russia's invasion of Crimea, in that both were dire humanitarian-based interventions.⁴⁹ NATO stands by the fact that its air campaign in Kosovo was launched solely to "prevent the large scale and sustained violation of human rights and the killing of civilians", and

44 Andrew Monaghan, "The Ukraine crisis and NATO-Russia relations," NATO Review Magazine, 2015, , accessed February 5, 2018, <https://www.nato.int/docu/Review/2014/Russia-Ukraine-Nato-crisis/Ukraine-crisis-NATO-Russia-relations/EN/index.htm>.

45 Michael Kofman et al. Lessons from Russia's Operations in Crimea and Eastern Ukraine, Santa Monica, CA: RAND Corporation, 2017, https://www.rand.org/pubs/research_reports/RR1498.html. Also available in print form.

46 Ibid.

47 Ibid.

48 Marten, "Reducing Tensions." 12.

49 In 1999, NATO intervened in Serbia and Kosovo in order to respond to a humanitarian crisis caused by the policies set by the Milosevic regime. NATO had two goals: first, "to help achieve a peaceful resolution of the crisis by contributing to the response of the international community" and second, "to promote stability and security in neighboring countries with particular emphasis on Albania and the former Yugoslav Republic of Macedonia." Although NATO intervened without the UN Security Council's approval, they acted in order to protect the ethnic cleansing that threatened thousands of Kosovar civilians. "NATO's role in relation to the conflict in Kosovo," NATO & Kosovo: Historical Overview, July 15, 1999, Accessed February 5, 2018, <https://www.nato.int/kosovo/history.htm>.

was in fact “recognized by the UN Security Council as a threat to international peace and security.”⁵⁰ Crimea on the other hand, had no pre-existing, humanitarian crises for a legal intervention, and therefore Russia cannot adequately defend their actions.⁵¹

Aftermath of Crimea

There are a number of important lessons NATO should take away from Crimea: 1) the importance of a strong and immediate conventional response to counter robust Russian military units 2) understanding that Russia will not always respect international law and 3) the necessity of openness and transparency surrounding military intentions.

- 1) In the case of Crimea, Ukrainian forces were considerably weaker than Russia’s. Ukrainian forces were unprepared for the swiftness of events to unfold, could not mobilize quickly enough, and therefore were vulnerable to a rapid Russian military offensive.⁵² Baltic states have recently reinforced their defense spending and military modernization.⁵³ NATO should continue to support these efforts, and offer conventional resources to their Baltic members if needed.
- 2) Additionally, the troops who led the invasion lacked insignia, which not only made it impossible to identify if they were sponsored by a state or non-state actor, but also went against international law.⁵⁴ NATO cannot take for granted that the Russians will uphold international treaties. Since the invasion, Estonia has stated that “[a]ny armed men without insignia would be considered as terrorists and will be dealt with as such.”⁵⁵ Although this would not necessarily invoke an Article 5 response, it would allow states to instantly launch a counterforce and permit NATO to send additional reinforcements.

50 NATO, "Russia relations: the facts," NATO, December 18, 2017, accessed February 5, 2018, https://www.nato.int/cps/en/natolive/topics_111767.htm#cl504.

51 Ibid.

52 Kofman, “Lessons,”

53 Jonathan P. Dunne, "Countering Russian Aggression in Eastern Europe Leveraging US Rotational Forces," June 2016, accessed March 5, 2018, http://www.atlanticcouncil.org/images/publications/Countering_Russian_Aggression_in_Eastern_Europe_web_060516.pdf.

54 Ewen MacAskill, "Russian troops removing ID markings 'gross violation'," The Guardian, March 06, 2014, accessed February 22, 2018, <https://amp.theguardian.com/news/defence-and-security-blog/2014/mar/06/ukraine-gross-violation-russian-troops>.

55 Praks, “Hybrid or Not.” 9.

- 3) Russia will always find a way to portray NATO's actions in a negative and hostile light, whether describing their "expansionist" means or the way it "aggressively" invaded Kosovo. For this reason, "[p]olicy decisions should be based on consistent, transparent, and treaty- and rule-based criteria wherever possible."⁵⁶ NATO's "[l]aw-abiding behavior will deflect Russian accusations of hypocrisy" and show the international community the Alliance's dedication to established law and institutions.⁵⁷ If NATO does bolster its military presence in the Baltics, promoting transparency will make it easier to explain its defensive intent. Openness is also an effective strategy in publicizing aggressive military actions by Russia, especially when the country disrespects international law. When Russia held an unlawful referendum in Crimea, NATO should have immediately announced to the public that these actions were unlawful and not to be tolerated. An open and transparent dialogue will help ensure the public's support to NATO and their willingness to remain resilient in crisis situations.

The critical difference between Crimea and the Baltics today is that NATO did not have a military obligation to respond in Ukraine, but does have a commitment to defend Estonia, Latvia and Lithuania in the case of a Russian armed attack. NATO's Baltic members have all expressed concern over Russia's military buildup and snap exercises along their eastern border. The Alliance should value the concerns of their member states, especially when the threat of persistent Russian influence and provocative aggression is imminent.

A Balanced and Appropriate NATO Response

NATO can most effectively respond to Russia's growing military capabilities in a balanced and non-escalatory way, by taking initiative to enhance their own conventional forces while maintaining a consistent and open dialogue with the international community. NATO should stand strong in their message to Moscow that collective defense will be upheld, but this warning will deter nothing if Russia believes the alliance lacks the conventional means to protect member states. NATO's deterrence is only credible if the message is backed by capability. In order to do this, the Alliance should continue to enhance its forces in the Baltic region and carry out their own snap exercises. As long as NATO remains transparent with respect to their conventional exercises, it is unlikely that Russia would escalate a military response. NATO should also empha-

⁵⁶ Marten, "Reducing Tensions," https://www.cfr.org/sites/default/files/pdf/2017/03/CSR_79_Marten_RussiaNATO.pdf, 28.

⁵⁷ Ibid. 28.

size the fact that these defensive “commitments are intended to neither isolate Russia from the West nor to initiate regime change in Moscow.”⁵⁸ It would be extremely naïve to ignore Russia’s growing aggression as a serious threat. NATO should respond to this threat in a thoughtful and sensible way that will work to dissuade Russia from conventionally targeting a NATO member.

Supplementing Conventional Baltic Deterrence

ZAPAD-17 is the most recent example of the increase in Russian military armament, modernization, and training on their European border. Russian media framed the week-long exercise as a defensive tactical anti-terrorist scenario. While the first half of the week’s exercise held to this narrative, the second half of the week was characterized by the Kremlin as Russian and Belarusian forces role-playing “a limited conventional operation against an equally conventional and advanced enemy that resembled a territory with NATO-interoperable armed forces.”⁵⁹ Russian military leadership began preparing their forces to combat an enemy of comparable size and with technology identical to that of NATO forces.⁶⁰ This portion of the ZAPAD exercise was conducted in Belarus: 60 miles from NATO member borders. Due to the limited strength of the Baltic states’ permanent armed forces, the region is dependent on NATO support to bolster their defense capabilities. Estonia currently operates a regular armed force of 6,000, with a Voluntary Defense League 15,000 strong. Latvia operates a regular armed force of 1,500. Lithuania operates a regular armed force of 3,500 personnel. All three Baltic countries currently operate little to no offensive air capabilities and rely on NATO aircraft to conduct air space policing operations. Without the Alliance’s assistance, the region could fall subject to Russia’s conventional pressures.

The push to seize a Baltic capital represents one of two methods in which Vladimir Putin could use Russian conventional forces to capture a NATO member or a region within its borders. The Rand Corporation, an American non-profit think tank that specializes in research and policy rec-

58 Ibid. 5.

59 Mathieu Boulegue, “Five Things to Know About the Zapad-2017 Military Exercise,” *Chatham House*. September 25, 2017 <https://www.chathamhouse.org/expert/comment/five-things-know-about-zapad-2017-military-exercise>

60 Michael Birnbaum & David Filipov, “Russia held a big military exercise this week,” *The Washington Post*, accessed February 5, 2018 https://www.washingtonpost.com/world/europe/russia-held-a-big-military-exercise-this-week-heres-why-the-us-is-paying-attention/2017/09/23/3a0d37ea-9a36-11e7-af6a-6555caeb8dc_story.html?utm_term=.76d77624f41a.

ommendations for the United States Armed Forces, has recently conducted numerous wargames designed to study the result of a Russian surprise attack on one of its NATO neighbors. Taking into account current force deployments, the capabilities of each states' known armored divisions and geographical factors contributing to force movements, the Rand models have shown that "across multiple games using a wide range of expert participants in and out of uniform playing both sides, the longest it has taken Russian forces to reach the outskirts of the Estonian and/or Latvian capitals of Tallinn and Riga, respectively, is 60 hours."⁶¹

The other method in which Russia could threaten the Baltic states' sovereignty is by using a more limited campaign to take a portion of a Baltic country. This portion would most likely be a city near a region of strategic importance. This limited campaign was showcased in Crimea when Russian troops captured the Crimean region before annexing the territory.

Both military options would result in a decisive Russian territorial occupation limiting a NATO response to one of two options, both with serious negative consequences. NATO could forfeit the captured region, confirming the Russian narrative that NATO is not capable of guaranteeing the security of its Baltic member, or NATO would be forced conduct a full scale military operation against a Russian force entrenched within the NATO state. This type of full-scale operation typically results in the large scale destruction of buildings and infrastructure, consequently threatening the safety of any Baltic citizens that remain in the capital region. These options allow Russia to dictate the course of military and political control in the Baltic region and do not ensure Latvia, Lithuania, and Estonia the security they are guaranteed as NATO members. In order to maintain a credible, conventional deterrence in the Baltic region, NATO should anticipate Russian military threats by increasing its forward presence and improving rapid response capabilities.

61 Shlapak & Johnson, "Reinforcing Deterrence." 2.

Building Credible Deterrence in the Baltics

When considering additional troop deployment, NATO leadership should consider the following three questions:

- 1) What forces are necessary strictly for maintaining credible deterrence?
- 2) How can NATO ensure full Alliance support for forces in the region?
- 3) Where should these forces be stationed in order to most effectively operate with regional factors?

In order to calculate the number of forces necessary for the continued defense of the Baltic region one must have an accurate understanding of Russian and NATO forces currently in the region and their capabilities. Given one week notice of a surprise attack NATO should be able to, in theory, assemble 12 maneuvering battalions from NATO-allied European and American military bases in Europe, comprised of light infantry, heavy infantry, and mechanized infantry working in concert with the Estonia, Latvia, and Lithuania defense forces. Based on Russian troop deployments there are 27 battalions stationed in the Western Military District which could be mobilized for an operation in the Baltics.⁶² All of these battalions are either mobile, mechanized infantry or more heavily armored tank divisions. As a result, all 27 Russian battalions are superior to NATO forces due to the Russian forces anti-armor and anti-air capabilities.⁶³ Russian air capabilities are equivalent to NATO's air forces in the region. Russia's air force has the technological capability to effectively limit the role of Western air assets through traditional air to air combat. The roughly equivalent force strength would stall any NATO efforts to slow or stall advancing Russian armored units.

NATO should prioritize the creation of a Baltic defense that can effectively slow a Russian surprise attack and make these countries unappealing targets for Russian occupation. The current imbalance in regional power would ensure a swift Russian victory, but if Putin is confronted with greater NATO military opposition, he may decide against an invasion. NATO's primary defense mechanism for the Baltic region must be in reaffirming Estonia, Lithuania, and Latvia as valued members of the Alliance. By preventing a *fait accompli* occupation, NATO can promote deterrence in the Baltic region. "Nations can be tempted or can talk themselves into wars that they believe will be quick, cheap, victories that are "over by Christmas" but, historically, are far less

62 Shlapak & Johnson, "Reinforcing Deterrence." 4.

63 Sokolsky, "The New NATO-Russia Military Balance: Implications for European Security."

likely to choose to embark on conflicts that they expect to be protracted, costly, and of uncertain outcome.”⁶⁴ While NATO membership alone contributes to the deterrence of Russian aggression, the deploying of more capable conventional forces will ensure the security of the Baltic region. NATO should encourage a greater presence of armored divisions to showcase a credible defense. These additional forward forces must be pre-deployed to the region as they do not have the capability to respond to a surprise assault unless already in the region.

NATO leadership should also consider the continued political and public support for the long term deployment of its forces. Beginning in June 2016, NATO employed its former Cold War policy of “tripwire” forces.⁶⁵ Four battalions comprised of roughly 1,000 individuals, American, German, Canadian, and British, have been deployed to Poland and the Baltic region in an effort to reassure the eastern NATO members of alliance support. These forces, while small in number, have had a positive effect on the feeling of security for the Baltic region and their peoples. “Before we had soft assurances but now we have an absolutely different situation. It’s game-changing.” said Lithuanian Defense Minister Raimundas Karoblis.⁶⁶

In order to secure continued NATO support for a lengthy deployment and reassure the people of the Baltic region, it is critical that NATO increase the size of its forward force by incorporating troops from all NATO members. The use of multinational forces not only demonstrates a unified front to deter Russian aggression but also emotionally ties NATO members to the region and ensures a collective response in the event of an attack. With the resurgence of Russian military power and a new era of aggression it is more essential than ever for the Alliance to prioritize collective defense and the integrity of the organization.

The final consideration for effective use of NATO forces in the Baltic region is the placement of troops and how they can most effectively be used in the region. The importance of strategic positioning in NATO’s approach to combating overt military operations balances the ability for rapid response while managing Russian escalation. NATO’s current rapid response capabilities include

64. Shlapak & Johnson, “Reinforcing Deterrence.” 8.

65. A tripwire policy is the use of multinational forces as the front line of defense ensuring that Russia must elect to combat all NATO members. NATO’s Summit: Trip-wire deterrence,” The Economist, accessed January 27, 2018 <https://www.economist.com/news/europe/21701515-ageing-alliance-hopes-russia-will-get-message-it-serious-trip-wire-deterrence>

66. David Stern, “Lithuanians ‘sleep peacefully’ thanks to German troops,” Politico, accessed February 15, 2018, <https://www.politico.eu/article/lithuania-nato-russia-baltics-germany-sleep-peacefully-thanks-to-german-troops/>.

the NATO Response Force of 40,000 troops and a spearhead group called the Very High Readiness Joint Task Force of 5,000 ground troops that can be deployed within 48 hours with accompanying air and logistical support. Additionally, supplies, including heavy weapons, have been pre-positioned in the Baltics following the 2016 NATO summit.⁶⁷ These forces provide NATO with the ability to rapidly project power to the Baltic region. While supplies and armor must be deployed to the region in order for their effective use, it is important that NATO mitigate escalation by Russian forces by limiting the number of forward forces. NATO should also take advantage of the tripwire policy. All NATO actions in the region will be described by Putin as an existential threat to Russia and proof of NATO aggression. If NATO elects to bolster its forward defense force the rapid response force should be stationed outside the Baltic region. By stationing rapid response forces across Europe, instead of in the Baltic region, NATO can ensure its response capabilities while limiting the size of the forward force.⁶⁸

Policy Recommendations

- NATO should continue to state its dedication to Article 5, and their unanimity in the matter.
- NATO should deploy several armored divisions to the Baltic region to increase NATO-Russian military parity
- NATO should expand its forward force capabilities by pre-deploying supplies, armor, and heavy weapons to the Baltic region. These forward forces should consist of at least four multinational mobile infantry battalions that operate under the force rotation established at the 2016 NATO summit. The force rotation should include contingents from all NATO members capable of supporting a battalion sized force.
- The Very High Readiness Joint Task Force should be enhanced with a higher concentration of advanced high mobility units, anti-armor, and anti-air capabilities.
- NATO High Readiness and Very High Readiness forces should be stationed throughout Europe, specifically in Germany, Poland, and Denmark, as opposed to the Baltic region in order to mitigate Russian escalation while maintaining regional proximity.
- NATO leadership should remain amenable to reopening military dialogue in the event of a Russian commitment to limiting military operations on NATO's eastern border.

⁶⁷ "NATO Summit: Trip-wire Deterrence."

⁶⁸ Radin, Andrew. *Hybrid Warfare in the Baltics: Threats and Potential Responses*. Santa Monica, CA: Rand Corporation, 2017. https://www.rand.org/pubs/research_reports/RR1577.html.

Hybrid Warfare

Drake Birnbaum and Mariam Malik

Introduction

Recently, Russia has implemented a mixed approach against NATO allies that has been effective due to a lack of proper protocols to prevent increased Russian interference in European affairs. This section focuses on the hybrid Russian threats of proxy warfare, information warfare, domestic forces, and cyber warfare. This section will focus largely on the model Russia used in Ukraine and will then provide policy recommendations.

Hybrid warfare: A Definition

Hybrid warfare presents a critical challenge to the Alliance. “Instead of separate challenges with fundamentally different approaches (conventional, irregular, or terrorist), we can expect to face competitors who will employ *all* forms of war and tactics, perhaps simultaneously.”⁶⁹

The challenge in addressing hybrid warfare lies not only in responding to each of these methods of disruption, but also understanding the larger threat that Russia poses.

Hybrid Warfare: A Model

There are three conditions necessary for hybrid warfare to be effective.

- 1) The desired objective of the aggressor must be beyond its capabilities, which forces the aggressor to use other means to complete its objective.
- 2) The aggressor must not make itself explicitly known and must be able to rely on deniability.
- 3) The aggressor must be militarily stronger than the victim so that escalation will not lead to a military defeat of the aggressor.⁷⁰

69 Hoffman, Frank. “Hybrid Warfare and Challenges.” *JFQ* 52 (2009): 34-39. http://www.academia.edu/22884324/Hybrid_Warfare_and_Challenges

70 L Harvey, *The Bear under the Mountain*, (2009): 6-7. <https://www.cfc.forces.gc.ca/259/290/318/305/harvey.pdf>

71 *Ibid.* 9.

72 *Ibid.* 11.

Hybrid warfare can be conducted through a combination of proxies and endogenous forces. This allows Russia to claim plausible deniability when it has in fact interfered in European affairs. Hybrid warfare also allows for a greater degree of flexibility as the use of proxy forces can serve the purposes of propaganda, espionage, crime, and establishing social discord.⁷¹ These objectives are not feasible by conventional means of war. Internal forces have conventional capabilities to arm proxy militia while avoiding direct confrontation: the supplying of arms to non-state actors allows Russia to deny direct involvement with conflict. The targets of hybrid warfare are commonly military forces, media networks, ethnic minorities, as well as economic and financial resources.⁷² Russia's success often entails creating chaos in an enemy's information space, economy, and legal system. This shall be examined within the context of the Russian actions in Ukraine.

Case Study: Ukraine

The Method

By using a combined approach of operating within legal grey area and fostering irredentist support, Russian influence in Ukraine began far before the “little green men” appeared across state lines. Russia began with targeting Ukraine's political sphere by exploiting the ethnic cleavages and manipulating Ukrainian media.⁷³ This will be elaborated on in the section “The Statelessness Problem.” The Kremlin used its ability to spread information to garner support and establish a framework to back pro-Russian militants within the regions of Crimea and Donbass.⁷⁴ This propaganda began months before the annexation of Crimea and created internal Ukrainian support for

71 Ibid. 9.

72 Ibid. 11.

73 Alexander Lanoszka, “Russian hybrid warfare and extended deterrence in eastern Europe,” *International Affairs* 92, no. 1 (2006): 189. <http://www.alexlanoszka.com/LanoszkaIAHybrid.pdf>

74 L. Harvey, “The Bear” 20-21.

the Pro-Russian movement. While cultivating local support, Russia utilized legal rhetoric “aimed to blur [the line between] legal and illegal, to create justificatory smokescreens, in part by exploiting some areas of uncertainty in international law, while making unfounded assertions of facts”⁷⁵ in relation to protecting ethnic Russians. Consequently, it is difficult for NATO to publicly fault Russia for its actions.

Military Forces

Russia had the military capabilities to occupy Crimea but would have lacked the ability to maintain control over Crimea if Western allies intervened. Therefore, Russia used unmarked military forces and enforced a referendum to provide legitimacy for the purpose of annexation.⁷⁶ Russia utilized proxies in Ukraine, and although they deployed thousands of unmarked Spetsnaz, these were only used for intimidation purposes; proxy groups fought alongside local extremists and criminal gangs.⁷⁷ Russia utilized a three-pronged approach in the take-over: the confusion of Ukrainian forces; the mobilization of pro-Russian groups, and the establishment of unconventional conflict through direct but limited actions.⁷⁸ This three-pronged approach could easily be repurposed for former Soviet states such as Latvia or Estonia.

Russia then provoked a Ukrainian response that was doomed to fail. While Russia deployed its own forces close the Ukrainian border, Ukraine was forced to amass its own militia in response. Russia then assisted rebels through Special Forces, unidentified soldiers, and mercenaries.⁷⁹ The Special Forces were disguised as civilians that operated in conjunction with the Pro-Russian population to delegitimize Ukrainian authority in Crimea. By utilizing Russian conventional forces

75 Roy Allison, ‘Russian “deniable” intervention in Ukraine: how and why Russia broke the rules’, *International Affairs* 90: 6, Nov. 2014, p. 1259. http://commonweb.unifr.ch/artsdean/pub/gestens/f/as/files/4760/39349_202339.pdf

76 “Crimea Referendum: Voters ‘back Russia union’,” *BBC*, March 16, 2014, . <http://www.bbc.com/news/world-europe-26606097>

77 Pyung-Kyun, Woo “The Russian Hybrid War in the Ukraine Crisis: Some Characteristics and Implications,” *The Korean Journal of Defense Analysis* 27, No. 3, September 2015): 387, 391 https://www.researchgate.net/publication/286061078_The_Russian_Hybrid_War_in_the_Ukraine_Crisis_Some_Characteristics_and_Implications

78 Harvey, “The Bear,” 17.

79 Kestutis Kilinskas, “Hybrid Warfare: an Orientating or Misleading Concept in Analyzing Russia’s Military Actions in Ukraine?” *Lithuanian Annual Strategic Review* 14 (2015-2016): 153 <https://epublications.vu.lt/object/elaba:20857654/20857654.pdf> .

to commandeer buildings such as the Council of Ministers of Simferopol,⁸⁰ Russia was able to take over areas of central authority. Once these institutions fell under Russian control, Ukraine no longer had the ability to govern these areas.

Politics and Media

Russia used propaganda, new immigration laws, and a referendum to complete the Crimean annexation. Putin encouraged Ukrainians to flee to Russia until the events calmed down. In conjunction, the Russia Migration Service declared a new set of rules that allowed increased stays within Russia. By accepting these people, Russia is setting a precedent of allowing citizens from other countries to become Russians.⁸¹ During the Crimean invasion, Pro-Russian media presented the unlabeled armed forces as protecting Crimea from ultra-nationalist, Ukrainian chaos. These same forces kidnapped and tortured pro-government activists, established checkpoints, and disrupted journalists,⁸² thereby restricting the flow of information through the area. Russia ultimately annexed Crimea when voters in the region were encouraged to support a referendum that would place Crimea under Russian control. The referendum passed by a wide margin.⁸³ In this way Russia launched an offensive through military arms, unlabeled military forces, disruption along ethnic lines, and used legal integration to bring Crimea into the Russian state.

Conclusion

The culmination of these efforts demonstrates Russia's use of domestic and proxy forces to maximize the threat against Ukraine. This is significant because Ukrainian government and NATO forces were unprepared to react to this method of warfare. Putin has declared that he will act in the interest of all "ethnic Russians" which adds to the concerns of the former Soviet States of Estonia and Latvia. This problem begins with the proliferation of social discord by Russian actors. NATO should use a political strategy to integrate stateless populations and prevent a similar incident from happening elsewhere.

80 Ibid.

81 Pyung-Kyun "The Russian Hybrid War in the Ukraine Crisis: Some Characteristics and Implications," 383-400.

82 "Crimea: Attacks, Disappearances' by Illegal Forces," *Human Rights Watch*, March 14, 2014, <https://www.hrw.org/news/2014/03/14/crimea-attacks-disappearances-illegal-forces>.

83 "Crimea referendum: Voters 'back Russia union.'" 4.

The Statelessness Problem: How to Prevent a Second Annexation

In 2010, the United Nations High Commissioner for Refugees (UNHCR) estimated that 35,000 people within Ukraine were stateless or in danger of being stateless. These included the ethnic group of Crimean Tartars.⁸⁴ Their stateless status makes them vulnerable to being incited by Russia to act in Pro-Russian interests and join separatist movements.⁸⁵ Latvia and Estonia are also vulnerable to Russian meddling. Strict nationalization policies in Latvia and Estonia have forced 252,017 people in Latvia and 82,341 in Estonia to declare stateless status as of 2016. This accounts for 6 percent of the Estonian population and 12 percent of the Latvian population.⁸⁶ These groups are largely ethnic Russians who lack political rights and suffer from disproportionate rates of unemployment.⁸⁷ This offers the Kremlin a means to exploit local discord to its advantage and disrupt unity within these countries. This poses a serious problem for NATO as these populations are justified in their frustration and may turn to Russian assistance in disrupting the power of the states that ignore their plight. If NATO seeks to reduce the threat of a second annexation it should ensure that relevant member states adequately care for their pro-Russian minorities. NATO should work with the United Nations High Commissioner for Refugees to take a more active role in supporting Estonia and Latvia to create avenues for ethnic minorities to gain citizenship. This will help prevent conditions for Russia to cause social discord.

Hybrid Warfare Policy Recommendations

Coordinate with other institutions to prevent Russian influence on ethnic minorities in the Baltic States.

84 Kateryna Moroz and Kim Harper, "Stateless in Ukraine," last modified 23 January 2014. <https://www.statelessness.eu/blog/statelessness-ukraine> .

85 Lanoszka, "Russian hybrid warfare," 192.

86 Yana Toom, "The fight for voting rights of stateless persons in Estonia and Latvia," last modified 27 July 2016.

Cyber Security and Deterrence in NATO

Today, cyberspace has become integral to the very nature of society. NATO recognizes cyberspace as a domain of operations.⁸⁸ While cyber warfare causes less physical damage than conventional warfare, its impact can be far more dangerous.⁸⁹ Failures in cyber security will hold an increased burden on member states, jeopardizing their sovereignty, privacy and the degradation of their economic and national interests.⁹⁰ This section will explore the Alliance’s current capabilities, the challenges it faces, and the way forward.

Consensus and Capabilities

Since 2002, NATO has realized the importance of recognizing and subsequently adapting cyber policy within its collective framework, as shown by the table below. The 2014 NATO Enhanced Cyber Defense Policy encompasses its goals for cyber governance, establishes NATO’s core task of collective defense, and recognizing that international law applies to cyberspace.⁹²

(i) Key Tenets of NATO Cyber Defense Policy Versions⁹³

Year	Key Tenets of NATO Cyber Policy
2008	<ul style="list-style-type: none"> • Emphasize protection of key information systems. • Share best practices for cyber defense. • Develop capability to assist Allied nations, upon request, to counter cyber attack. • Develop NATO’s cyber defense capabilities. • Strengthen linkage between NATO and national authorities.⁹³

87 “Amnesty International Report 2014/15: the state of the world’s human rights” p. 147, 226. <https://www.amnesty.org/en/documents/pol10/0001/2015/en/>

88 NATO, “Warsaw Summit Communique”, Article 70, 8-9 July 2016, https://www.nato.int/cps/en/natohq/official_texts_133169.htm

89 NATO, NATO Cyber Defence Fact Sheet, April 2017, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_201_03/20170331_1704-factsheet-cyber-defence-en.pdf

90 Luukas Ilves, Timothy Evans, Frank Cilluffo, and Alec Nadeau. "European Union and NATO Global Cybersecurity Challenges: A Way Forward." *Prism : A Journal of the Center for Complex Operations* 6, no. 2 (2016): 127.

91 Jeffrey L. Caton, and Army War College, “NATO Cyberspace Capability : A Strategic and Operational Evolution”. Strategic Studies Institute and U.S. Army War College Press, (2016): 8

92 NATO, “NATO Cyber Defence Fact Sheet”, July 2016, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_07/20160627_1607-factsheet-cyber-defence-eng.pdf.

93 Caton, “NATO Cyberspace Capability,” 7-8.

2011	<ul style="list-style-type: none"> • Integrate cyber defense considerations into NATO structures and planning processes in order to perform NATO’s core tasks of collective defense and crisis management. • Focus on prevention, resilience, and defense of critical cyber assets to NATO and Allies. • Develop robust cyber defense capabilities and centralize protection of NATO’s own networks. • Develop minimum requirements for cyber defense of national networks critical to NATO’s core tasks. • Provide assistance to the Allies to achieve a minimum level of cyber defense and reduce vulnerabilities of national critical infrastructures. • Engage with partners, international organizations, the private sector and academia.⁹⁴
2014	<ul style="list-style-type: none"> • Reaffirms the principles of the indivisibility of Allied security and of prevention, detection, resilience, recovery, and defense. • Recalls that the fundamental cyber defense responsibility of NATO is to defend its own networks • Emphasizes responsibility of Allies to develop relevant capabilities for protection of their own national networks. • Recognizes that international law applies in cyberspace. • Affirms that cyber defense is a part of NATO’s core task of collective defense under Article 5.⁹⁵

More recently, 2016 saw the adoption of the Cyber Defense Pledge,⁹⁶ a responsibility on members to advance their cyber capabilities with NATO’s help as needed.⁹⁷ However, the pledge is non-binding and each member’s upholding of it is evaluated at the biannual summits. For a space that is exponentially growing, more frequent talks are needed, as is a stricter incorporation of the Cyber Defense Pledge to guarantee the ongoing safety of the alliance and all its member states.

Within NATO, The NATO Computer Incident Response Capability (NCIRC) protects NATO’s own networks, and NATO supports allied members in their individual cyber defenses through intelligence gathering and sharing, the employment of high-readiness cyber defense teams, the development of targets for allied countries to facilitate national cyber defense capabilities, and investment in education, training, and exercise.⁹⁸ NATO, in its extensive overview of cyber-

94 "Defending the networks: The NATO Policy on Cyber Defence." NATO North Atlantic Treaty Organization. 2011. https://www.nato.int/nato_static/assets/pdf/pdf_2011_08/20110819_110819-policy-cyberdefence.pdf.

95 North Atlantic Council. "Wales Summit Declaration" NATO North Atlantic Treaty Organization. September 5, 2014. https://www.nato.int/cps/ic/natohq/official_texts_112964.htm.

96 Ibid.

97 NATO Factsheet, February 2018.

98 Barbara Roggeveen, "NATO Needs an Offensive Cybersecurity Policy", [Atlanticcouncil.org](http://www.atlanticcouncil.org), August 2017, <http://www.atlanticcouncil.org/blogs/new-atlanticist/nato-needs-an-offensive-cybersecurity-policy>.

space, also has other elements of cyber governance. This includes the Cyber Defense Committee (CDC), the lead committee to overlook and provide oversight to cyber defense efforts⁹⁹ and the new Cyber Operations Centre, which is currently in the process of being set up and will serve to reinforce NATO cyber defensive capabilities.¹⁰⁰

NATO and EU members fund centers of excellence that provide expertise and give advice on the matter of cyber threats and security. Three of these, The NATO Cooperative Cyber Defense Centre of Excellence (CCD COE), The European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE) and The NATO Strategic Communications Centre of Excellence (NATO StratCom COE) are of particular importance. StratCom COE, for example, is not funded by NATO or a part of the Command Structure,¹⁰¹ but helps the alliance research and advises in the area of strategic communications; namely, aiding in training as well as understanding and influencing how key audiences perceive NATO's actions.¹⁰² It is funded by sponsoring states, all of eight of whom are NATO members.¹⁰³ The CCD COE focuses on aiding in securing critical infrastructure through extensive research and recommendations. It is also the organization behind the Talinn Manual, a useful tool on the way to establishing more extensive laws that apply to the cybersphere. The Hybrid COE, while under Finnish legislation, aids the EU-NATO effort to further understand cyber threats.¹⁰⁴ Originally a joint European effort, the initiative was supported by NATO soon after the joint EU/ NATO declaration by both entities, confirming growing cooperation.¹⁰⁵

Currently, none of these organizations are aided by or include all member states. Neither do all member states participate in cyber defense exercises hosted by the CCD COE. Given that NATO is an organization that is consensus-based, there is a greater need to incorporate scholars, diplomats and military personnel from these centers into the NATO command structure to help estab-

99 Caton, "Nato Cyberspace Capability," 8.

100 NATO, Factsheet, February 2018, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2018_02/20180213_1802-factsheet-cyber-defence-en.pdf

101 NATO StratCom COE, "About Us", <https://www.stratcomcoe.org/about-us>

102 NATO StratCom COE "About Strategic Communications" <https://www.stratcomcoe.org/about-strategic-communications>

103 StratCom is financed and staffed by eight members of NATO and the two partnering nations of Finland and Sweden, both of which are not a part of NATO. <https://www.stratcomcoe.org/about-us>

104 United States Senate Committee on Foreign Relations, Putin's Asymmetric Assault On Democracy In Russia And Europe: Implications For U.S. National Security, 10 January 2018: 142

105 The initiative was supported in the Common set of proposals for the implementation of the Joint EU/NATO Declaration, endorsed by the Council of the European Union and the North Atlantic Council on 6 December 2016, <https://www.hybridcoe.fi/about-us/>

lish better policies for the alliance. With different outlooks to come to consensus-based policy recommendations, NATO can assess and implement certain policy recommendations to improve current plans. There is also a greater need to create a permanent space for the exchange of details of threats, possible practices and far more formal and informal channels of continuing these discussions, such as the Defense Planning Process.¹⁰⁶ Special clauses and rules need to exist in the Readiness Action Plan (RAP). As part of the RAP's objectives, the Locked Shields exercise must invite delegations from all member states to participate in the exercise to create a space of practice and information sharing. This will greatly improve quick response times and better address long-term issues through precedence by exploring examples, cases and extensive research.

Cyber Security Policy Recommendations

- Provide greater funding and support to the CCD COE and aid in its expansion.
- Establish or expand a current COE into a permanent cyber security and threat analysis institution.
- Expand existing policies to include cybersecurity and up-to-date cyber threats.¹⁰⁷
- Encourage their implementation in the security framework of member states and incorporate several articles from the Cyber Defense Pledge as core tasks for member states.
- Increase the focus on a framework of core collective defense in the domain.
- Frequently revise the Cyber Defense Pledge to better address the rapidly evolving cyber domain.
- Implement greater budget allocation to the research of cyber norms and attacks.

106 Neil Robinson, "NATO: Changing gear on cyber defence", NATO Review Magazine <https://www.nato.int/docu/review/2016/Also-in-2016/cyber-defense-nato-security-role/EN/index.htm>.

107 This includes (but not limited to) the Readiness Action Plan (RAP) NATO Defense Planning Process; the Cyber Defense Pledge respectively.

Information Warfare

While the use of information and disinformation is not new, it has taken a metamorphosed shape in the Internet age. Since Soviet-era times, Russia has used techniques to cause instability in societies.¹⁰⁸ These tactics are now being modified and used for hybrid warfare against the West to undermine a nation's democracy and sovereignty.¹⁰⁹ Cyber espionage, political sabotage and propaganda are a few of the critical ways Russia has proved its offensive cyber capabilities and demonstrated the 'weaponization of information.'¹¹⁰ This, in turn, aids in creating 'frozen conflicts'¹¹¹ within the Baltics, causing a consistent feeling of uncertainty, growing insecurity and the weakening of governments.¹¹² This will likely prohibit these countries from joining NATO and their internal discord poses a challenge to the alliance.

Propaganda plays a massive role in Russia's growing influence and destabilization efforts of the Baltic States. With the increase of online sources and fake news, there is increased skepticism in the legitimacy of sources online.¹¹³ Within the Baltic States, Russia uses ethnicity to help disrupt and divide society.¹¹⁴ In Estonia, for example, propaganda is aimed at Russian-speaking populations, falsely claiming severe discrimination by the government, implications of Nazi support and a bleak future.¹¹⁵ All of this, as seen through developments in Estonia, is untrue. The aims to weaken morale in the state come from the need to demonstrate the alliance's weaknesses and challenge its commitments to Article 5, by demonstrating their lack of will or authority to invoke an armed attack despite repeated attacks and threats of this new nature.¹¹⁶ Due to these threats, there is a need to create transparency and work with the media for more awareness and literacy within member states on the topics of cyberspace and security. This in turn can lead to a popula-

108 Maria Snegovaya "Russian Report I – Putin's Information Warfare in Ukraine: Soviet Origins of Russia's Hybrid Warfare." Washington, D.C.: Institute for the Study of War (2015).

109 Keir Giles, "Russia's Public Stance on Cyberspace Issues", NATO CCD COE Publications 2012: 4

110 Praks, "Hybrid or No," 5

111 Robert Orttung and Christopher Walker, "Foreign Policy, Putin's Frozen Conflicts," 13 February 2015, <https://foreignpolicy.com/2015/02/13/putins-frozen-conflicts/>

112 Ibid.

113 Giles, "Russia's Public Stance," 6

114 Praks, "Hybrid of Not," 4

115 Ibid. 6

116 Paul A Goble, "In Estonia, life is good, maybe too good, for ethnic Russians", *Quartz*, February 16 2015, <https://qz.com/344521/in-estonia-life-is-good-maybe-too-good-for-ethnic-russians/>

tion with strong cognitive defenses¹¹⁷ and the ability to analyze fact from falsehood. More media coverage on these topics will create more awareness and better discourse on the subject.

Propaganda also plays into political sabotage; another method used by Russia, especially demonstrated in elections in Western states. As seen in the U.S. and French elections, doxing and defamation are tactics used to influence and undermine the choice of the people and hence, democracy. Russia created numerous fraudulent social media accounts to organize political rallies and promote false news, which were used to influence American voters in 2016.¹¹⁸ Russia's end game is to cast public doubt in the ability of these democratic states to function. These in turn challenge the voice of a democratic population and undermine democracy.

Information Warfare Policy Recommendations

- Encourage media literacy through state transparency on cyber issues to create awareness among the population of member states.
- Organize voluntary citizen cyber exercise programs in member states.
- Work with social media platforms for better policing and fact and background verification

The Case of Estonia

Beginning on the 27th of April and lasting over several weeks, numerous Estonian organizations such as banks, media outlets and even the government saw unprecedented levels of internet traffic through the use of globally dispersed and virtually unattributable botnets of "zombie" computers.¹¹⁹ This attack came shortly after demonstrations over the decision to move a Soviet soldier Bronze statue, which was misconstrued to seem as if the statue was being destroyed. This was the first instance of a large scale Distributed Denial of Service Attack (DDOS) and preempt-

117 Jaime Ho, "Commentary: As information warfare enters a new age, time for a Total Defence upgrade", *Channel News Asia*, 14th Jan 2018, <https://www.channelnewsasia.com/news/singapore/commentary-as-information-warfare-enters-a-new-age-time-for-a-9855832>.

118 Alicia Parlapiano and Jasmine Lee, "The Propaganda Tools Used by Russians to Influence the 2016 Election", *New York Times*, February 16 2018, <https://www.channelnewsasia.com/news/singapore/commentary-as-information-warfare-enters-a-new-age-time-for-a-9855832>.

119 Damien McGuinness, "How a Cyber Attack transformed Estonia," *BBC News*, 27 April 2017, <http://www.bbc.com/news/39655415>.

ed the need to protect a country's critical infrastructure, security and sovereignty. The events helped create discourse regarding the Baltic's vulnerability to this unprecedented kind of attack, and about the use of state-sanctioned cyber attacks to advance foreign policy goals.¹²⁰

While it was, and can be, difficult to attribute the shut down to any particular actor, Attribution can help us better understand threats from different actors across the spectrum. This makes future attacks somewhat predictable and in the process of analyzing threats, NATO is better able to equip itself for the future. As Moscow denied any such involvement, there was enough evidence to look at Russia.¹²¹ The statue was a memorial of Soviet influence, fake news was being reported on Russian-language news channels in Estonia and above all, Moscow had warned the country of disastrous effects were the statue to be removed.¹²² These tactics have been seen repetitively since, especially during the Ukraine conflict.¹²³ With several members in the Baltics bordering Russia, such an attempt on any other member would and could be disastrous for stability in the region and the democracy of these states. The attacks sent a clear message: cyber warfare must be integrated into the discourse of military action and defense.¹²⁴

Estonia, a neighbor of Russia, has since not been entirely immune to cyber attacks and information warfare tactics. The country warns NATO of attacks against NATO troops in the Baltic States, particularly at a time of Latvian elections in the coming months and during the celebration of independence in Estonia and Lithuania.¹²⁵ NATO's CCD COE is situated in Estonia and through its tremendous efforts to combat attacks on Critical Infrastructure, Estonia is now well equipped to handle many such attacks. The CCD COE involves civilians as volunteers in their model for cyber defense, strengthening the Estonian population's skills to prepare and enhance

120 Stephen Herzog. "Revisiting the Estonian Cyber Attacks: Digital Threats and Multinational Responses:", *Journal of Strategic Security* 4, no.2 (2011): 54

121 Ibid.

122 Emily Tamkin, "10 Years After the Landmark Attack on Estonia, Is the World Better Prepared for Cyber Threats?" *Foreignpolicy.com*, 27 April 2017, <http://foreignpolicy.com/2017/04/27/10-years-after-the-landmark-attack-on-estonia-is-the-world-better-prepared-for-cyber-threats/>

123 Refer to Ukrainian Case Study of this Task Force Report.

124 Ernest Y. Wong, Nan Porter, McKinnon Hokanson, Bing Bing Xie, "Benchmarking Estonia's Cyber Security: An On-Ramping Methodology For Rapid Adoption And Implementation," *Army Cyber Insititute*. Accessed February 16, 2016 <http://cyber.army.mil/Portals/3/Documents/publications/external/On-Ramping%20Methodology%20for%20Rapid%20Adoption%20and%20Implementation.pdf?ver=2017-12-21-134355-907>.

125 "Estonian Intelligence warns of information warfare by Russia against NATO troops in the Baltic States," *UAWIRE*. Accessed 9 February 2018, <http://www.uawire.org/estonian-intelligence-warns-of-information-warfare-by-russia-against-nato-troops-in-the-baltic-states>.

126 Kadri Kaska, Anna-Maria Osula, and Jan Stinissen, "Cyber Defence Unit of the Estonian Defence League: Legal, Policy and Organizational Analysis" *NATO CCD COE* 2013. PDF file.

support capabilities in the instance of a cyber crisis¹²⁶ which reiterates the importance of civilian literacy on cyber matters.

To combat the Kremlin's propaganda, Estonia has launched a full-time Russian language TV news channel to help present facts to their ethnic Russian minority. Increasing cyber literacy, security, and creating the Estonian Defense League's Cyber Unit are proper responses to a major cyber attack. Estonia can help lead the Alliance towards a stronger framework for cyber policy.

Challenges to Addressing the Cyber Threat

Perhaps the greatest challenge to NATO cyber security is cooperation. Trust among members is a major component of a strong alliance and constructive policy formation in the realm of cyberspace.¹²⁷ The imbalances in the levels of cyber security of different member states only heighten the risk of sensitive information being compromised and misused, which falls short of member states' commitment to the Cyber Defense Pledge.

Another challenge in the creation and implementation of policy is the rapidly changing dynamic of cyberspace. New vulnerabilities as well as new forms of malware, viruses and phishing campaigns are introduced even before a previous attack can be fully addressed. The rapid innovation of technology makes it difficult for cyber policy to stay current, because by the time this policy is ratified, it will be obsolete. Again, the need for research centers is imperative. After the Estonian attacks, Russia analyzed NATO vulnerabilities and responses in the wake of the attack to better improve their own cyber weaponry and capabilities.¹²⁸

Progress in ensuring a safer cyber space is also difficult due to lack of attribution given the non-existence of physical space and the entire domain being virtual. NATO faces a cyber threat landscape that abounds with hackers, hacktivists, malicious nation-states, and criminals. NATO itself has been targeted directly by Russian hackers seeking information on its defensive posture

127 "Cyber Defence Pledge." NATO North Atlantic Treaty Organization. July 8, 2016 https://www.nato.int/cps/su/natohq/official_texts_133177.htm.

128 Herzog, "Revisiting the Estonian Cyber Attacks," 55.

129 Kenneth Geers, "Beyond 'Cyber War': Russia's Use of Strategic Cyber Espionage and Information Operations in Ukraine," NATO CCDCOE Publications, 2015, https://ccdcoe.org/sites/default/files/multimedia/pdf/CyberWarinPerspective_Weedon_08.pdf.

against Russia.¹²⁹ Lastly, with lack of substantial episodes of attacks, treaties and attribution, the newness of the domain makes policy making difficult.

Cyber Policy Recommendations

- Establish open dialogue with and have a better understanding of Russia.
- Fully implement the Cyber Defense Pledge along with key clauses moved into the main framework.
- Create and follow through with consequences of not adhering to the Cyber Defense Pledge.

Digital Response: A Cyber Problem, A Legal Solution

In the future, NATO should be able to address cyber threats at their source, using legal means to take action beyond their current jurisdiction. Although NATO does not have offensive cyber capabilities of its own, the United States, Britain, the Netherlands, Germany, France and Estonia have developed offensive cyber weapons.¹³⁰ These allies have agreed to make their capabilities available for NATO use.¹³¹ However, NATO's current defensive capabilities are limited and static, similar to "cyber Maginot Line",¹³² meaning that NATO can only interact with malevolent forces within its own systems. NATO must develop flexible cyber capabilities to go beyond its servers to properly respond to the attacks it faces. Ultimately, an offensive cyber policy is unavoidable, so it should therefore be implemented in steps.

During the next cyber exercise, NATO should simulate an attack and response with a NATO Cyber Red team.¹³³ Before this exercise, NATO should gain permission from cyber-capable states to demonstrate offensive cyber capabilities during the simulation so that NATO teams are familiar with these tools in the field. NATO's NCIRC would continue to familiarize itself with

130 Robin Emmot, "NATO mulls 'offensive defensive' with cyber warfare rules," *Reuters*. Last modified November 30, 2017. <https://www.reuters.com/article/us-nato-cyber/nato-mulls-offensive-defense-with-cyber-warfare-rules-idUSKBN1DU1G4>.

131 Thomas Ricks, "NATO's Little Noticed by Important New Aggressive Stance on Cyber Weapons," *Foreign Policy*, December 7, 2017. <http://foreignpolicy.com/2017/12/07/natos-little-noticed-but-important-new-aggressive-stance-on-cyber-weapons/>

132 James Lewis, "The Role of Offensive Cyber Operations in NATO's Collective Defence," *The Tallin Papers*. No. 8 (2016): 12 <https://ccdcoe.org/multimedia/role-offensive-cyber-operations-natos-collective-defence.html>

133 Lewis, "The Role," 10.

these tools and by the next summit NATO would declare its own offensive cyber capabilities. Although this could worsen relations with Russia, but it would also be a cause for stability as it makes clear to potential opponents the risk of continued aggression against NATO's cyber networks.¹³⁴ This would give NATO the proficiency to deal with these threats, but NATO also has to develop the legal grounds to do so.

Although cyber attacks can trigger an Article 5 response, many of these cyber threats are not disruptive enough to be considered armed attacks.¹³⁵ However, NATO has declared that its “policy also recognizes that international law, including international humanitarian law and the UN Charter, applies in cyber space.”¹³⁶ Importantly, International Humanitarian Law (IHL) applies fully to all cyber operations that are part of an armed conflict, whether they are launched by states, non-state groups, or individuals.¹³⁷ A cyber operation is covered under IHL if it is directed at civilians or civilian objects.¹³⁸ If civilian objects can be interpreted as civilian data, then this gives NATO a legal mechanism by which to respond to cyber attacks, but only if civilian digital information is abused by a state or non-state actor.

This is significant because it could give NATO an offensive capability without necessitating an Article 5 response and a new capability to respond to lesser threats. Although this does not directly address the challenge of attributing malevolent actors' actions to the states they work for, this gives NATO an improved ability to respond. If NATO begins to take such actions, then non-state actors will become more hesitant to attack NATO. When this legal mechanism is paired with a NATO offensive capability, NATO will have the authority and an improved ability to ef-

134 Ibid. 6-7

135 “Wales Summit Declaration.” NATO, 5 Sept. 2014, www.nato.int/cps/ic/natohq/official_texts_112964.htm.

136 Ibid. www.nato.int/cps/ic/natohq/official_texts_112964.htm.

137 Michael Schmitt and Liis Vihul, “The Nature of International Law Cyber Norms,” *The Tallinn Papers*. No. 5. (2015): 6 <https://ccdcoe.org/sites/default/files/multimedia/pdf/Tallinn%20Paper%20No%20%205%20Schmitt%20and%20Vihul.pdf>

138 “Protocol Additional to the Geneva Conventions” Geneva, 8 June 1977, Article 85(3)(b). CDDH, *Official Records*, Vol VI, CDDH/SH 44, 20 May 1977, p. 291

fectively retaliate against cyber attacks. This will irrevocably change cyber warfare such that NATO will be on a more equal footing with the parties that attack the Alliance.

Energy Security

Rishi Paramesh and Daniel Darmawan

Introduction

Europe's dependence on Russian oil is no secret. Since 2005, the EU has imported 30% of its oil from Russia and that number shows no signs of decreasing.¹³⁹ Nearly every industrialized country is dependent on hydrocarbons. Very few countries, other than those who are net exporters, have adequate reserves if crucial suppliers arbitrarily decide to limit or cut off exports. Oil prices are volatile, price shocks of the 1970s and early 1980s yielded two deep recessions, high inflation, and large trade deficits.¹⁴⁰ In fact, between 2008 and 2016, oil prices reached a high of \$140/bbl and plummeted to a low of \$30/bbl.¹⁴¹ Smaller countries in Europe with smaller economies are heavily affected by these price changes, and are often at the mercy of their supplier(s).

This report encourages single-import dependent countries and NATO members to diversify their sources of energy and avoid dependence on state-backed Russian oil companies. While few developed countries have faced serious energy shortages in the 21st century, the potential for such problems is increasing. The 2014 annexation of Crimea highlighted the political, economic, and security challenges surrounding the energy supply of many NATO allies. Anders Fogh Rasmussen,¹⁴² the former NATO Secretary General, proclaimed that "[NATO] must make energy diversification a strategic transatlantic priority and reduce Europe's dependency on Russian energy."

139 Phil Summerton. "A Study on Oil Dependency the EU." In *Transport and Environment*, edited by Cambridge Econometrics. Cambridge Econometrics, 2016. Pg.4

140 Ibid. pg. 9

141 Ibid.

142 Julijus Grubliauskas, "NATO's energy security agenda." In *NATO Review magazine*, 2015 .

Inaction in addressing possible energy security issues places future NATO operations on Russia's western border at risk.

For the purposes of this report, energy security only refers to a country's reliance on hydrocarbons such as oil or natural gas as the primary natural resource for energy consumption. If a country is completely reliant on oil imports from one exporter, that country employs poor energy security strategies and risks crippling energy shortages. If a country diversifies its sources of oil imports or is in the process of developing alternative sources of energy such as shale oil, that country employs effective energy security strategies that reduce the chances of a national crisis.

Russian Energy Organization

Russia, through state-backed oil companies such as Gazprom and Rosneft, is actively using hydrocarbon exports and sizeable energy resources as a mechanism by which to gain influence in European countries. In many cases, Russia builds dependence by purchasing stock in local energy companies or negotiating long term contracts with governments that rely on cheap energy to fund their infrastructure. This report will not only show the current dependence on Russian oil by European states, but also how Russia is gaining influence in Europe based on hydrocarbon exports.

Gas Island Influence through the Druzhba Pipeline

Landlocked countries, especially those in the Baltic and Balkan regions, are more prone to energy security issues, given their lack of access to the sea routes and infrastructural advantages available to their Southern neighbors. Some territories were members of the Soviet Union, and consequently, their energy infrastructures are of Soviet make, creating a kind of 'gas island'.¹⁴³ The 4,000 km Druzhba Pipeline from Russia is the only pipeline that brings fuel to Latvia, Lithuania, Poland, Czech Republic, Germany, Slovakia, Hungary, and finally, Croatia.

143 Summerton "A Study" pg. 5



144

Conveniently, Russian oil is the cheapest and most reliable source of energy in the region. As early as 2011, most Baltic States, Slovakia, and Bulgaria received over 90% of their gas from Gazprom, the Czech Republic over 70%, Hungary and Slovenia over 50%, while Poland was around 45%.¹⁴⁵ The price, quantity, and long-term contracts by Russia with these countries are the primary reasons why they do not invest in alternative energy sources or try and increase energy efficiency.

144 "Druzhba Pipeline Map." Map. Eurodialogue.

145 Alan Riley "Gazprom, Energy Security and the CEE Region: It's More Serious Than You Think" Energy Security Forum. 2011 pdf.

Covert Russian Oil Influence in Slovakia and Hungary

In Russia, the largest oil and gas companies are state-run. In addition, independent companies that exist to attract foreign investments are susceptible to Russian government acquisition. Bashneft, a private Russian oil company, is the main refiner and producer of Russian oil products. The potential for entering new markets was noted by the Russian government, and consequently, Rosneft acquired Bashneft and its assets in the Ural Mountains. In an effort to streamline oil exports to more valued clients such as Poland, Germany, and the Czech Republic, Rosneft “gradually ditched intermediaries, such as Souz Petroleum, Mercuria Energy, and Sunimex from the chain of supplies.”¹⁴⁶ This strategic maneuver put the onus on larger foreign corporations to invest in the Russian market. As a result, Rosneft can guarantee profit for foreign investors and distance itself from the Kremlin, all the while granting Russia substantial influence over oil-dependent regions.

Glencore is one of the world’s largest global fuel distribution firms that is seeking to grow its business.¹⁴⁷ With the help of a Qatari fund, Glencore, unable to resist the prospect of making easy money, bought 19.5% of Rosneft and negotiated the supplying of tens of thousands of barrels of oil which have reached “500,000 [barrels] in January to March” alone.¹⁴⁸ Consequently, NATO members Hungary and Slovakia are highly susceptible to Russian influence and hybrid threats, while the Kremlin has distanced itself from Rosneft through foreign investors.

Russian Acquisitions of Regional European Oil Companies

Rather than selling stock in Russian companies, Russia has recently employed the strategy of purchasing local European oil companies to spread its influence to European nations and beyond. Last year, Rosneft expressed a strong desire to acquire INA.¹⁴⁹ This Croatian oil magnate has substantial stock in the oil companies of surrounding regions, especially in Bosnia and Herzegovina, where Holdina, its daughter company,¹⁵⁰ “manages a network of about 50 gas stations across BiH.” Such an acquisition would solidify Russian influence in the region, making Croatia,

146 Olga Yagova “Rosneft sends oil to Hungary, Slovakia with Glencore's help”, *Reuters*, last modified January 20, 2017.

147 BMI Research, “Glencore Seeking Further Downstream Exposure” *Fitch Group Company*. last modified October 11, 2017

148 Yagova, “Rosneft”

149 INA alone controls 5% of the world’s total oil production

150 Sarajevo Times. "Russian Oil Giant wants to buy key companies in Croatia and BiH."

a NATO member, and BiH, as well as surrounding nations wholly dependent on Russian oil. In addition, the Former Croatian Finance Minister, Slavko Linic, stated that he believes that MOL, INA's largest shareholder,¹⁵¹ "and Rosneft have already agreed on Sale of INA." Croatians welcome this acquisition as the country could get more gas, oil and better prices with Rosneft, which is worth the cost of substantial Russian influence in the country. This challenges NATO's ability to conduct stable operations in the region.

Furthermore, in addition to making Croatia wholly dependent on Russian oil, Linic stated that "The Russians are not interested in the Croatian market, but in the Mediterranean." They will come with their own oil and gas and produce their derivatives here." Russians will bring jobs to Croatia while also being able to advance their oil interests in the Mediterranean. If Linic is correct, Russia's influence in this NATO member state will yield an opportunity for further involvement in other regions of possible NATO operations, including in North Africa, where Rosneft has already started to lift oil from Libya on a one-year contract.¹⁵²

The Role of NATO

Energy Security is not a new issue for NATO. The Alliance has had an Energy Security Centre of Excellence in place since 2011, it is not clear if any have been implemented. As a result, energy security challenges in the Baltic States and Russia's use of oil as an instrument of foreign policy have not been acted upon. According to Michael Rühle,¹⁵³ Head of the Energy Security Section in NATO's Emerging Security Challenges Division, possible reasons for the inaction have been the diverging national interests of European countries and NATO, an extricable link between energy security and Russia, and other supranational actors such as the EU and the IEA are dealing with the issue. Regardless, Europe has not been able to combat Russian energy influence, and NATO must prioritize this issue because its own member states are at risk of excessive Russian oil dependence. Furthermore, NATO military operations in Eastern Europe will be at risk.

151 N1 Hrvatska . "MOL i Rosnjeft su veÄ dogovorili prodaju Ine" [MOL and Rosneft have already agreed to sell INA]. Accessed February 11, 2017.

152 Reuters Staff. "Rosneft lifts oil from Libya on a one-year contract." *Reuters*. Last modified September 9, 2016 .

153 Michael Rühle, "NATO and energy security." In *NATO Review magazine*, Last modified 2011.

While NATO rarely acts towards non-military threats, it would be both foolish and naïve for the Alliance to not address the rapidly growing Russian influence over Europe through a staple commodity such as hydrocarbons. NATO members in Eastern Europe such as Poland, Estonia, Latvia, and Lithuania have made significant, successful strides in diversifying their energy sources through shale oil, oil shale, alternative imports, and through technology such as Liquid Natural Gas (LNG) terminals. However, the efforts of these members have not been recognized or encouraged by NATO. For example, Slovenia, another NATO member, is a fervent supporter of Russian products,¹⁵⁴ but the Alliance has been silent on encouraging cooperation of its members to invest in energy security efforts.¹⁵⁵

As shown by Russia's successful efforts in destabilizing nations such as Georgia and Ukraine, NATO should ensure the highest chance of success for possible missions in these regions and throughout Europe. Given the tendency of the Russian state apparatus to use energy as an instrument of foreign policy, continued Russian energy dominance threatens NATO's influence in the Baltics and beyond. Decreasing Russian leverage and increasing energy connectivity within NATO therefore requires an appropriate response framework as well as a diversification of sources. It is imperative that member states possess the capability to maintain critical infrastructure functions in the absence of imports from Russian state-backed monopolies.

The first phase of this effort would begin with a shift towards alternative sources of fossil fuels, followed by a long-term transition to local renewable energy. Many energy reports overlook the significance of sustainable energy as a solution to NATO's energy concerns. However, recent advancements in renewables have positioned domestic tidal, wind, solar, and geothermal sources as crucial alternatives to imported hydrocarbons. This section will review the diversification of European energy imports from a security perspective, and evaluate a long-term, alternative energy strategy for NATO member states following the example of the EU's Energy Directives. It will also recommend a risk-management framework as a response to gas supply discontinuation and attacks on critical energy infrastructure affecting member states in the short-term.

154 Reuters Staff. U.S. urges Serbia, Slovenia to diversify their energy sources." Reuters. Last modified September 9, 2016; Valetio Fabbri. "Slovenia-Russia: the bilateral relationship." The Slovenia Times. Last modified August 9, 2016.

155 Rühle, "NATO and energy security."

Policy Recommendations

- Increase cooperation with the EU by supporting its energy directives. These include implementation of the Third Energy Package and Energy Security Strategy.
- Recognize the political benefits of a single European energy market with reduced dependency on Russian gas.
- Prioritize reports by the NATO Energy Security Center of Excellence.
- Create a contingency plan to sustain short-term energy involving alternative sources in response to supply discontinuation/disruption by state-sponsored monopolies.

Case Study: Responses to Supply Chain Impediment during NATO operations

During the NATO combat support operations in Afghanistan, important supply lines were established to supply ISAF. In response to the death of 24 Pakistani officers in a NATO airstrike in Salala,¹⁵⁶ Pakistan shut down NATO's Ground Lines of Communication (PGLOCs). This airstrike was a part of NATO's International Security Assistance Force (ISAF) operations against the Taliban, and thus, the PGLOC cutoff represented a direct impediment to NATO's military supply chain. At this point, 30-40% of ISAF fuel supplies, vital to coalition forces in Afghanistan, were travelling through Pakistan. Thus, a PGLOC cutoff would cripple subsequent missions if left unresolved.

The shutdown of the PGLOC routes¹⁵⁷ prompted a rerouting of non-lethal NATO supplies through a significantly costlier Northern route (NDN). No military response was directed towards state actors for severely impeding NATO operations. Rather, diplomatic and alternative

156 One of Pakistan's Federally Administered Tribal Areas (FATA)

157 This route cost \$17 million per month to maintain compared to the NDN route, which cost \$104 million per month.

158 Monish Gulati, "Unblocking of NATO Supply Routes by Pakistan". 2013. "Pentagon figures indicated that about \$104 million per month was being spent additionally to supply ISAF through NDN which was \$87 million more per month than the \$17 million it used to cost on the PGLOCs. These costs do not reflect over \$30 million in U.S. aid and an additional \$11 million for the fiscal year 2012 which Uzbekistan has received to facilitate movement of supplies on the NDN."

economic lines of communication were carefully evaluated and emphasized to avoid further straining of ties with the Pakistani administration. Subsequent rerouting of shipments through Central European and Baltic countries on the NDN proved more secure despite increased cost and shipping time.¹⁵⁸ In spite of this experience, NATO has not developed a contingency plan to prevent similar impediments from occurring. NATO requires a detailed contingency plan that creates a capacity to replace pipelines that are at risk of a cutoff. In the case of the Baltic region, this would entail alternative suppliers, routes, as well as both long-term and short-term response frameworks.

Energy Strategies for Europe and NATO

Energy diversification (Long Term Strategy)

In 2011, the EU launched the Third Energy Package as a part of its effort towards a single European gas and electricity market.¹⁵⁹ The Third Energy Package urges import diversification and increased integration of the EU energy market on the basis of economic incentives. Given Russia's monopoly on natural gas, NATO possesses security incentives to support the implementation of the Third Energy Package.¹⁶⁰ NATO should also encourage the Energy Union Framework¹⁶¹ (EUF) to reduce foreign imports, overall dependency, and promote energy efficiency.¹⁶² Many measures addressed within these documents are framed from the angle of economic cooperation; however, the ESS in particular provides a logistical framework for diversification and risk management that may be adapted to all NATO member states.

158 Monish Gulati, "Unblocking of NATO Supply Routes by Pakistan". 2013. "Pentagon figures indicated that about \$104 million per month was being spent additionally to supply ISAF through NDN which was \$87 million more per month than the \$17 million it used to cost on the PGLOCs. These costs do not reflect over \$30 million in U.S. aid and an additional \$11 million for the fiscal year 2012 which Uzbekistan has received to facilitate movement of supplies on the NDN."

159 United States. Congress. Senate. Committee on Foreign Relations. Putin's Asymmetric Assault On Democracy In Russia And Europe: Implications For U.S. National Security. Washington: U.S. G.P.O., 2018. <https://www.foreign.senate.gov/imo/media/doc/FinalRR.pdf>.

160 The Third Energy Package promotes energy diversification and the creation of a single, integrated EU gas and energy market. The package aims to unbundle the energy production and supply interests from the network in order to prevent network operators from favoring their own energy production and supply companies, thus preventing regional monopolies.

161 This Energy Union Framework includes the EU Energy Security strategy to increase domestic energy production and diversify sources of supply; the Oil Stocks Directive to promote member countries to have reserve stocks of oil for distribution or consumption; and the Vehicle Emissions Regulation to promote energy efficient standards to reduce consumption

162 European Commission. "The Energy Union on track to deliver." Press Release Brussels, November 18, 2015.

All but four NATO states are members of the EU. NATO should urge member states of both organizations to gradually transition to sources of energy derived from a pan-European market. The Kremlin's current monopoly on energy supplies to the Baltic region as well as its continued construction of the Nordstream 2, will create a set of states reliant on Russian gas. Further cooperation between NATO, EU, and energy producing states is paramount to resist Russian energy dependence through the completion of Nordstream 2. This section is divided into two geographical areas addressing the Baltics and the Southern members of the alliance (Greece, Bulgaria, Hungary, and Turkey).

Successful Energy Security Case Study: Italy

Italy imports as much as 25% of its oil from Russia. It is not completely reliant on Russian oil but is nonetheless affected by temporary shortages. However, given access to alternative foreign energy imports, Italy's market can stabilize following price fluctuation. For example, when a gas hub in Baumgarten, Austria, suffered an explosion, it prevented Russian gas from entering Europe.¹⁶³ However, Italy correctly employed energy security tactics such as updating its infrastructure to include bi-directional pipelines and reverse flows, using the EU energy crisis level frameworks for different scenarios, diversifying suppliers and supply routes, surplus storage and successful communication to rapid response teams all aided in the prevention of a sustained national emergency.¹⁶⁴ In addition, "the latest regulation also requires the member states to provide both preventative action plans, as well as emergency plans that deal with the roles and responsibilities of different entities throughout the gas system chain...[and] a solidarity mechanism that will address extreme situations in which supply of gas for vulnerable customers is threatened."¹⁶⁵

163 Italy, a country where "gas heating constitutes more than 60% of the country's gross heat generation" and "imports almost 64% of the gas it consumes...caused Italy to declare a temporary state of emergency in the country." Additionally, a "crack in the infrastructure" of a pipeline in Norway led to spike of 97% in gas prices in Italy, 46% in the UK

164 Julia Vainio, "An explosion in the heart of the European gas system: What does the Baumgarten case tell about the resiliency of the system?" *SARDINES* 5, no. 12 (December 2017). PDF.

165 Ibid.

166 Indrė Dūdėnaitė "Significance of assessing environmental risks: The Nord Stream Project." PhD diss., Institute of Public Law, University of Oslo, 2011. https://www.duo.uio.no/bitstream/handle/10852/22675/Copy_of_Master_Thesis.pdf?sequence=1&isAllowed=y.

Italy has fully adopted these EU strategies, and while they do depend on Russian oil, they have a mechanism by which to ensure the capacity to replace their primary oil supplier. Given the success of the EU's Energy Union Framework, NATO should collaborate with its fellow supranational institution to encourage their members to promote effective energy securities.

Regulating Imports from Russian Controlled Pipelines (Nord Stream II)

Nord Stream II (NS2) is a natural gas pipeline currently under construction to be built alongside the existing Nord Stream I (NS1). NS2 poses an existential threat to energy diversification in the Baltic Region due to its 55 billion cubic meter transmission capacity.¹⁶⁶ This cheap hydrocarbon is a tempting fuel option for Eastern NATO allies considering Russia's low natural gas prices. It is scheduled to be operational by 2019, and aims to route gas from the Russian coast along the Baltic Sea, terminating near Greifswald in Germany. NS2 will double the capacity of fuel travelling along the same route as NS1 alongside the borders of Latvia, Lithuania, Estonia, and Poland. Increased transmission capacity will only strengthen Gazprom's grip on Europe, which will make it more difficult for EU and NATO states to diversify their energy imports. While NS1 has been described as a "stranded investment which never makes the return on capital" by analysts, the pipeline creates considerable political leverage for Russia.¹⁶⁷

It is therefore imperative that the aforementioned Eastern European states regulate current and potential gas imports travelling through NS1 and NS2, while establishing imports from non-Russian suppliers. Firms like Vopak (Netherlands, state-controlled), GAZ System (Poland, state-controlled), and Balti Gaas (Estonia, private) represent natural gas suppliers with existing terminals along the NordStream route. Establishing long-term supply contracts with the above suppliers, as well as others with access to Baltic gas-sourced pipelines within the region, would allow

166 Indrė Dūdėnaitė "Significance of assessing environmental risks: The Nord Stream Project." PhD diss., Institute of Public Law, University of Oslo, 2011. https://www.duo.uio.no/bitstream/handle/10852/22675/Copy_of_Master_Thesis.pdf?sequence=1&isAllowed=y.

167 Ilya Zaslavskiy, Georgiy Kasianov, Conor O'Reilly, and Elizabeth Pond. "Putin's Art of the Deal." Berlin Policy Journal. May 18, 2017. <https://berlinpolicyjournal.com/putins-art-of-the-deal/>.

Eastern European states to meet demands even in the case of supply discontinuation by Russia. NATO should promote the capacity to replace cheap Russian oil by encouraging states to develop contracts with the above companies. This act would not be controversial, as it does not infringe upon a member state's domestic ability to choose their primary supplier.

Establishment of Regasification Terminals Along the Baltic Coast

One alternative to continued natural gas imports via the Nordstream pipeline is the establishment of land-based and floating regasification terminals on the Baltic coast. The Klaipeda LNG terminal in Lithuania is a floating storage and regasification unit (FSRU) that supplies natural gas from the Baltic Sea gas market to Lithuania. It is occupied by the FSRU Independence, a \$330,000,000 mobile regasification unit that was constructed and launched between 2012-2014 in Singapore. The short timescale of the FSRU Independence's construction has allowed Lithuania to quickly transition from a near-complete dependence on Russian gas imports pre-2014 to a 25-50% dependency rate in 2016.¹⁶⁸ Furthermore, FSRU terminals run by GAZ System already exist in Poland; the Świnoujście terminal has been in operation since 2016, and the FSRU Baltic Sea Coast is scheduled for operation by 2023. If similar projects were to be launched across neighboring states, Russia's grip on the Baltic energy market would weaken significantly by 2023 given a transition to natural gas as the main energy source.

Rerouting the Southern Gas Corridor and the Trans-Adriatic & Trans-Anatolian Pipelines

Ukraine was able to diversify its gas imports by reversing the flow of gas in its pipelines leading towards Central and Western Europe in response to the Russian gas cutoff of 2015. This reduced their imports from a 65% dependence on Russian gas in 2009 to 18% in 2017. The issue with Southeastern NATO states like Romania, Bulgaria, and Hungary is that they are on a 'gas island.' Given the landlocked nature of Hungary and the diminutive coastlines of the above states, FSRU terminals are not a viable option for diversification. An alternative solution would be to reroute gas from the Trans-Anatolian Pipeline (TANAP) and the Trans Adriatic Pipeline (TAP) through Greece.

168 "Oil and Petroleum Products – a Statistical Overview," *Eurostat*.

TAP and TANAP draw gas from the Shah Deniz gas field in Azerbaijan, and are set to supply gas to Southern, Eastern, and Central Europe. TAP will travel through Turkey upon project completion in 2018¹⁶⁹ and route gas to Greece and Bulgaria via the Interconnector Greece-Bulgaria pipeline (ICGB). Supporting a unified approach to energy will benefit NATO, as TAP and TANAP will increase energy connectivity between Southern areas of the alliance. With a transport volume of 5 billion cubic meters/year, the ICGB will help build the capacity to replace Russian imports by 2023. As the ICGB received its Bulgarian construction permit in October 2017¹⁷⁰ but is still yet to be built, it is imperative that NATO urge Bulgaria to hasten the construction of the pipeline.

Environmental grounds for the opposition of Nord Stream 2

In addition to the political and economic incentives present for opposing the NordStream II project, it is important to note that NS2 poses severe environmental risks during both construction and operational phases. NATO should thus consider the environmental risks of the NS2 project as grounds to further examine NS2 integration into the transatlantic energy network. Environmental concerns can provide additional support for the appropriate energy solution, and therefore should be identified and publicized.

Construction of NS2 risks triggering unexploded ordinance from World War II scattered across the bottom of the Baltic Sea, subsequently posing significant risks of damage and chemical contamination to the fragile Baltic ecosystem.¹⁷¹ Once laid down, the operation of NS2 also poses the risk of a potential gas leakage in one of the world's coldest, logistically remote marine environments. Water temperatures in the Baltic Sea range from <0 degrees Celsius¹⁷² in the winter to a maximum of 20 degrees Celsius¹⁷³ mid-summer. As such, the cleanup of a potential NS2 spill during the wintertime would entail the logistical nightmare of breaking through sea ice and removing hydrocarbons dissolved in near-freezing waters.¹⁷⁴

169 "Southern Gas Corridor." Trans-Adriatic Pipeline. Accessed February 15, 2018. <https://www.tap-ag.com/the-pipeline/the-big-picture/southern-gas-corridor>.

170 "ICGB received construction permit on Bulgarian territory." ICGB AD. October 4, 2017. <http://www.icgb.eu/icgb-received-construction-permit-on-bulgarian-territory>.

171 "ESPOO Report Nord Stream 2" Nord Stream 2. 2017. http://www.envir.ee/sites/default/files/ns2_aruane_en.pdf.

172 <32 Fahrenheit.

173 68 Fahrenheit.

174 Swedish Meteorological and Hydrological Institute. "Sea surface temperature." SMHI database. <https://www.smhi.se/en/theme/sea-surface-temperature-1.12287>.

Protecting critical energy infrastructure (Short Term Strategy)

Defending Against IT-Based Attacks on Non-Nuclear Critical Energy Infrastructure

Cyber attacks on energy infrastructure can take many forms, but due to the centralized nature of electricity Operational Technology (OT) systems, the control system is often chosen as a target. Unlike most IT systems, electricity OT systems must operate in real-time and cannot simply install patches or updates, or shut down and reboot as in the typical response to digital failures or breaches. Special security considerations and precautions are therefore needed.¹⁷⁵ Such digitalization of allied energy infrastructure would also optimize consumption, further reducing import requirements from non-European sources. Among these precautions, NATO should encourage the implementation of a “smart grid” energy infrastructure among member states to reduce the human error present in the control system by automating system operator’s manual processes and actions.¹⁷⁶

Older Information and Communication Technology (ICT) networks are generally closed networks unconnected to the Internet. This makes them inherently more vulnerable to malware manually inserted into the system via hardware and extremely difficult to troubleshoot.¹⁷⁷ Digitized infrastructures provide higher resilience against attackers for this reason. “Smart grids” reduce the risk of both human-error and web-derived attacks through built-in safeguards against the malfunctioning of individual control units. The Ukraine power grid shutdown of 2015 is an example of such an attack.

As a risk management framework against IT-based attacks, NATO should suggest a target deadline of 2020 for the formation of individual rapid response teams for each NATO state. Teams may be composed of both state-and non-state experts who are deeply familiar with the energy

175 "Digitization and Energy: Cross-cutting risks: Cybersecurity, privacy and economic disruption". OECD/ International Energy Agency. 2017. <https://www.iea.org/publications/freepublications/publication/DigitalizationandEnergy3.pdf>

176 “Good Practices Guide^{SEP} on Non-Nuclear Critical Energy Infrastructure Protection (NNCEIP) from Terrorist Attacks Focusing on Threats Emanating from Cyberspace,” *OSCE*, 2017, pp. 32

177 *OSCE*, 2017, pp. 27

infrastructure of each country, akin to Estonia's cyber defense league. Considering the rapid development of the NATO Cooperative Cyber Defense Center of Excellence over the last seven years, a two-year timeline for the formation of a framework by the NATO Center for Energy Excellence is well within reach. Additional measures within the aforementioned framework should stress mandatory education on cyber-hygiene for professionals in the energy field. Human error remains the most often exploited flaw, and so public-private cooperation should be emphasized to keep up-with the rapid pace of malware development and reduce phishing rates.

Conclusion

Russia's monopoly of hydrocarbon exports across Eastern and Southern Europe has placed NATO's energy security in unnecessary jeopardy. The existence of a NATO Center for Energy Excellence, multiple energy security directives from the EU, and projects underway in multiple countries point towards a vast capacity for improvement in NATO's own energy policies. To reiterate Secretary General Stoltenberg's remarks in 2017, the, "resilience of [NATO]'s energy supply, roads, and health care... highlights the need to work closer together with civilian authorities in the different member countries, but also [to] work together with the European Union."¹⁷⁸ A key theme of this section has been inter-institutional cooperation. If NATO states are able to adhere to the EU's energy directives, allocate more resources to the Center of Excellence for Energy, and formulate a contingency plan, these would all be major factors in ensuring energy security for the Alliance.

178 Stoltenberg, Jens. "Remarks by NATO Secretary General Jens Stoltenberg at the Inauguration of the Helsinki Centre of Excellence for Countering Hybrid Threats, with EU High Representative Federica Mogherini." NATO North Atlantic Treaty Organization. Delivered October 1, 2017. https://www.nato.int/cps/ua/natohq/opinions_147499.htm?selectedLocale=uk.

Weapons of Mass Destruction

Jennifer Wood and Faizah Abdullah

Introduction

NATO officially classifies Weapons of Mass Destruction (WMDs), as “Chemical, Biological, Radiological, and Nuclear” (CBRN) weapons.¹⁷⁹ While the Alliance has always considered the disarmament, deterrence, and non-proliferation of WMDs to be one of its central tasks, these issues have reemerged with increased Russian aggression after 2014.

This section will analyze the shortcomings and successes of existing, unclassified NATO policies and strategies regarding prevention of and defense against CBRN attacks around the world, specifically stemming from Russian action. Though the stockpiling, development, and use of nuclear weapons remains one of the greatest threats posed to NATO member states, the organization must shift its focus towards the growing threat posed by chemical, biological, and even hybrid weaponry. State and non-state actors are using these means in greater numbers in the modern age. Hybrid, and therefore cyber, weapons now pose a greater risk to the stability and existence of nations, requiring NATO to analyze their potential status as a Weapon of Mass Destruction. Radiological weapons, in recent years, have been the target of non-state actors such as terrorist organizations. While NATO should remain prepared to respond to radiological attacks on every front, this report will not analyze the radiological threat posed by Russia.

Furthermore, NATO must research and investigate the increased activity of Russia in other nations. The Alliance needs to evaluate the threat posed by the use of chemical weapons in areas such as Syria, and the production of nuclear materials in other Middle Eastern countries closely aligned with Russia. A threat is presented not only when a country produces and uses its own Weapons of Mass Destruction, but also when it allows and promotes such actions by others.

179 “Chemical, biological, radiological and nuclear (CBRN) material is used as an umbrella term for chemical, biological and radiological agents in any physical state and form, which can cause hazards to populations, territory and forces. It also refers to chemical weapons precursors and facilities, equipment or compounds that can be used for development or deployment of WMD, CBRN weapons or CBRN devices.” North Atlantic Treaty Organization [NATO], “Combined Joint Chemical, Biological, Radiological and Nuclear Defense Task Force: The Alliance’s Multinational CBRN Defense Capability,” *NATO: Topics*, August 6, 2015, https://www.nato.int/cps/ic/natohq/topics_49156.htm.

Measures already being taken by NATO to counteract such threats are commendable, including the implementation of CBRN Centers of Excellence. These centers research modern technological advances, prepare training programs, and mobilize highly skilled Task Forces to respond in the event of accidents or attacks regarding CBRN materials. In recent years, NATO has focused much of its work with CBRN defense in areas prone to terrorism. This report will analyze what further actions should be taken by NATO to better prepare against a specifically Russian threat. NATO must reorient its policies towards Russia, as the threat posed by WMDs will only increase in the next five years.

Nuclear Aggression and Deterrence Post-2014

NATO is an alliance based and formed on the ideas of collective defense and nuclear deterrence.¹⁸⁰ Since its formation in 1949, the alliance's main responsibility has been to deter Russian nuclear aggression by maintaining a nuclear arsenal of their own within member countries. The system of nuclear deterrence rests on the theory of Mutually Assured Destruction (MAD) which ensures total annihilation of both parties, should one state choose to utilize nuclear weapons. This theory is enshrined in treaties such as the Nuclear Non-Proliferation Treaty (NPT)¹⁸¹ of 1967, and the Intermediate-Range Nuclear Forces Treaty (INF)¹⁸² of 1987, and has been the basis of all NATO's nuclear policies. Most recently, in 2012, the alliance released a new Defense and Deterrence Posture Review (DDPR) that was an ineffective re-commitment to deterrence, lacking any concrete policy consensus to prepare the organization for the events that would follow the 2014 Russian annexation of Crimea.¹⁸³

In 2012, Russia was still a nominal partner of NATO and had open dialogue with the Alliance. The new Strategic Arms Reduction Treaty (START) between the U.S. and Russia had just been signed in 2010, calling for massive reduction in nuclear missiles between the two states.¹⁸⁴ After

180 Nuclear Deterrence refers to the concept that, when two or more countries hold somewhat equal amounts of nuclear armaments, no state with strike first in fear of Mutually Assured Destruction and total annihilation of one's nation. Therefore, to maintain security in the existence of nuclear weapons, states must have, or align themselves with countries who do have, nuclear weapons to avoid nuclear attacks.

181 U.S. Department of State, "Adherence to and Compliance with Arms Control, Nonproliferation, and Disarmament Agreements and Commitments" (United States Department of State, April 2017), <https://www.state.gov/documents/organization/270603.pdf>.

182 Daryl Kimball and Kingston Reif, "The Intermediate-Range Nuclear Forces (INF) Treaty at a Glance" (Arms Control Association, December 2017), <https://www.armscontrol.org/factsheets/INFtreaty>.

183 Karl-Heinz Kamp, "Nuclear Reorientation of NATO," NDC Commentary: Research Division (NATO Defense College, February 18, 2018).

184 Steven Pifer, "NATO, Nuclear Weapons and Arms Control," Arms Control and Non-Proliferation (Brookings Institute, July 19, 2011).

2014, Russia massively increased its use of nuclear capabilities in military exercises, and has continued to improve the capabilities of its existing nuclear weapons. Most recently, the United States has come forward with accusations that Russia has developed a long-range intercontinental torpedo,¹⁸⁵ potentially violating the terms of the INF Treaty,¹⁸⁶ which bans the development of similar weaponry. Russia shows a clear desire to develop new nuclear warheads, as Russian President Vladimir Putin has been quoted saying he desires to leave the INF Treaty for what he perceives to be an unequal limitation on Russia's ability to develop weapons compared to other nuclear powers.¹⁸⁷

In response to this aggression, certain world leaders, like United States President Donald Trump, have recently advocated for a new era of nuclear development. In this era, countries would continue to increase the number of nuclear warheads they possess, strengthening the security of nuclear deterrence.¹⁸⁸ He has stated his desire to increase the number of warheads under U.S. control, and relax the limits of their use.¹⁸⁹ It is inadvisable that NATO adopt this policy, as it poses numerous security challenges to the Alliance and the entire global community. Furthermore, it would be ineffective in curtailing Russian aggression and would potentially encourage Russia to develop more Weapons of Mass Destruction. This policy, if enacted, would nullify existing treaties that have begun the disarmament and non-proliferation¹⁹⁰ of nuclear capabilities, thus opening the door for non-nuclear states, as well as existing nuclear powers like Russia, to develop their own weapons. While NATO is reliant on its nuclear-capable member states, the Alliance should propose that the United States exercise caution in the restructuring of its nuclear policy. NATO must remain committed in the long-term to the disarmament and non-use of nuclear weapons.

185 Barbara Starr and Zachary Cohen, "US Says Russia 'Developing' Undersea Nuclear-Armed Torpedo," *CNN Politics*, February 3, 2018,

186 Ankit Panda, "The Uncertain Future of the INF Treaty," *Council on Foreign Relations*, December 21, 2017, <https://www.cfr.org/background/uncertain-future-inf-treaty>.

187 Daryl Kimball and Kingston Reif, "The Intermediate-Range Nuclear Forces (INF) Treaty at a Glance" (Arms Control Association, December 2017)

188 Max Fisher, "Trump, Promising Arms Race, Could Set World on Uncertain Path," *New York Times*, December 23, 2016. <https://www.nytimes.com/2016/12/23/world/trump-nuclear-arms-race-russia-china.htm>

189 Ibid.

190 This report refers to Horizontal Proliferation, which is the spread of nuclear capabilities from Declared Nuclear States to non-nuclear states. Victor W. Sidel, MD and Barry S. Levy, MD, MPH, "Proliferation of Nuclear Weapons: Opportunities for Control and Abolition," *American Journal of Public Health* 97, no. 9 (September 2007): 1589–94.

While NATO is in favor of nuclear disarmament, and considering Russia's disregard for disarmament treaties like the START and the NPT, the alliance should not pursue strict disarmament schedules for the time being. It should instead encourage its member states to decrease the rate of destruction of their existing nuclear warheads. This would maintain an effective nuclear deterrent against Russia, which is imperative to the existence of NATO as a whole. The United Nations recently proposed a Nuclear Weapons Ban Treaty (NWBT), which calls for the complete ban and illegality of all nuclear weapons. NATO has stated its strict disapproval of this treaty,¹⁹¹ which would force NATO member states to completely disarm. It is unreasonable to expect that Russia would abide by such a treaty and destroy their nuclear weapons in the foreseeable future. With total military spending at just around 1/10th of that of the United States, much of their projection as a military superpower is contingent on their massive nuclear armaments.¹⁹² This treaty, and others of its nature, would only create inequality among disarmament measures between liberal democracies and authoritarian regimes, and fundamentally de-legitimize deterrence.¹⁹³ Many scholars claim that these treaties continue to carry less weight as authoritarian regimes are unlikely to abide by international treaties if they do not serve national interests.¹⁹⁴ The NWBT would not create a compromise between Russia and NATO countries, and would not result in the total elimination of nuclear warheads. It would only create major imbalances of armaments, posing massive amounts of risk to NATO and its allies. Imposing a new ban would do nothing but decrease NATO's effectiveness while allowing Russia's to increase. NATO is correct in its opposition of the NWBT.

NATO does not, as an organization, develop new nuclear weapons, but must ensure its members be at the cutting edge of weapons technology to maintain its effectiveness as an alliance based on collective defense. While member states cannot violate existing treaties to which they are bound, they should continue to research and develop new capabilities to counter those being made by Russia. NATO should study and assess the shortcomings of individual member states and internally recommend solutions. General aspects of this internal review should be made public, so that NATO can be transparent with civilian populations and external governments to show that

191 Anthony Juarez, "Rethinking Deterrence and Assurance," in *Western Deterrence Strategies: At an Inflection Point?* (Research Division - Nato Defense College: DeBooks Italia srl, 2017).

192 "U.S. Defense Spending Compared to Other Countries" Stockholm International Peace Research Institute: Peter G. Peterson Foundation, June 1, 2017, https://www.pgpf.org/chart-archive/0053_defense-comparison.

193 Michael Rühle, "The Nuclear Weapons Ban Treaty: Reasons for Skepticism," *NATO Review Magazine*, May 19, 2017.

194 Kamp, "Nuclear Reorientation of NATO."

the Alliance is prepared to respond to these threats in the proper capacity. The latest “Comprehensive, Strategic-Level Policy for Preventing the Proliferation of Weapons of Mass Destruction (WMD) and Defending against Chemical, Biological, Radiological and Nuclear (CBRN) Threats” outlining NATO’s responses to WMDs was last updated in 2009, and reflects a world much different from the one we see today.¹⁹⁵ An updated policy is imperative for NATO to be perceived as an effective alliance.

This new era of Russian nuclear aggressiveness renders NATO’s current policies outdated, and the Alliance should reanalyze threats where they are felt the most. To maintain stability and peace in the nuclear realm, NATO must reiterate its commitment to deterrence, specifically tailored to the modern threat of Russia.

Chemical and Biological Threats from Russia

Russia poses not only a nuclear threat, but has also shown an increase in activity concerning chemical and biological weapons development. NATO must properly investigate and recognize the threats posed by these weapons. In 2012, Russian President Vladimir Putin stated that he desired to create a “weapons system based on new physical principles (beam, geophysical, wave, genetic, psychophysical, and other technology),”¹⁹⁶ which would potentially violate the Biological Weapons Convention (BWC)¹⁹⁷ of which Russia is a signatory.

The main threat in the non-nuclear realm comes from Russia’s support of chemical weapons use and retention. From the ratification of the Chemical Weapons Convention (CWC)¹⁹⁸ to 2003 Russia had only destroyed about 1% of its existing stockpiles, compared to around a 22% total

195 NATO, “NATO’s Comprehensive, Strategic-Level Policy for Preventing the Proliferation of Weapons of Mass Destruction (WMD) and Defending Against Chemical, Biological, Radiological and Nuclear Threats” (North Atlantic Treaty Organization, September 3, 2009).

196 Raymond A. Zilinskas and Phillippe Mauger, *Biosecurity in Putin’s Russia* (Boulder, Colorado: Lynne Rienner Publishers, 2018),

197 “Article I: Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile, or otherwise acquire or retain: (1) Microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;” U.S. Department of State, “Text of the Biological Weapons Convention” Biological Weapons Convention, Washington, London, Moscow: Bureau of International Security and Nonproliferation, 1972, <https://www.state.gov/t/isn/bw/c48738.htm>.

198 Article I of the CWC prohibits all signatories from producing, stockpiling, sharing, or coming into contact with chemical weapons, and exclusively prohibits the use of chemical agents in a warfare setting. “Article I. General Obligations,” *Chemical Weapons Convention* (Organisation for the Prohibition of Chemical Weapons, n.d.).

reduction from all declared states.¹⁹⁹ This asymmetric destruction of chemical capabilities has allowed for these weapons to remain within the arsenals of many state and non-state actors. While the international community has not seen the use of chemical weapons by Russia for decades, it is Russia's vehement support of nations and governments that have used them, such as Syria, which sparks concern for the future. As is the case with Russia and nuclear weapons treaties, recent actions suggest that Russia will not abide by treaties that threaten its national interests, such as the CWC and BWC.

Russia is a major ally of the Syrian government and has been the main contributor to this government's campaign in a devastating civil war. On numerous occasions dating back to 2013, the Syrian government has been accused of using chemical weapons.²⁰⁰ Sarin and chlorine gases were used to cause massive death and injury to the civilian population. Following these attacks, Russia helped to broker a deal with Syria acceding them into the CWC²⁰¹ and ensuring the destruction of all Syrian chemical weapons. Just this past year, it has become evident that Syria never followed through, and UN-verified accounts of new chemical weapons attacks have occurred in the first months of 2018.²⁰² Russia's response to these accusations has been continued denial of all guilt of the Syrian government. In addition, Russia has recently blocked UN investigations into new accusations by employing its Security Council veto power.²⁰³ Many NATO members, including the United States and UK, claim that Russia is primarily at fault for the continued use of chemical weapons on civilians in Syria, and that it should face the appropriate consequences.²⁰⁴

199 Jiri Matousek, "Impact of the Scientific and Technological Development on the Chemical Weapons Convention: Threats and Benefits," n.d.,.

200 James William and Alison Williams, "Russia Undermining Action Against Chemical Weapons, Says UK, Citing Syria 'Cover Up,'" *Reuters*, October 27, 2017, <https://www.reuters.com/article/us-mideast-crisis-syria-un-britain/russia-undermining-action-against-chemical-weapons-says-uk-citing-syria-cover-up-idUSKBN1CW1A3>.

201 "Article I. General Obligations." Organization for the Prevention of Chemical Weapons.

202 John Irish, "U.S. Takes Aim at Russia After Suspected Syrian Government Gas Attack," *Reuters*, January 23, 2018, sec. World News

203 Ayanna Alexander, "Haley Condemns Russia over Syria Chemical Weapons Use," *Politico*, February 5, 2018. These accusations were verified by a joint-investigation carried out by the UN and the Organization for the Prohibition of Chemical Weapons (OPCW).

204 Irish, "U.S. Takes Aim at Russia After Suspected Syrian Government Gas Attack"; James William and Alison Williams, "Russia Undermining Action Against Chemical Weapons, Says UK, Citing Syria 'Cover Up,'" 2017.

This support of the Syrian government is just one facet of Russia's attempts to create a new sphere of influence in the Middle East. This is primarily in response to NATO's expansion into former Soviet states in Eastern Europe. Russia has formed close economic ties with both Iran and Saudi Arabia, states that have shown interest in developing CBRN capabilities in the past.²⁰⁵ The possibility of Russia using this influence to advance its own interests regarding CBRN weapons development, and the proliferation of weapons to non-CBRN states, is a major threat that must be investigated at length by the Alliance. Russia sees NATO as its absolute rival, and the Alliance must assume that the country will act accordingly.²⁰⁶ It is critical that NATO be prepared for every possible outcome that poses a threat to the national security of member states, including the proliferation of CBRN weapons to nations like Syria and others in the Middle East.

The CWC, implemented after Saddam Hussein used chemical weapons on civilians in the 1980s, was meant to eliminate chemical weapons as a means of warfare. Clearly it has failed to do so. Russia's support of countries like Syria, and failure to condemn the use of chemical weapons, shows that NATO cannot rely on the effectiveness of treaties to keep Russia in line and must be prepared to respond with the utmost effectiveness should Russia decide to utilize their capabilities.

Cyber Warfare and CBRN Responses

Though "CBRN weapons" has been an effective definition for WMDs in addressing the destructive weapons of the past, it falls short in including the threats posed by states and individuals today. Cyber warfare has the capacity to destroy or destabilize states at the same level as some existing WMDs, and should be recognized accordingly. Certain individuals within NATO have begun to add a "-H" component to their definition of a WMD, to read as "CBRN-H" weapons.²⁰⁷ This would imply that, on a case-by-case basis, hybrid (and therefore cyber) weapons and attacks

205 John Hannah, "Russia's Middle East Offensive," *Foreign Policy*, September 13, 2016.

206 Russia has partnered with Iran, a country that desires to become a nuclear state. These close economic ties, plus Russia's involvement in the Iran Nuclear Deal of 2015, are highly troublesome for NATO's ability to provide security around the world. Wade Shepard, "When U.S. Sanctions Backfire: Russia and Iran Partner Up In \$2.5 Billion Deal," *Forbes*, August 1, 2017, <https://www.forbes.com/sites/wadeshepard/2017/08/01/russia-and-iran-partner-up-as-the-us-turns-its-back/#795e2bad5f63>.

207 We were able to speak with a number of officials, researchers, and legal advisors from the NATO Defense College and NATO Headquarters. This information was learned during a discussion with one of these presenters.

can be treated with the same policy and military responses as existing CBRNs. NATO has classified cyber weapons as deserving of Article 5 responses, should the destruction be large enough.²⁰⁸ Therefore, this report recommends that NATO classify cyber weapons and assaults as WMD attacks when destruction and disruption is comparable to that of chemical, biological, radiological and perhaps even nuclear attacks.

The 2007 Estonia hacking and 2010 Stuxnet hacking of Iranian nuclear facilities are two instances where the world was shown the increasing level of insidious destruction cyber weapons can produce. In Estonia, nationwide communication was wiped out instantaneously, and in Iran, hackers were able to damage uranium processing facilities and compromise the entire production of nuclear materials in Iran.²⁰⁹ Alone, the fact that nuclear development facilities can be compromised so easily is cause for alarm,²¹⁰ but technology has continued to advance since these hacks, and NATO must pivot its position towards this new realm to be best prepared for the future.

Recognition of a weapon as being equal to WMDs not only changes public perception, but can lead to eventual changes in the appropriate responses attributed to its use. Recently, The United States Department of Defense sent a proposal to the White House suggesting that the use of nuclear weapons can be appropriate and proportionate in the event of a devastating cyber attack.²¹¹ According to a 1996 decision by the International Court of Justice, the use of nuclear weapons is not clearly illegal, making this proposal legitimate under international law.²¹² However, it does not appear that this policy would be effective in controlling the tide of cyber attacks. The purpose of a nuclear weapon is to threaten total annihilation of an adversary without actually being used. Therefore, this proposal claims that classic nuclear deterrence would not be an effective strategy to counter recent increases in cyber warfare. NATO could choose to adopt this policy, on the basis that the threat of a nuclear response would deter individuals and states from carrying out massive cyber attacks. However, as detailed in length in the Hybrid Warfare section, it is extremely difficult for NATO to attribute cyber attacks to state actors at this point in time. Threat-

208 Andrea Shalal, Dan Grebler, and Mark Heinrich, “Massive Cyber Attack Could Trigger NATO Response: Stoltenberg,” Reuters, June 15, 2016, sec. World News.

209 Michael Holloway, “Stuxnet Worm Attack on Iranian Nuclear Facilities” (Stanford University, July 16, 2015), <http://large.stanford.edu/courses/2015/ph241/holloway1/>.

210 Brent Kesler, “The Vulnerability of Nuclear Facilities to Cyber Attack,” *Strategic Insights* 10, no. 1 (Spring 2011): 15–25.

211 David E. Sanger and William J. Broad, “Pentagon Suggests Countering Devastating Cyberattacks With Nuclear Arms,” *New York Times*, January 16, 2018.

212 Louis Maresca, “Nuclear Weapons: 20 Years Since the ICJ Advisory Opinion and Still Difficult to Reconcile with International Humanitarian Law,” *International Review of the Red Cross*, July 8, 2016, sec. Humanitarian Law and Policy, <http://blogs.icrc.org/law-and-policy/2016/07/08/nuclear-weapons-20-years-icj-opinion/>.

ening nuclear weapons to deter unidentifiable adversaries is likely to be ineffective. Further, nuclear weapons cannot be utilized against civilians who are not directly engaged in armed conflict, making retaliation via nuclear power against individual hackers or unaffiliated groups difficult to justify in legal terms.²¹³ NATO and its member states should not attempt to counter new threats with old solutions.

Though this report advocates for the inclusion of cyber capabilities in NATO's definition of Weapons of Mass Destruction, it is not advisable that NATO rely solely on nuclear deterrence to prevent debilitating assaults. The alliance must work closely with both its CBRN and Cyber Centers of Excellence, and encourage collaboration with other international organizations like the European Union,²¹⁴ to continue to find concrete policies reflecting different levels of devastation, including those which would classify as CBRN attacks.

NATO's Defensive Actions in the CBRN Realm

Within NATO, a Joint Chemical, Biological, Radiological and Nuclear Center of Excellence (JCBRN COE) exists, is composed of 15 member countries, and is spearheaded by CBRN experts in the Czech Republic. Together, these nations work as an independent entity to research and develop CBRN weapons and countermeasures, to ensure greater capabilities for all NATO members.²¹⁵ The UN and European Union (EU) also have their own respective COEs called the UN Group of Friends²¹⁶ on CBRN and the EU CBRN COE. The EU has an extensive network of specialized CBRN COEs that work around the world to prevent and respond to CBRN accidents and attacks. These COEs work directly with host nations to provide tailored assistance and expertise to situations at hand.²¹⁷ These organizations collaborate in matters pertaining to CBRN weapons, including research and risk analysis. NATO should work to strengthen the ties between its own JCBRN COE and those of the UN and EU to coordinate responses and bolster information sharing capabilities between the organizations and their respective member states.

213 Maresca. 2016.

214 NATO and the EU have already collaborated on cybersecurity issues to a point, but still struggle with "shared situational awareness" and "lack of information sharing." We specifically advocate for greater joint training, exercises, and education in cybersecurity and CBRN sectors; Bruno L  t   and Piret Pernik, "EU-NATO Cybersecurity and Defense Cooperation: From Common Threats to Common Solutions," Security and Defense Policy (The German Marshall Fund of the United States, December 15, 2017).

215 "JCBRN Defense COE," 2018.

216 "CBRN Centres of Excellence," <http://www.unicri.it/topics/cbrn/coe/>, United Nations Interregional Crime and Justice Research Institute (UNICRI)

217 "CBRN Centres of Excellence: An Initiative of the European Union," <http://www.cbrn-coe.eu/>.

NATO can also utilize the extensive network provided by the EU CBRN COEs to improve its own effectiveness within the North Atlantic Treaty Area.²¹⁸

NATO created a Joint CBRN Task Force (JCBRN Task Force) in 2003 that specializes in defense against potential CBRN attacks. This Task Force is currently oriented towards counter-terrorism measures and is composed of an elite team of multinational specialists prepared to “prevent, protect and recover from WMD attacks” and “CBRN events.”²¹⁹ NATO should reorient this Task Force to more adequately address potential threats from Russia, and look into enlarging the Task Force to include more members from Eastern European states. Further, the last updated information on this Task Force was released in 2015, and the last collaborative exercise was done in 2010.²²⁰ NATO should release updates on current actions of this Task Force and COE to maintain transparency with the public, member and partner states, and potential adversaries. This would allow for greater expertise throughout NATO regarding CBRN defense mechanisms. To promote cooperation and cohesion, NATO’s Task Force units should collaborate with the EU COEs to reorient defensive and preventative efforts towards Russia.

The UN and EU could benefit from the expertise and employment of this Task Force. Collaboration of all specialized groups would be beneficial for the joint analysis of new developments in WMDs. Specifically, the NATO JCBRN COE and comparable international groups should research the implications of adding the “-H” component to the formally utilized definition of WMDs. We recommend NATO encourage cooperation between its own JCBRN and Cyber COEs on this topic, as well as with those of the UN and EU. Attaining international consensus among the three organizations would bring legitimacy to NATO’s own utilization of a “CBRN-H” definition.

218 The “Treaty Area” is referring to all member countries of NATO.

219 North Atlantic Treaty Organization [NATO], “Combined Joint Chemical, Biological, Radiological and Nuclear Defense Task Force: The Alliance’s Multinational CBRN Defense Capability,” *NATO: Topics*, August 6, 2015.

220 “NATO and Partners Exchange Best Practices Against Chemical, Biological, Radiological and Nuclear Threats,” NATO Newsroom.; “Combined Joint Chemical, Biological, Radiological and Nuclear Defense Task Force: The Alliance’s Multinational Defense Capability,” NATO: Topics

Conclusion

NATO is now facing significant CBRN threats from Russia. Consequently, NATO must remain committed to nuclear deterrence and non-proliferation and the security they provide in uncertain times. International treaties on nuclear development and production have increasingly shown to be ineffective in controlling Russian behavior, raising the need for a reorientation of nuclear deterrence policy directly towards the immediate Russian threat.

In the CBRN-H realm of WMDs, NATO faces just as serious threats from Russia, compared to the nation's nuclear activities. Through insidious actions around the world and stated intention to violate the CWC and BWC, Russia is in a perfect position to make serious gains in the chemical and biological sectors. Cyber weaponry is a component of modern warfare that largely remains a grey area. Recognizing cyber assaults as equal to some WMDs would help to bring concreteness and legitimacy to NATO's responses regarding this new issue, and would change public perception on the potential threat that cyber warfare poses. As the world continues to see rapid technological advancements, this recognition would make NATO better prepared to respond to any issue. It is imperative that the Alliance work collaboratively with other international organizations to increase the security of the North Atlantic Treaty Area without provoking greater action from Russia.

Policy Recommendations

- Reiterate the need for effective nuclear deterrence policies and capabilities worldwide to address the shortcomings of international treaties that have failed to control Russian behavior.
- Release an updated nuclear policy review document addressing the current Russian nuclear threat, and NATO's commitment to counteracting such aggression.
- Assess internal shortcomings in CBRN defense and find solutions to such issues, releasing a general statement to show that these improvements are under way.
- Recognize WMDs as "CBRN-H Weapons," to include the possibility of cyber attacks as war-warranting responses historically attributed to existing CBRNs. In addition, this recognition would change public perception on the immense threat posed by cyber warfare.
- Collaborate with the EU and UN, especially with respective CBRN and Cyber COEs, to reorient international attention and expertise towards Russia, and to be better prepared in the event of a CBRN-H attack.

NATO Political Unity and a Russian Partnership

Felice Cat-Tuong Luu and Sean Zeyou Dong

Introduction

On April 4, 1949, 12 countries convened in Washington, D.C. to sign the 14 articles of the North Atlantic Treaty, more commonly known as the Washington Treaty. This moment led to the creation of the North Atlantic Treaty Organization (NATO). Since then, 17 other countries have signed onto the North Atlantic Treaty, committing to uphold NATO's mission to defend peace and security throughout the North Atlantic Area.²²¹ To this day, despite the ever changing nature of politics and conflict, the founding articles of NATO have never been modified.²²²

Of these articles, this section will pay special attention to those that give NATO political mandates for cohesion, enlargement, and collective defense.²²³ As a treaty-based international organization, the North Atlantic Treaty provides guidance for NATO's actions. As a consensus-reliant alliance, the voices of member states provide guidance for NATO's future. During the Cold War, NATO's driving force was rooted in Articles 3 and 5 to act as deterrence against the Soviet Union and protect the collective security of its members. After the fall of the Berlin Wall and the collapse of the USSR, NATO shifted focus to promoting stability and preserving peace in places such as the Baltic region, the Balkans, and the Middle East.²²⁵ Today, NATO continues to act in a crisis management role either directly through NATO resources from member states or indirectly through cooperation in NATO-led programs across the globe.²²⁶

221 NATO defines the North Atlantic Area to include all current member states and their territories above the Tropic of Cancer. The geographical requirement for potential member states is that they must be on continental Europe above the tropic of cancer. NATO recognizes the North Atlantic Area to include Turkey. "The North Atlantic Treaty," *NATO North Atlantic Treaty Organization*. Last modified March 21, 2016. https://www.nato.int/cps/ic/natohq/official_texts_17120.htm.

222 "Founding treaty," *NATO North Atlantic Treaty Organization*. Last modified January 30, 2017. https://www.nato.int/cps/en/natolive/topics_67656.htm.

223 Articles 4, 5, and 10 of the North Atlantic Treaty. *NATO North Atlantic Treaty Organization*, "The North Atlantic Treaty."

224 NATO North Atlantic Treaty Organization, "The North Atlantic Treaty."

225 Article 2. *NATO North Atlantic Treaty Organization*, "The North Atlantic Treaty."

226 These programs include the Euro-Atlantic Partnership Council (EAPC), NATO's Mediterranean Dialogue, the Istanbul Cooperation Initiative (ICI), and Partners across the globe. "Partners," *NATO North Atlantic Treaty Organization*. Last modified November 11, 2015. <https://www.nato.int/cps/su/natohq/51288.htm>

Given this role of crisis management and acknowledging the origins of NATO, it is important to consider Russia's role in the modern world. Soon after the collapse of the USSR, Russia began cooperating with NATO on the front of collective security. For over 20 years, NATO and Russia had a functioning partnership on grounds of common interests and areas of concern, including counter-terrorism, defense transparency, and nuclear weapons.²²⁷ Under Article 10, Russia even has the possibility of accession to NATO.²²⁸ However, in more recent years, several obstacles have arisen which prevent this accession and also threaten the security of the North Atlantic Area.

This section will discuss some key political challenges that face NATO-Russian relations today. In particular, this section will address maintaining cooperation and cohesion among the Alliance, NATO enlargement, and the future of NATO-Russian cooperation. While NATO's mission is not dependent on a functional partnership with Russia, the collective security and peace of the North Atlantic Area cannot afford a return to Cold War politics or a breakdown of the consensus.

Maintaining the Alliance: Fostering Cooperation and Maintaining Political Unity

The Alliance is built on reciprocity and trust.²²⁹ Not only is NATO a treaty-based international organization, but also it is one reliant on consensus among all member states. Article 4 declares that members "will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the [members] is threatened."²³⁰ Article 9 establishes the North Atlantic Council (NAC), a forum for member states to bring forth issues, in which all voices carry equal weight.²³¹ No statement or decision comes out of the NAC without the absolute consent of all member states, lending NATO actions significant weight in the international community. With 29 voices at the NAC, the question becomes less about the implications of consensus and more about how NATO maintains the unity necessary to achieve it.

227 "Relations with Russia," *NATO North Atlantic Treaty Organization*. Last modified June 16, 2017. https://www.nato.int/cps/en/natohq/topics_50090.htm.

228 NATO North Atlantic Treaty Organization, "The North Atlantic Treaty."

229 We've spoken to several experts on NATO as well as attended lectures regarding NATO operations over the course of our research. This is one common theme we've learned through our time with these speakers.

230 NATO North Atlantic Treaty Organization, "The North Atlantic Treaty."

231 Ibid.

As a political and military alliance, NATO members are dedicated to promoting democracy, peace, and security throughout the North Atlantic Area. As long as member states are willing and able to contribute to this mission and the consensus, NATO has no mandate to interfere in individual members' affairs, unless brought before the NAC. This subsection will address one situation in which member states are on opposite sides of international conflict and how NATO can maintain its integrity when their member states may contradict the North Atlantic Treaty.

In terms of conflict among member states, it is important to recognize that political alliance and collective defense go hand in hand, but are not so intertwined that NATO cannot function if member states have divergent interests. In the case of Germany, domestic and constitutional constraints led to its acquiescence to Operation Unified Protector (OUP) in Libya to maintain consensus with NATO, but not actual participation in the mission.²³² OUP continued without Germany, and several other member states' participation, but the acknowledgment and respect of political differences made it possible for this to happen.²³³ Moving forward, NATO and NATO member states must remember that the collective security of the North Atlantic Area faces several geopolitical challenges that must be handled with the understanding that each member is equally important to the overall mission of NATO.

This must also be the case when member states are in direct conflict with each other. OUP was an instance where a Germany's interests conflicted with the actions of NATO. In the case of Turkey and the U.S., two member states are on opposing sides of an active conflict where one (the U.S.) is threatening to impose sanctions on the other (Turkey).²³⁴ Though the U.S. and Turkey have been long standing allies, the conflict in Syria, in addition to recent political instability in Turkey and tension over Iranian sanctions, is putting strain on their relationship.²³⁵ When asked

232 In 2011, the United Nations Security Council passed Resolution 1973. NATO soon started an operation to militarily implement the resolution. Although Operation Unified Protector was considered a military success, it was also a moment of division in the Alliance as only six member states participated. Germany was one that did not. Florence Gaub, and Army War College, *The North Atlantic Treaty Organization and Libya: Reviewing Operation Unified Protector. (Letort Papers)*, vii, 3, 28; Richard Rousseau, "Why Germany Abstained on UN Resolution 1973 on Libya." *Foreign Policy Journal*. Last modified June 22, 2011.

233 Charles A. Kupchan, "Libya's Strains on NATO," interview by Bernard Gwertzman, *Council on Foreign Relations*. Last modified April 4, 2011. <https://www.cfr.org/interview/libyas-strains-nato>.

234 Eric Edelman and Jake Sullivan, "Turkey Is Out of Control. Time for the U.S. to Say So." *Politico*. February 12, 2018. <https://www.politico.com/magazine/story/2018/02/13/turkey-us-trump-policy-syria-216972>.

235 Dominic Evans, "Syrian frontline town divides NATO allies Turkey and U.S." *Reuters*. February 12, 2018. <https://www.reuters.com/article/us-usa-tillerson-turkey/syrian-frontline-town-divides-nato-allies-turkey-and-us-idUSKBN1FW17K>.

about the developing situation between the U.S. and Turkey in Syria at a press conference in February 13, 2018, NATO Secretary General Jens Stoltenberg had this to say:

*I welcome that there are contacts, talks between Turkey and the United States to address the issues on the ground in northern Syria. But as I said, [NATO is] not present on the ground but we will continue to provide support to the Global Coalition and we will continue to provide support to Turkey as I just mentioned.*²³⁶

Member states are entitled to their own affairs and NATO allows member states to handle them without comment or remark. So long as member states adhere to the values of the North Atlantic Treaty to promote and protect democracy, peace, and security, NATO welcomes their contribution and commitment to the Alliance.

How NATO chooses to address or not address internal relations will be as crucial to the collective security of the North Atlantic Area as how NATO chooses to approach external threats. As a 29-member organization, intra-NATO relations can be complex, especially when factoring in that all but four member states belong to the EU and all member states also belong to the UN. This, in addition to the varying geopolitical issues throughout the North Atlantic Area, makes cooperation and cohesion critical to the effectiveness of NATO as a political and military alliance. Below is a list of actions NATO should consider in order to maintain the integrity of the Alliance:

Policy Recommendations

- Continue to act as a forum for intergovernmental and bilateral negotiations between NATO members.
- Acknowledge geopolitical differences between member states in statements from NAC.

236 “Press conference by NATO Secretary General Jens Stoltenberg ahead of the meetings of NATO Defence Ministers on 14-15 February” NATO North Atlantic Treaty Organization. Transcribed February 13, 2018. https://www.nato.int/cps/en/natohq/opinions_151503.htm?selectedLocale=en.

Enlargement

According to the Washington Treaty, NATO membership is open to “any other European state in a position to further the principles of this Treaty and to contribute to the security of the North Atlantic area.” NATO’s door remains open to any European country in a position to undertake the commitments and obligations of membership and contribute to security in the Euro-Atlantic area. As mentioned, NATO’s membership has grown from 12 member states to 29 since 1949 through seven rounds of enlargement. NATO’s “open door policy” is based on Article 10 of this founding treaty. Any decision to invite a country to the Alliance is made by the North Atlantic Council by consensus among all. Overall, NATO’s enlargement has had a positive effect on the North Atlantic Area and its members.

In order to join NATO, countries have to fulfill the following requirements:

- 1) Have a functioning democratic political system based on a market economy.
- 2) Uphold the fair treatment of minority populations.
- 3) Commit to the peaceful resolution of conflicts.
- 4) Have the ability and willingness to make a military contribution to NATO operations.
- 5) Commit to democratic civil-military relations and institutional structures.

Potential NATO Member State: Ukraine

After the collapsing of the Soviet Union in, Ukraine became an independent country on August 24, 1991. In the early months of 2014, Kiev fell into a near-constant state of revolution and in February of that year, Russia annexed Crimea. Today, Russia is still occupying parts of eastern Ukraine and controlling Crimea.²³⁷ On June 10, 2017, Ukrainian President Petro Poroshenko started the discussion about a Membership Action Plan (MAP) with NATO. Poroshenko stated that while Ukraine does not meet NATO’s accession criteria at the moment, it has a plan to meet NATO’s criteria by 2020. The NATO Secretary General Jens Stoltenberg stated that NATO would support Ukraine’s close relationship with the Alliance and the Alliance would continue to assist Ukraine’s reforms to meet NATO’s standards in the future.²³⁸ In order to join NATO, the individual country must settle all their international disputes. In Ukraine’s case, its disputes are

237 NATO North Atlantic Treaty Organization, “The North Atlantic Treaty.”

238 VOA News, “Ukraine to Begin Talks on NATO Membership Action Plan.” *Voice of America*. July 10, 2017. <https://www.voanews.com/a/ukraine-begins-talks-on-nato-membership-action-plan/3935639.html>.

predominantly regarding Russian problems. Stoltenberg stated that Russia has been using some aggressive measures against Ukraine, but the Alliance would stand by Ukraine. Furthermore, Stoltenberg released a statement, saying, "NATO allies do not and will not recognize Russia's illegal and illegitimate annexation of Crimea."²³⁹

Potential NATO Member State: Georgia

The former Soviet Republic of Georgia is in a vital location and part of Russia's self-defined sphere of influence. After independence in 1991, Georgia made a number of initiatives towards the West and possible NATO membership. But a destructive war with Russia in 2008 was a major setback and created two more "frozen conflicts" within Georgia's internationally recognized boundaries. In 2008, at the NATO summit in Bucharest, the United States and Poland called on the Alliance to begin a MAP for Georgia.²⁴⁰ Due to the opposition from some member states, led by France and Germany, the Alliance decided not to offer Georgia a MAP.²⁴¹ One concern was Russia's response if NATO let Georgia join the MAP.²⁴² At the same time, Georgia sees joining NATO as a guarantee of stability in its borders and continues to look for security support from the Alliance.

Under the current situation and foreseeable future, Ukraine and Georgia are not able to join the Alliance. However, this does not mean they are unable to cooperate with NATO. The Partnership for Peace (PfP) is a program that allows practical bilateral cooperation between individual Euro-Atlantic partner countries and NATO. It allows partners to choose their priorities for cooperation, and build a relationship with the Alliance. Partner countries choose individual activities according to their ambitions and abilities. Ukraine and Georgia are two examples of non-member states cooperating with NATO through the PfP.

239 VOA News, "Ukraine to Begin Talks on NATO Membership Action Plan."

240 Liz Fuller, "Georgia's Hopes of NATO Membership Recede." *RadioFreeEurope/RadioLiberty*. April 26, 2016. <https://www.rferl.org/a/27699636.html>.

241 Uffe Ellemann-Jensen, "Beacon falters in fight for freedom." *Macedonian News*. Last modified April 7, 2008. <http://www.vmacedoniannews.com/2008/04/beacon-falters-in-fight-for-freedom.html>.

242 "Russia continues to support the separatist regimes." *International Herald Tribune*. April 3, 2008. Retrieved August 8, 2008. <http://www.iht.com/articles/ap/2008/04/03/europe/EU-GEN-Russia-Putin-Georgia.php>. Deleted from original URL.

Potential NATO Member States: Finland and Sweden

The three Baltic states—Estonia, Latvia, and Lithuania—have security concerns directly connected with the Nordic countries. Although not NATO members, Finland and Sweden are both in the PfP, allowing cooperation between them and the Alliance.²⁴³ The geographic location in relation to the Nordic countries is significant for the Baltic States' security. If a country wishes to hold military operations in the Baltic States, they must go through the Finland and Sweden land, air, and sea area.²⁴⁴ NATO has military interest to welcome Nordic countries to the Alliance but based on current situations, Finland and Sweden have not initiated any formal action to join.

Policy Recommendations

- Retain the enlargement mechanism and its openness and willingness of inviting other countries to join the Alliance. NATO should continue inviting Russia to NATO-Russian Council dialogues for the purpose of proactive transparency.
- Encourage Finland and Sweden to join the Alliance by increasing their involvement in the PfP and other NATO partnership programs.
- Continue the enlargement policy within the mandated North Atlantic area.

NATO – Russia Future Cooperation

For the purposes of this section, political dialogue will refer to all non-military communications between nations and organizations. The goal of political dialogue is to exchange information and foster a better understanding on a basis of reciprocity between all parties involved. Extensive communications involving military engagement will be discussed in later areas of this report.

243 Luke Coffey and Daniel Kochis, "The Role of Sweden and Finland in NATO's Defense of the Baltic States." *The Heritage Foundation*. April 28, 2016. <https://www.heritage.org/europe/report/the-role-sweden-and-finland-natos-defense-the-baltic-states>.

244 "Relations with Finland." *NATO North Atlantic Treaty Organization*. Last modified March 30, 2017. https://www.nato.int/cps/ic/natohq/topics_49594.htm.

245 Ryan C. Hendrickson, "Sweden: a special NATO partner?" *NATO Review Magazine*. Accessed February 16, 2018. <https://www.nato.int/docu/review/2013/Partnerships-NATO-2013/Sweden-partnerships/EN/index.htm>.

The NATO-Russian Council (NRC), created in 2002 based on the 1997 NATO-Russia Founding Act, is one of the main points of communication between NATO and Russia. From 2002 to 2008, the NRC had regular meetings about several areas of concern, including defense, counter-terrorism, and civilian exercises.²⁴⁴ After Russia's military involvement in Georgia, NATO suspended select areas of cooperation in the NRC only to resume formal meetings and practical cooperation in 2009. From there, NRC meetings focused on looking forward to joint missions and greater cooperation between NATO and Russia. This all changed following the annexation of Crimea.

After the annexation, the Alliance took immediate steps regarding its relations with Russia.²⁴⁵ Russia does not consider the annexation of Crimea to be illegal and will not reverse its actions in the near future. In response, the Alliance suspended planning for its first NATO-Russia joint mission and halted the entire range of NATO-Russia cooperation. In April 2014, NATO suspended all practical civilian and military cooperation with Russia, maintaining only political contacts at the level of ambassadors in the NRC to allow NATO and Russia to exchange views on Ukraine.²⁴⁶ The NRC remains an important forum for facilitating dialogue and information exchange. It also reduces misunderstandings and increases predictability between the Alliance and Russia. Below are three possible futures for NATO-Russian cooperation based on actions taken by both parties thus far.

Optimistic Approach

NATO and Russia could engage in more conversations about common interest like counter-terrorism in Europe. For example, in the 2011 NRC meeting, the council met in Sochi, and discussed their commitment to pursuing cooperation on missile defense as well as other security areas of common interest. Other opportunities for confidence building measures could arise and could result in improved communication.

244 NATO North Atlantic Treaty Organization, "Relations with Russia."

245 Euronews, "NATO warns Russia to cease and desist in Ukraine." *Euronews.com*. March 2, 2014. <http://www.euronews.com/2014/03/02/nato-warns-russia-to-cease-and-desist-in-ukraine>.

246 NATO North Atlantic Treaty Organization, "Relations with Russia."

Pessimistic Approach

This option envisions a collapse in the relationship between Russia and NATO. While this is unfavorable, there is much evidence to support this option. At the NATO Summit in Wales, September 2014, NATO leaders strongly condemned Russia's military intervention in Ukraine and demanded that Russia stop and withdraw its forces. NATO reaffirmed at the Summit that the Alliance does not recognize Russia's illegal and illegitimate annexation of Crimea. If NATO and Russia cannot find compromise, NATO and Russia might cut off all communication, and the situation may result in unintended escalation. This option is the most dangerous and will hopefully be an unlikely future.

Realistic Approach

NATO and Russia could continue to maintain their dialogue at a diplomatic level. The Alliance does not seek confrontation and poses no threat to Russia, but it will not compromise on the principles on which the Alliance was founded upon. While Russia disagrees with this stance, this is NATO's position and NATO can counteract Russian messaging through proactive transparency. As described earlier in this section, it will take significant work to reconcile the distrust between NATO and Russia, the varying relationships between the member states and Russia, and tension preventing future cooperation.

Most recently, Russia has shown a continued willingness to disregard international law and obligations through its recognition of Abkhazia and South Ossetia as sovereign states and support for the Syrian regime.²⁴⁷ By immediately suspending all practical cooperation, NATO signaled an ultimatum to Russia from which it cannot back down.²⁴⁸ By voting in support of a UN measure recognizing the armed conflict between Ukraine and Russia, all NATO member states signaled a consensus in condemning the actions of Russia and urging for international law to be applied.²⁴⁹

247 NATO North Atlantic Treaty Organization, "Relations with Russia."

248 NATO North Atlantic Treaty Organization, "Relations with Russia."

249 "UN General Assembly approves resolution on Crimea." *UKRINFORM*. Last modified December 20, 2017. <https://www.ukrinform.net/rubric-politics/2367877-un-general-assembly-approves-resolution-on-crimea.html>.

By standing firm on its support of EU sanctions on Russia, NATO signaled its resolve to see this situation through to an end where Russia returns Crimea.²⁵⁰ Given these facts, NATO appears unlikely to improve relations with Russia until the Kremlin signals a change in this undesirable behavior. However, the continued existence of channels of communication and dialogue shows a desire from both sides to return to a functioning partnership.

The Case of Sanctions and Results

Sanctions, by definition, are ways for actors to indirectly affect others' actions through economic means. The actor imposing sanctions faces potential repercussions of losing all economic, political, and military ties with its target. Because of this, sanctions tend to be imposed by the stronger actor.²⁵¹ While NATO has no mandate for imposing sanctions, it has strongly supported Russian-related sanctions, which have had an effect on NATO-Russian relations as well as member states' economies.

Russia is facing an economic downturn, caused both by the decline in oil prices and the sudden sanctions since 2014.²⁵² At the same time, countries like Greece, Italy, and Germany have been critical of sanctions due to their unintended economic consequences on their own exports.²⁵³ A weakened economy is one of the warning signs of political instability, which threatens the security of the state. NATO has publicly supported sanctions against Russia over Crimea in spite of the subsequent economic burden on its member states.²⁵⁴ Political unity among the Alliance will be critical in reconciling these unintended consequences.

250 Reuters Staff, "NATO's Stoltenberg: EU sanctions on Russia should remain." Reuters. Last modified June 20, 2016. <https://www.reuters.com/article/us-nato-russia-ukraine/natos-stoltenberg-eu-sanctions-on-russia-shouldremain-idUSKCN0Z61M3>.

251 Baran Han, "The Role and Welfare Rationale of Secondary Sanctions: A Theory and a Case Study of the US Sanctions Targeting Iran." *Conflict Management and Peace Science*. Published June 16, 2016. PDF file.

252 Edward H. Christie, "Sanctions after Crimea: Have they worked?" *NATO Review Magazine*. Accessed February 16, 2018. <https://www.nato.int/docu/Review/2015/Russia/sanctions-after-crimea-have-they-worked/EN/index.htm>; Emma Ashford, "Not-So-Smart Sanctions: The Failure of Western Restrictions Against Russia." *Foreign Affairs*, (JAN/FEB 2016). <https://www.foreignaffairs.com/articles/russian-federation/2015-12-14/notso-smart-sanctions>.

253 Francesco Giumelli, "The Redistributive Impact of Restrictive Measures on EU Members: Winners and Losers from Imposing Sanctions on Russia*" *Journal of Common Market Studies*, 2017 Volume 55. Number 5. pp. 1062.

254 Ashford, "Not-So-Smart Sanctions."

NATO cannot now resume practical cooperation with Russia, because to do so would legitimize Russia's annexation of Crimea. After Russia's military presence in Georgia, NATO and Russia had limited communications for a year before attempting to return to normal relations. Reversing its stance on sanctions now, as well as restoring practical cooperation, would show further weakness in the Alliance. This is similar to the position of the UN in 2006 in the case of Iran's refusal to end its uranium enrichment program.²⁵⁵

UN sanctions on Iran over its uranium enrichment program took nearly 10 years before seeing any progress. It wasn't until 2015 that Iran struck a nuclear deal with the U.S., the U.K., Russia, France, China, and Germany, in which Iran would take steps to disabling its nuclear program in exchange for an easing of sanctions. Had the UN removed Iranian sanctions, Iran could still have its old nuclear program, if not a more dangerous one in place today. The combination of continued sanctions such as the U.S.'s "broadest and most robust multilateral restrictions on Iran in history," and continued political dialogue through the UN made these sanctions a success.²⁵⁶ Following this model, NATO should not back down from supporting sanctions. Instead, NATO and Russia should use the NRC to develop new points of cooperation that could eventually lead to a compromise over Crimea and the lifting of sanctions. It will take time to rebuild any trust between these two actors, but it will be impossible to return to NATO-Russian political dialogue pre-2014 or even pre-2008.

As mentioned before, NATO supports EU sanctions on Russia. In the UN, NATO members have also unanimously voted in favor of a resolution acknowledging the severity of the armed conflict in Ukraine.²⁵⁷ Successful sanctions require a long-term commitment, but this united front in other forums of political dialogue shows that NATO is committed to resolving this crisis. While maintaining only ambassadorial communications leaves little room for continued political dialogue, it delivers a strong message for the future of NATO-Russian relations.

255 In 2006, the UN Security Council passed Resolution 1696, declaring that Iran must comply with the International Atomic Energy Agency (IAEA) requirements for building confidence that Iran's nuclear program was exclusively peaceful. Iran defied this resolution, which led to the UN imposing sanctions on Iran, subsequently resulting in stronger sanctions from the U.S. United Nations Security Council, "Security Council Demands Iran Suspend Uranium Enrichment by 31 August, or Face Possible Economic Diplomatic Sanctions," United Nations. Last modified July 31, 2006. <https://www.un.org/press/en/2006/sc8792.doc.htm>.

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Below are a list of actions NATO could take in regards to the state of political dialogue with Russia and the unintended consequences of sanctions:

Policy Recommendations

- Maintain ambassadorial NATO-Russian relations at the highest level, regardless of future Russian actions. Continue to keep political and military channels of communication open with Russia.
- Stand firm on support for EU sanctions on Russia over Crimea to recognize Ukrainian and Georgian sovereignty. Encourage stronger economic unity among NATO/EU member states to ensure political stability and reduce reliance on Russian trade.
- Encourage NATO members to exert united political pressure on Russia.
- Use current ambassadorial relations between NATO and Russia interact to pursue common interests in order to rebuild trust between delegations.
- Leave room for potential Russian cooperation, such as joint missions in Africa and the Middle East, for the purpose of increased dialogue.

Conclusion

NATO is an organization for the collective security and peace of the North Atlantic Area that has always been and will always be relevant. However, it faces new challenges with every development in innovation, international policy, and conflict. The face of warfare is changing. NATO's policies must change with it.

Russia's commitment to displaying its conventional military capabilities make it crucial for NATO to enhance its forward presence in the Baltic region. NATO must also reevaluate its approach towards WMDs to combat reemerging Russian aggression. Throughout this, NATO's united position will be critical in addressing political differences among the Alliance and a continued relationship with Russia.

At the same time, the Alliance's relevance depends on its capacity to adapt to emerging threats. Currently, NATO is unprepared to handle hybrid and energy security threats. In the realm of hybrid, NATO must work closely with members states to profile state-specific weaknesses that Russia can capitalize on. It is also imperative for NATO to cooperate with other organizations—specifically the EU—to complement existing infrastructure for energy security. Looking forward, NATO will be challenged by its relationship with Russia in these respective areas. However, we believe that following these policies will allow NATO to choose the best course of action.

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