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NATO's Modern Deterrence Strategy in Eastern Europe

Major Mark Sandner

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ABSTRACT

In 2014, Russian military actions resulted in the annexation of Crimea, causing unease among Eastern European NATO allies, and necessitating an evolution in NATO deterrence strategy. At that time, NATO was not in a militarily viable position to deter a great power on its eastern border. Since the end of the Cold War, Russia was not considered a military adversary; instead, most European nations were deepening ties with Russia in economics and politics. Thus, NATO military resources were focused on the shift to an expeditionary posture due to the rise of non-state threats that were causing disorder and unrest around the world. Previous academic literature on the subject shows that while NATO was focussed on operations in regions such as the Middle East, conventional assets that are effective in great power competitions were left to atrophy. This atrophy has had a detrimental effect on NATO deterrence and readiness, since the most pressing concern to NATO is now Russia.

Confronting Russia requires a largely different make up of forces than counter-insurgency operations would. Using a backdrop of deterrence theory, and NATO strategy throughout its history, this paper contends that while NATO has begun a shift to modernizing its deterrence strategy, there is still improvements to be made in the areas of cyber security, logistics, hybrid warfare resiliency, and nuclear modernization. Ignoring or assuming risk in these areas would leave many NATO allies vulnerable to further Russian aggression and effect the cohesion and resiliency of the alliance as a whole.

LIST OF ABBREVIATIONS

A2/AD	Anti-Access/Area Denial
ASW	Anti-Submarine Warfare
ASuW	Anti-Surface Warfare
C2	Command and Control
CSIS	Center for Strategic & International Studies
GIUK Gap	Greenland-Iceland-UK-Gap
GDP	Gross Domestic Product
ICBM	Intercontinental Ballistic Missile
INF Treaty	Intermediate-Range Nuclear Forces Treaty
IR	International Relations
ISAF	International Security Assistance Force
ISIL	Islamic State of Iraq and the Levant
ISR	Intelligence Surveillance and Reconnaissance
MAD	Mutually Assured Destruction
NATO	North Atlantic Treaty Organization
NRC	NATO Russia Council
PPP	Public Private Partnerships
RAP	Readiness Action Plan
SNMG2	Standing NATO Maritime Group 2
VJTF	Very High Readiness Joint Task Forces

ON THE RIGHT TRACK: NATO'S MODERN DETERRENCE STRATEGY IN EASTERN EUROPE

> *Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose.*
>
> - Bernard Brodie, *The Absolute Weapon,* 1946

INTRODUCTION

Deterrence has been a forever-evolving theory, requiring change whenever modern technology dictates a shift in battlefield tactics. Deterrence has become a principal theme in not only Canadian defence policy, but the North Atlantic Treaty Organization (NATO) as well.[1] One definition of deterrence is "the use of threats to convince an adversary from taking an action."[2] However, deterrence as a concept or strategy has evolved greatly since the post Second World War era into the Cold War, when conventional and nuclear forms of deterrence were primary. In particular during the Cold War, deterrence was centred around the threat of the use of nuclear weapons, and mutually assured destruction.

With the formation of NATO in 1949, the idea of collective defence against a Soviet aggressor was at the forefront of initial talks within the forming partners. The idea of collective defence defining NATO deterrence strategy was effective at preventing the use of nuclear weapons during the Cold War as well as into the 2000s. Both sides realized that nuclear weapons and the threat of mutually assured destruction that went along with them was a price too terrible to pay for whatever military advantage would be gleamed from striking first. Fast forward to present day and the rise of non-state actors, and Russia's use of hybrid warfare along with its modernization of its nuclear arsenal has forced NATO to re-evaluate its strategy in the

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[1] Michael J Mazarr, "Understanding Deterrence," n.d., 1.
[2] "The Origins and Evolution of Deterrence Theory," Harvard Online Courses, November 10, 2018, https://online-learning.harvard.edu/course/origins-and-evolution-deterrence-theory.

realm of more poignant conventional deterrence. Furthermore, many of the NATO member countries, quite rightly, put immense resources into combatting terrorism and non-state aggression post September 11, 2001, since the requirement for investing further resources into conventional deterrence was not necessary. Post-Cold War, Russia's military was depleted, and it seemed like future conflict would be counterinsurgency related or against non-state actors. Thus, many of the conventional forms of deterrence preparation for NATO were left to atrophy, and when Crimea was annexed in 2014, NATO realized it needed to play catch-up to counter the traditional threat it was created to face.

NATO has begun to acknowledge recently (the events of 2014 in Ukraine arguably being the catalyst) that effective modern deterrence is multifaceted. There is also a realization that NATO's emphasis on expeditionary operations and counterinsurgency will need to synergize with its lacking focus on collective defence against a state aggressor. Many NATO members, as previously stated, had let traditional deterrence assets (at all levels, strategic to tactical) atrophy, instead diverting resources into combatting non-sate threats that required an expeditionary operations approach. Regardless, the Readiness Action Plan (RAP) that came out of the Wales Summit in September 2014 provides a form of reassurance to nervous NATO member states that felt threatened or exposed to aggression from the Kremlin.

Russia's actions in Ukraine and the subsequent unease of smaller NATO partners has made it more evident than ever that a well-rounded deterrence approach is the most important issue for NATO today. A deterrence response is required in Eastern Europe that is agile, effective, and does not require a presence-heavy contribution from partner nations that have trouble funding the 2% of Gross Domestic Product (GDP) asked of them. NATO's purpose is to *not* fight wars, yet the build-up

and high readiness of its troops in Europe could be misconstrued as such for certain adversaries. Thus, NATO's deterrence should take an evolved approach, one that does not require a large buildup of forces and can better achieve the required effect factored into a multi-domain operations battlespace.[3]

This approach in deterrence theory takes the form of modern deterrence, a relatively new concept implemented by NATO after the events of 2014. NATO Secretary General Jens Stoltenberg in 2016 reiterated this when he said that "…we think modern deterrence is this combination of forward presence and ability to reinforce…we are adapting to a changed security environment."[4] In a broader context, modern deterrence is a mobile and agile response to a threat, with emphasis on situational awareness, resilience, and clear messaging.[5] The days of heavy troop presence standing toe-to-toe on battle lines are over, and nations are unwilling to pay for the expenses that go along with such a static strategy.

Deterrence and collective defence are more important than ever to NATO, and much time and resources have been spent in the last 8-10 years shaping the Alliance's collective defence strategy to accurately repel any would be aggressors. This is not an easy task, for it requires preparation, analysis, and a fair amount of foresight to be able to be prepared for not only today's problems, but tomorrows. This is an especially pressing concern since the pace of technology is moving so blindingly fast that large, and bureaucratic organizations such as NATO sometimes have trouble keeping their edge.

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[3] "It's Time to Rethink NATO's Deterrent Strategy," War on the Rocks, December 6, 2019, https://warontherocks.com/2019/12/want-to-deter-russia-think-mobility-not-presence/.
[4] NATO, "Doorstep by NATO Secretary General Jens Stoltenberg," NATO, accessed January 29, 2022, http://www.nato.int/cps/en/natohq/opinions_127825.htm.
[5] Karsten Friis, *NATO and Collective Defence in the 21st Century: An Assessment of the Warsaw Summit* (Florence, UNITED KINGDOM: Taylor & Francis Group, 2017), 23, http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=4809731.

This paper will argue that NATO's new concept of modern deterrence is the most important aspect of the alliance's strategy to counter current and future conventional and non-conventional threats from Russia. Yet modern deterrence as it stands is not perfect and requires augmentation and improvement in time to be able to react to many of the newer threats related to hybrid warfare. This paper will further explain these concepts, as well as the roadmap that got deterrence to where it is today through five chapters.

The first chapter will explain the main ideas related to deterrence, and what makes it, historically, an important aspect of international relations. Second will be an overarching view of NATO's deterrence model, and what NATO's strategy has traditionally been in response to state and non-state actors. The third chapter will break down the threats facing NATO so the reader can understand what challenges NATO is currently facing. Chapter three will also include a further discussion of the concept of hybrid warfare, something that Russia has been using to great effect. Following this, a deeper analysis into recent NATO deterrence strategy and changes (focusing on 2014-2022) will occur in chapter 4. The year 2014 was chosen as a starting point since the Russian annexation of Crimea was the catalyst for NATO to seriously re-think its strategy in Europe in terms of countering conventional aggression and reassuring Eastern European partners. This paper will then round out the discussion with an argument for modern deterrence as being superior to conventional deterrence and discuss what improvements can be made to the deterrence strategy being developed to better counter future threats from Russia.

Deterrence must be at the forefront of high-level NATO discussions. It is important because, as NATO is a defensive alliance, deterrence is the first line of protection and reassurance for all allies and partners. Thus, it behooves NATO to

continually evaluate its deterrence strategy to ensure that it is efficient and effective against adversaries who would seek to do undermine the cohesion and camaraderie that such an alliance is able to provide. It is only through evaluation, critique, and understanding, that NATO will succeed in any strategy put forward. It is hoped that this paper is a small contribution toward those three actions, and to the success of NATO in the future.

CHAPTER 1 – DETERRENCE AS A CONCEPT

Introduction

This chapter will discuss main concepts and themes within deterrence theory that are essential to understand to have a more advanced discussion on NATO. The terms introduced here will be used throughout the paper, so defining them early on will allow for ease later. Deterrence occurs in the mind of the aggressor: what the enemy believes is what matters, not necessarily what the reality is. Thus, the goal of deterrence is to convince the enemy that what they believe is that they are better off not committing the military act in question.[6] Well before nuclear weapons or modern conventional weapons existed, political leaders historically puffed their chests and made threats with the goal of dissuading others from influencing their interests.[7] Deterrence thus existed well before the (in)famous nuclear deterrence of the Cold War Era. A discussion of deterrence as a concept is therefore useful before delving into how NATO is approaching its use in the 21st century.

Defining Deterrence

Deterrence, as defined by NATO, is "the threat of force to discourage an opponent from taking an unwelcome action."[8] It involves efforts "to stop or prevent an action,"[9] thus preventing an unwanted or undesired reality from occurring. However, if deterrence were that simple, then hundreds, if not thousands, of books and articles would not have been published, discussing the intricacies of deterrence theory and

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[6] Karl P. Mueller, "Conventional Deterrence Redux: Avoiding Great Power Conflict in the 21st Century," *Strategic Studies Quarterly: SSQ* 12, no. 4 (Winter 2018): 79.
[7] Erik Gartzke and Jon R. Lindsay, *Cross-Domain Deterrence: Strategy in an Era of Complexity* (Oxford, UNITED STATES: Oxford University Press USA - OSO, 2019), 1, http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=5647786.
[8] "NATO Review - Deterrence: What It Can (and Cannot) Do," NATO Review, April 20, 2015, https://www.nato.int/docu/review/articles/2015/04/20/deterrence-what-it-can-and-cannot-do/index.html.
[9] Mazarr, "Understanding Deterrence," 1.

how it has morphed over the past century. Deterrence is therefore a contested concept. Of course, deterrence can also refer to the criminal justice system and law;[10] however for this paper the conceptual discussion of deterrence will address its use in matters of international relations (IR) and IR theory.

Deterrence theory, as explained by Quackenbush, explains that to deter an attack, a nation or state must persuade an attacker that:

- It has a capable military
- There would be unacceptable costs on the attacker
- Any threats made would be carried out if the defender were attacked[11]

As Quackenbush further elaborates, classical and traditional deterrence theory models, at a basic level, explain deterrence as a game between a challenger and a defender. The challenger looks to alter the status quo, and the defender seeks to deter any challenges. A basic deterrence "game" looks something like figure 1.1 (see next page).

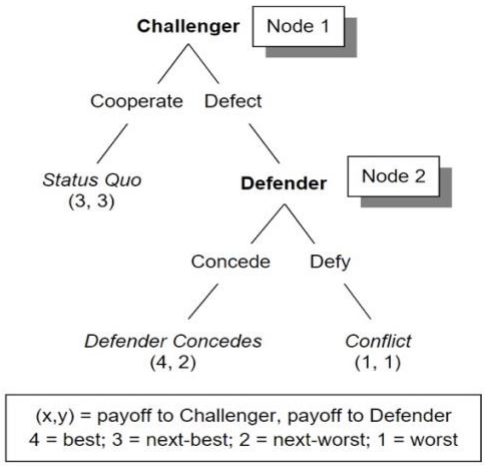

Figure 1.1 – A Basic Deterrence Game

[10] See: Daniel S. Nagin, "Criminal Deterrence Research at the Outset of the Twenty-First Century," *Crime and Justice: A Review of Research* 23 (1998): 1–42.

[11] Stephen L. Quackenbush, *Understanding General Deterrence : Theory and Application*, 1st ed. (New York: Palgrave Macmillan, 2011), 5, https://web-p-ebscohost-com.cfc.idm.oclc.org/ehost/ebookviewer/ebook/bmxlYmtfXzQzNjMxNl9fQU41?sid=ba61e17a-75b4-48ee-b133-899e43b954a5@redis&vid=0&format=EB&rid=1.

Source: Quackenbush, *Understanding General Deterrence: Theory and Application,* 7.

The best payoff for the challenger is outcome 4, where the challenger 'defects' and the defender 'concedes,' or to put it more plainly, the challenger makes an aggressive action toward the defender and the defender surrenders or gives into demands. Conflict occurs when the defender 'defies' the challenger, resulting in the worst outcome for both parties involved. Classical deterrence theory presumes that the states or actors in a scenario act rationally.[12] A rational actor in this context refers to a state or individual that, given a scenario, will more than likely act in a predictable, non-chaotic manner, maximizing their net value.[13] There are arguments about the predictability of rationality in deterrence, and how nuclear weapons play into this, though that discussion is well outside the scope of this paper.[14]

According to Mazarr, the primary goal of any form of deterrence is to "shape the thinking of a potential aggressor,"[15] such that any of the alternatives to war or conflict are much more attractive than the aggressive option. Deterrence situations, as developed by Morgan in 1983, come in two forms: general and immediate.[16] General deterrence "related to opponents who maintain armed forces to regulate their relationship even though neither is anywhere near mounting an attack."[17] Immediate deterrence "concerns the relationship between opposing states where at least one side

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[12] Jörg Noll, Osman Bojang, and Sebastiaan Rietjens, "Deterrence by Punishment or Denial? The EFP Case," in *NL ARMS Netherlands Annual Review of Military Studies 2020: Deterrence in the 21st Century—Insights from Theory and Practice*, ed. Frans Osinga and Tim Sweijs, NL ARMS (The Hague: T.M.C. Asser Press, 2021), 110, https://doi.org/10.1007/978-94-6265-419-8_7.
[13] Alex Mintz and Karl DeRouen Jr, eds., "The Rational Actor Model," in *Understanding Foreign Policy Decision Making* (Cambridge: Cambridge University Press, 2010), 57–67, https://doi.org/10.1017/CBO9780511757761.004.
[14] For more info on rationality in deterrence, see Graham T Allison, *Essence of Decision: Explaining the Cuban Missile Crisis*, 2nd ed. (New York: Longman, 1999).
[15] Mazarr, "Understanding Deterrence," 1.
[16] Patrick M Morgan, *Deterrence: A Conceptual Analysis*, 2nd ed. (University of Michigan: Sage Publications, 1983).
[17] Morgan, 30.

is seriously considering an attack while the other is mounting a threat of retaliation in order to prevent it."[18] A prime example of immediate deterrence was the Cuban Missile Crisis, where an attack was imminent, and the defender was ready with retaliation. Huth is one author that further differentiates deterrence situations such as when more than two actors are involved,[19] but for the purposes of this paper, Morgan's two situations are sufficient. Regardless of the deterrence situation at hand, the strategy used can be formed into two fundamental approaches: deterrence by denial and deterrence by punishment.

Deterrence by Denial

Deterrence by denial is a common term that refers to a certain style of thinking within deterrence theory. It seeks to "deter an action by making it infeasible or unlikely to succeed,"[20] making the aggressor think twice about their actions and planting seeds of doubt that they will attain their objective. Deterrence by denial can take many forms, the most obvious being a sufficient build-up of forces in which to confront an aggressor. In a historical sense, this could take the form of a heavily fortified city state or strategically important location. In modern times, this could also include a strategic maritime strait that is populated with undersea mines, hydrophones, and naval firepower, as seen by Russia in the Baltic Sea where the nation has set up an effective area denial/anti-access defensive zone.[21]

Deterrence by denial is usually associated with conventional deterrence, or the "function of the capability of denying an aggressor his battlefield objectives with

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[18] Morgan, 30.
[19] Paul K. Huth, "Extended Deterrence and the Outbreak of War," *The American Political Science Review* 82, no. 2 (June 1988): 423.
[20] Mazarr, "Understanding Deterrence," 2.
[21] Robert M. Klein et al., "Baltics Left of Bang: The Role of NATO with Partners in Denial-Based Deterrence," *Strategic Forum*, no. 301 (November 2019): 3.

conventional forces."[22] In this sense, conventional force refers to modern, non-nuclear weapons that are seen on the battlefield. The sheer commitment of defensive measures with such forces to a location is in most cases sufficient to make an aggressor seriously consider the risk of catastrophic loss in their plans. It should be noted that "deterrence and defense are analytically distinct but thoroughly interrelated in practice."[23] Whereas defence refers to the actions or assets in place to assert control of an area, deterrence by denial is the theory behind that defence, and will almost always be linked to conventional forces rather than nuclear forces.

Deterrence by denial need not always refer to military assets. This form of deterrence can include other methods such as political retaliation, however what springs to mind for most people is the military capabilities that would make an adversary pay an inordinate cost for attacking a defended objective. Deterrence by denial has been popular in modern states, such as use of anti-access area denial capabilities[24] in prominence with many countries today including Russia, China, and the USA. The NATO build-up of the Greenland-Iceland-UK Gap (GIUK Gap) after the Second World War is an excellent physical example of deterrence by denial.[25]

Deterrence by Punishment

Deterrence by punishment is another common term that refers to deterrence strategy. Specifically, it "threatens severe penalties, such as nuclear escalation or severe economic sanctions, if an attack occurs."[26] Deterrence by punishment is not so

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[22] John J. Mearsheimer, *Conventional Deterrence* (Ithaca, UNITED STATES: Cornell University Press, 1985), 15, http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=4799673.
[23] Morgan, *Deterrence: A Conceptual Analysis*, 32.
[24] Erica D. Borghard, Benjamin Jensen, and Mark Montgomery, "Elevating 'Deterrence by Denial' in US Defense Strategy," *Atlantic Council* (blog), February 4, 2021, https://www.atlanticcouncil.org/content-series/seizing-the-advantage/elevating-deterrence-by-denial-in-us-defense-strategy/.
[25] "The GIUK Gap's Strategic Significance," *Strategic Comments* 25, no. 8 (September 14, 2019): i–iii, https://doi.org/10.1080/13567888.2019.1684626.
[26] Mazarr, "Understanding Deterrence," 2.

much related to the direct defence as deterrence by denial is, but the broader scope of punishment that would come from committing to an attack on a state. The punishment portion of deterrence would come after the aggressor's military actions have taken place, where the defender or its allies would take retaliatory action upon the opponent's civilian population or industry with military or economic action.[27] The success of deterrence by punishment depends greatly on the credibility of the threat put forth upon the aggressor. If the threat of punishment does not seem credible, or simply not enough of a punishment, then an aggressor may decide that its actions are worthwhile. Thus, a strong deterrence by punishment policy must include a commitment to the deterrence strategy by the defender to go through with the punishment.[28] Deterrence by punishment is of course with its limitations. A strategic aggressor could perform a decisive first move that would prevent retaliation. The aggressor could also not generate enough of a credible threat to provoke a committed response, a strategy utilized in hybrid warfare.[29] Nevertheless, deterrence by punishment still has more of a foothold in today's deterrence sphere due to how prominent nuclear weapons have become.

The most obvious example of deterrence by punishment is the threat of nuclear weapons. It has drastically changed how countries evaluate their actions and makes the principle of credibility a primary concern for an aggressor.[30] A small handful of the world's powers currently hold a stockpile of nuclear weapons that would make any attack on their interests with such a weapon a recipe for disaster in the form of mutually assured destruction (MAD).[31]

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[27] Mearsheimer, *Conventional Deterrence*, 14.
[28] Noll, Bojang, and Rietjens, "Deterrence by Punishment or Denial?," 110.
[29] "NATO Review - Deterrence."
[30] Robert Powell, *Nuclear Deterrence Theory: The Search for Credibility* (Cambridge: Cambridge University Press, 1990), 6, https://doi.org/10.1017/CBO9780511551598.
[31] Powell, 2.

In the Cold War, the United States and the Soviet Union's abilities to impose tremendous cost on the other despite not striking was at the core of nuclear deterrence theory.[32] The incredible power of such weapons made "winning such a war virtually useless."[33] Both sides recognized this reality but would not admit it due to the importance of credibility behind the threats of deterrence by punishment. This credibility was put to the most extreme test during the Cuban Missile Crisis of October 1962, when President John F. Kennedy grimly estimated the chances of entering a nuclear was "between one out of three and even."[34] In this case, deterrence worked because the Soviet Union believed Kennedy's threats of nuclear punishment to be credible, and mutually assured destruction not worth the military gains of taking actions towards the USA.

Direct vs Extended Deterrence

Nuclear deterrence between two countries follows the principle of direct deterrence. It entails one nation defending itself from threats, via through denial or through punishment, against an external aggressor. A prime example of this would be the USA defending itself via nuclear weapons, creating a shield over its homeland that ensures any aggressor realizes that an attack would have a retaliatory result.[35] During the Cold War, the USA and the Soviet Union operated on a basis of direct deterrence. The retaliatory attacks performed by the defender against the aggressor would have resulted in MAD. In the Cold War, MAD deterred either side from launching an attack that they knew would be suicidal for their own people.[36]

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[32] Powell, 2.
[33] Quackenbush, *Understanding General Deterrence : Theory and Application*, 1.
[34] Quackenbush, 2.
[35] For a modern example of this in a NORAD context, see: O'Shaughnessy, Terrence J. and Peter M. Fesler. "Hardening the Shield: A Credible Deterrent & Capable Defense for North America." Also see: *Shielding North America: Canada's Role in NORAD Modernization*, edited by Nancy Teeple and Ryan Dean. Peterborough, Ontario: North American and Arctic Defence and Security Network, 2021, 66-83.
[36] Center for Strategic & International Studies, *Deterrence 101 Module 1 - Foundations of Deterrence*, 2021, https://www.youtube.com/watch?v=g1th_3vlLd4.

Direct deterrence is sometimes insufficient to explain the relationships in place. Today, there are nine nuclear states (USA, Russia, UK, France, China, Israel, India, Pakistan, and North Korea)[37] with varying levels of deterrence relationships. Many of these nations have identified that it is in their best interest to defend their allies from hostile aggressors in the world using their own nuclear arsenal. This form of a deterrence relationship operates under a form of an umbrella known as extended deterrence. It is what NATO and its allies base their deterrence strategy around,[38] with the USA championing this model through not only its umbrella deterrence of NATO nations, but non-NATO allies such as Japan and South Korea.[39]

Conventional Deterrence

It is easy to think of conventional deterrence as simply non-nuclear deterrence, and on the surface, one could largely be correct. At the basic level, conventional deterrence refers to the personnel and materiel used to put either a direct or indirect cost on an adversary on the battlefield.[40] A read through John Mearsheimer's aptly titled "Conventional Deterrence" will expand that definition further. Mearsheimer explains that "conventional deterrence is directly linked to battlefield outcomes,"[41] meaning the non-nuclear, conventional force form of deterrence. For this paper, the definition of conventional deterrence will be bound to this realm.[42]

Within conventional deterrence, there are four categories based on the threat and scope involved. Karl Mueller explains these very well in his section of The Netherlands Annual Review of Military Studies 2020, entitled "The Continuing

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[37] Center for Strategic & International Studies.
[38] Noll, Bojang, and Rietjens, "Deterrence by Punishment or Denial?," 125.
[39] Center for Strategic & International Studies, *Deterrence 101 Module 1 - Foundations of Deterrence*.
[40] Mueller, "Conventional Deterrence Redux," 80.
[41] Mearsheimer, *Conventional Deterrence*, 15.
[42] Ibid. Deterrence that includes non-military threats or economic sanctions or any form of diplomatic repercussions is not the definition of conventional deterrence used here, for ease of use.

Relevance of Conventional Deterrence."[43] The following definitions are credited to him.

- Battlefield defeat: this category is very similar to the premise of deterrence by denial, with the premise being that if an adversary attacks, the probability of success is too low, and the cost of victory is too high to make the action worthwhile
- Strategic Defeat: Strategic defeat lends itself greatly to extended deterrence as discussed previously in this chapter. In this case, a deterrer can threaten "we may not be able to prevent your attack from succeeding, but that will be merely the first phase of a longer war, which we will ultimately win."[44] If an aggressor makes an accelerated action into a state, a smaller, less defended state may not be able to withstand the onslaught, but be part of a larger alliance that would be able to punish the aggressor over time.
- Punitive Resistance**: S**ometimes winning the battle does not mean one will win the war. That is the premise of strategic defeat, whereupon a defender does not guarantee a complete loss for themselves but may inflict such a heavy price on the aggressor that any gains made afterward cannot be realized due to the amount of rebuilding required, and the amount of manpower lost in the initial action.
- Strategic Retaliation: Conventional deterrence can take the form of punishing an aggressor by attacking targets not related to the enemy attack at all. In the Second World War, the attacks on cities far removed from the battlefield. Nowadays this can include the use of long range ballistic missiles.[45]

Conventional deterrence, even with the advent of modern technology, cyber warfare, and nuclear weapons, is still an important piece of the deterrence puzzle. There are some that argue (such as Mueller) that conventional deterrence is still the most relevant and desirable deterrence strategy to pursue, however the argument does show its limits when the battlefield in question is not a physical one.[46]

The Concept of Modern Deterrence

NATO has traditionally relied on conventional and nuclear capabilities to maintain deterrence. During the Cold War, the traditional build up of forces in a

[43] Mueller, "Conventional Deterrence Redux," 50.
[44] Mueller, 52.
[45] Ibid.
[46] Mueller, "Conventional Deterrence Redux," 57.

deterrence by denial strategy, backed up by a nuclear deterrence by punishment threat was the norm. A combination of both deterrence strategies was sufficient when the main threat was the Soviet Union, since there was a reliance on less versatile, stationary forces.[47] However the make-up of military forces in the present day has evolved, and the quality of troops, as well their agility has become more important than mere numbers. This, in addition to the introduction of the pan domain concept of the battlespace,[48] has required deterrence strategy to evolve to be able to operate in this new global climate. Modern deterrence theory attempts to address these issues by ensuring deterrence techniques operate in not only the physical domain, but in domains such as space and cyber as well. In today's international climate, everything can be weaponized, from social media to natural resources.[49] A modern deterrence strategy focuses on not only military forces, but on economic, political, and social threats that can be more effective than a conventional response in forcing an adversary to submit to your demands or to halt their actions. It is important to note that an adversary may not be a state actor but could be a non-state actor or rogue nation that operates with a completely different rulebook than a state actor would.[50]

Modern deterrence, according to the Center for Strategic & International Studies (CSIS) in the USA, works in four ways to deter modern threats:[51]

- Establish norms: Establish "agreed codes of behaviour"[52] such as the Geneva Convention for modern nations. This should be extended to

[47] Igor Istomin, "Does Lighter Mean Healthier? Risks of Modern Deterrence in the Russia-NATO Context," December 3, 2019, https://www.europeanleadershipnetwork.org/commentary/does-lighter-mean-healthier-risks-of-modern-deterrence-in-the-russia-nato-context/.
[48] Pan-domain is a concept used to describe integrating effects across allies, domains, and whole-of-government. See DND Canada, "Pan-Domain Force Employment Concept, Prevailing in an Uncertain World" (Ottawa, 2020).
[49] "European Defense and Security | Center for Strategic and International Studies," accessed March 19, 2022, https://www.csis.org/programs/europe-russia-and-eurasia-program/european-security-politics-and-economics/european-defense.
[50] Non-state actors are not beholden to the Geneva Convention, nor the Law of Armed Conflict, and thus are able to wage war without the limitations of such.
[51] "European Defense and Security | Center for Strategic and International Studies."
[52] "European Defense and Security | Center for Strategic and International Studies."

cyber and space, so as to establish mutually agreed upon behaviour that can be written or unwritten. Establishing norms can also include enabling predictable military exercises and actions, to not cause escalation unnecessarily

- Tailor threats to specific actors: state and non-state actors (discussed later) require different deterrence responses. A deterrence response need to be uniquely constructed to respond to the threat at hand.
- Ensure deterrence techniques entail a whole of government approach: Deterrence is no longer just a military responsibility. A modern deterrence approach requires efforts from all aspects of government to ensure that a threat is deterred in all domains.
- Build credibility with adversaries: The resolve to follow through with threats should deterrence fail is a key aspect of modern deterrence. Should an adversary believe that an entity is bluffing in their deterrence threats, then deterrence has fundamentally failed.[53]

Post-2014, modern deterrence has been the strategy that NATO has adopted to confront Russian aggression. This strategy has allowed NATO to maximize the potential (and utility) of non-military tools, enhance cooperation with Allied nations, and enhance resiliency across all domains.[54]

Modern deterrence is the natural evolutionary successor of conventional deterrence, but still operates under the basic premises of deterrence by denial and deterrence by punishment. Under modern deterrence, denial is achieved through the use of defence-in-depth, or high readiness troops with the ability to reinforce forward presence assets in a timely manner. This prevents the financially draining, static build-up of forces such as was seen in the Cold War and allows for troops to utilize current technologies such as intelligence, surveillance, and reconnaissance (ISR), to accurately analyze where denial reinforcements will be needed most. Modern deterrence achieves deterrence by punishment through the ever-present threat of

[53] "European Defense and Security | Center for Strategic and International Studies."
[54] Beyza Unal and et. Al, "'Blurring the Lines': Nuclear and Conventional Deterrence," Chatham House – International Affairs Think Tank, accessed March 19, 2022, https://www.chathamhouse.org/2020/04/perspectives-nuclear-deterrence-21st-century-0/blurring-lines-nuclear-and-conventional.

nuclear deterrence, as well as the threats of economic and political sanctions that could potentially cripple a country more than a conventional war ever could. [55]

Conclusion

The breadth and depth of the strategies used for deterrence in human history is deep, going far beyond what is explained in this chapter. Deterrence can take many forms, and with the formation of international regimes and alliance such as NATO, one can see that deterrence can and should be tailored to fit the scenario at hand. As seen in the next chapter, NATO's deterrence strategy has never been static; it has evolved to suit the current threat. An amorphous deterrence strategy will yield results due to the ever-changing shape of threat, however making broad, sweeping changes to policy does not occur over night, and when changing strategy from a state actor to a non-state actor (and back again), the ability to do so quickly can come with unforeseen consequences.

[55] Center for Strategic & International Studies, *Modern Deterrence*, 2019, https://www.youtube.com/watch?v=O98ApfsgXFs.

CHAPTER 2: NATO'S EVOLVING DETERRENCE STRATEGY

Introduction

NATO's evolution of its deterrence strategy to present day takes place through some of the points in history where the potential for absolute catastrophe was at its peak. The threat of assured destruction after the Second World War caused NATO to craft a deterrence strategy that not only provided a strong, resilient force to deter the Soviet Union's conventional forces, but also the nuclear backing that would by and large be provided by the USA. NATO's pivot to non-state threats after the Cold War caused many allies to recognize terrorism as not just a domestic issue, but one where war could be declared, and Article 5 of NATO could be invoked. Doing so required a shift in deterrence strategy, which fundamentally changed the way NATO fought conflict overseas. This chapter will aim to discuss the state of the world after the Second World War and highlight some of the main catalysts for change for NATO's deterrence strategy. This chapter will argue that multiple shifts in the threat to NATO, and a shift in warfighting doctrine, caused a major setback for the recent great power competition occurring in Eastern Europe between Russia and NATO.

The Second World War and Beyond

The idea after the end of the Second World War was that all nations of the world would be able to put their weapons down, embrace peace, and rebuild. Unfortunately, that was not the case, as Soviet Union expansionism in Eastern Europe and Asia threatened the world with nationalist militarism, and further conflict.[56] From a Soviet perspective, they were justified in their acts of aggression; western expansion through its European allies was encroaching on Soviet territory. Furthermore, this was

[56] NATO, "A Short History of NATO," NATO, accessed January 25, 2022, http://www.nato.int/cps/en/natohq/declassified_139339.htm.

directly following the Second World War, when the Americans had the atomic bomb, and the Soviets did not. With these facts in hand, it was no surprise that the Kremlin would want a buffer zone to ensure the protection of its citizens.[57]

In 1948, the Allies of the Second World War came together to create the Western Union. This was followed by the signing of the North Atlantic Treaty on April 4, 1949, which included Article 5. Of all of the Articles within the Treaty, Article 5 is the most well-known, as it famously states that "an armed attack against one of more of (the Allies) …shall be considered an attack against them all."[58] The Treaty's original signees – Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom, and the United States – determined that a treaty such as this was the only way to prevent militarism in Europe, and allow for constructive integration in the future, and also a way to guarantee assistance to Europe from the USA should the continent once again need it.[59] It was during this time that the organization adopted the name as it is today - the North Atlantic Treaty Organization.[60]

NATO originally had adopted deterrence against the Soviet Union through nuclear means. In the early days of NATO, the alliance was at a stalemate with the Warsaw Pact, a military alliance headed by the Soviet Union that included Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland, and Romania. To confront the communist powers, NATO adopted the strategic doctrine of "massive retaliation." This was the early form of mutually assured destruction, the idea of

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[57] See chapter five in: "Soviet Perspectives on International Relations, 1956-1967," n.d., 163, accessed May 1, 2022.
[58] NATO, "A Short History of NATO."
[59] Timothy Andrews Sayle, *Enduring Alliance: A History of NATO and the Postwar Global Order* (Ithaca, UNITED STATES: Cornell University Press, 2019), 19, http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=5732975.
[60] Sayle, 17.

deterrence by punishment through the threat of nuclear weapons that would essentially wipe out both sides of a conflict. Massive retaliation stayed in place as NATO's strategy for deterrence until US President John F. Kennedy developed the strategy of "flexible response."[61] While massive retaliation focused on a binary principle – peace or total war – flexible response improved on this by "offering military responses short of a full nuclear exchange in the event of conflict."[62] Flexible response was extremely important during The Cold War, when crises such as the Cuban Missile Crisis had the world at the brink of nuclear war.

The Age of Nuclear Deterrence

The primary deterrence model used during the Cold War was that of nuclear deterrence. It closely aligns with deterrence by punishment,[63] and is defined as utilizing nuclear weapons to inflict unacceptable punishment on an enemy's homeland.[64] Nuclear deterrence is where the term MAD originated, in that any use of nuclear weapons would be met with nuclear retribution from the defender, ensuring destruction on both sides. Obviously, this was not an outcome desired by either side, so nuclear deterrence in the Cold War resulted in an increasing build-up of nuclear weapons by USA and by the Soviet Union. Nuclear deterrence not only requires a first-strike capability but also a second-strike capability, or a nation's ability to survive a first strike and be able to respond in kind with the remaining functional weapons.[65]

NATO's shifting priorities in threats and challenges caused the changes in its deterrence strategy. Post-Second World War, NATO required a strong conventional

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[61] NATO, "A Short History of NATO."
[62] NATO.
[63] Mearsheimer, *Conventional Deterrence*, 15. See also Chapter 1
[64] Michael MccGwire, "Nuclear Deterrence," *International Affairs (Royal Institute of International Affairs 1944-)* 82, no. 4 (2006): 1.
[65] MccGwire, 2.

deterrence force to counter the Soviet threat, as well as a strong nuclear deterrent. This shaped NATO's defence policy of the time. In the early days of the Cold War, this was the correct response to a Soviet threat that had great disdain and mistrust for the West, and one that placed great emphasis on its conventional force, not wanting it to be inferior to the West in any way.[66] Through the Cold War, NATO operated a deterrence by denial as well as a deterrence by punishment strategy to counter that Soviet threat. Nuclear weapons were at the same time becoming increasingly more powerful, requiring NATO to keep up with the Soviets not only with conventional forces, but with nuclear or ballistic capable ones as well. Nuclear deterrence strategy changed slightly after 1987, when the Soviet Union and the USA signed the Intermediate-Range Nuclear Forces (INF) Treaty.[67] The INF eliminated "all nuclear and ground-launched ballistic and cruise missiles with intermediate ranges,"[68] meaning most nuclear weapons were taken out of Europe, vastly de-arming the continent on both sides.

Nuclear warheads no longer being in Europe did not eliminate the nuclear threat; it simply pushed both sides of the Cold War to better develop nuclear assets with longer ranges that could operate outside of the medium-range envelope. This required larger payloads that were more fitted to carry nuclear warheads longer distances with greater accuracy. Even with the INF being signed, signaling a possible end to the Cold War soon, conventional forces were still present: Germany was still separated, and the Soviet Union operated its vast arsenal of submarines from the Baltic Sea region. Therefore, NATO still had to maintain defences in the Greenland-Iceland-UK Gap (GIUK Gap) as a means of deterrence by denial.[69]

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[66] Friis, *NATO and Collective Defence in the 21st Century*, 8.
[67] NATO, "A Short History of NATO."
[68] NATO.
[69] See chapter 1.

When the Berlin Wall fell in 1989, conventional forces were able to relax their posture. However, it took some six years before further nuclear readiness levels in NATO and Russia were reduced from a readiness level of 'launch within minutes' to 'launch within weeks.' Reduced readiness levels included a further reduction of nuclear arms, as some 95 percent of weapons were disarmed and dismantled. Nuclear deterrence at this point was still an effective form of deterrence, but no longer were nations perpetually ready to press the proverbial big red button. A relaxed posture also meant that NATO could look elsewhere in the world: to shape politics and development of less-stable countries. NATO had been deploying allied troops outside of Europe since the 1970s, but after the fall of the Soviet Union, these missions took more of a central role to NATO's strategy of collective defence.[70]

Post Cold War, and the Need for an Evolved Strategy

In 1999, NATO released an unclassified strategic concept that outlined its view on NATO's ability to influence the new threats facing the alliance. The document stated the threats of tomorrow were "complex new risks to Euro-Atlantic peace and security, including oppression, ethnic conflict, economic distress, the collapse of political order, and the proliferation of weapons of mass destruction."[71] In other words, NATO had recognized that a collective defence strategy needed to be expanded to focus on not only state actors, but non-state actors in all corners of the world that detested NATO's founding principles.

The coming decades tested NATO's resolve and ability to respond to collective threats in ways that were not previously seen from conventional threats. The terrorist attacks of 11 September 2001 were a stark demonstration that the USA - and

[70] NATO, "Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation," 2010, 11.
[71] NATO, "A Short History of NATO."

by extension NATO – were facing a new type of threat. Disorder in distant parts of the world would begin to equate to real consequences at home. NATO deterrence did not have a viable strategy for terrorist attacks, or for the idea of asymmetric warfare for that matter, and for the first time in history defence clause Article 5 was invoked against the Al-Qaeda terrorist group by the USA. The "war on terror" as it was called, brought allies in response to America's call for a show of staunch reassurance.[72] NATO's deterrence strategy up to this point had been focused on conventional, and to a lesser extent due to de-proliferation, nuclear threats. Non-state actors had not been a credible threat to any NATO nation, even though NATO had begun to extend its sphere of influence outside of Europe.[73] It was clear from the attacks on September 11 that some non-state actors in the world were not content with NATO (or USA) involvement in their region and were certainly not perturbed by conventional or nuclear deterrence factors.

In response to the new type of threat facing NATO, the thought of a conventional threat to allied nations was temporarily set aside as resources were required to tackle the shadowy threat of insurgency. The war in Afghanistan placed a huge cost on NATO allies, both in personnel and in equipment, and a shift in war-fighting capabilities was evident. Fighting a counter-insurgency conflict does not require the same skills as a conventional one, and NATO's conventional deterrence resources atrophied because of it. Afghanistan required a specific skillset for soldiers operating there; skills that were fundamentally different than those required to counter a conventional threat such as Russia.[74] For example, aircrews normally proficient in

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[72] Alastair Finlan, *Contemporary Military Strategy and the Global War on Terror : US and UK Armed Forces in Afghanistan and Iraq 2001-2012* (Bloomsbury, 2013), 29.
[73] NATO, "A Short History of NATO."
[74] Finlan, *Contemporary Military Strategy and the Global War on Terror : US and UK Armed Forces in Afghanistan and Iraq 2001-2012*, 30.

anti-surface/anti-submarine warfare (ASuW/ASW) were now being trained to become experts in intelligence surveillance and reconnaissance (ISR) overland. This forced a shift in training (for Canada, the UK, and many others), which would have repercussions into the future should the allies have great need of those skills in short order.[75] This shift in proficiency would have a profound effect on readiness when Crimea was annexed, something that will be discussed later.

Conclusion

It would have been ideal for NATO if it had to deal with only one type of threat at a time, but unfortunately that is not how the world works. NATO would soon learn that threats can be multi-faceted, and modern threats require a dynamic approach to deterrence. While NATO was pooling resources into the International Security Assistance Force (ISAF) in Afghanistan,[76] traditional state actors were slowly and methodically rebuilding their conventional forces. Although the Soviet Union was a thing of the past, Russia had taken to re-fitting its conventional military, investing in anti-access/area denial (A2/AD) systems to bolster its defences Eastern Europe and in the Baltic Sea region.[77] Russian investments were not just on land either; they had begun modernizing their submarine fleet[78] and developing new aircraft. Russia was a global superpower at one point, and the re-arming of its forces in the 2000's hinted that it desired to be treated as such once again. A deterrence strategy would soon be needed to deal with a resurgent threat from Russia in a modern threat environment.

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[75] For a Canadian perspective, see: Richard Mayne, "Cinderella's Star: The CP 140 Aurora and the Evolution of the Royal Canadian Air Force's Modern Long Range Patrol Capability, 1939-2015," *Canadian Military History* 30 (2021): 35.
[76] NATO, "ISAF's Mission in Afghanistan (2001-2014) (Archived)," NATO, accessed January 29, 2022, http://www.nato.int/cps/en/natohq/topics_69366.htm.
[77] "The GIUK Gap's Strategic Significance," 2.
[78] "Janes: Russian Navy to Acquire 12 New Lada-Class Submarines," accessed October 16, 2021, https://customer-janes-com.cfc.idm.oclc.org/DefenceWeekly/Display/FG_1379996-JDW.

CHAPTER 3: THREATS TO NATO IN THE MODERN WORLD

Introduction

NATO's initial list of threats and challenges has grown since the end of the Second World War. This factor necessitates a more dynamic deterrence response not just from the conventional threats of the Cold War, but also from hybrid threats that utilize grey zone warfare and the cyber domain to achieve political and military aims. As discussed in previous chapters, NATO was originally founded to deter a conventional and nuclear threat from the Soviet Union. As time passed, the threat to NATO on its eastern border diminished, but never fully dissipated. The threat picture of today is increasingly more complex than years past. Not only has conventional conflict returned, but conflict below the threshold of what would be considered open military conflict is increasing.[79] These grey-zone threats,[80] or threats that seek to achieve limited aims without direct conflict, are part of "an emerging but ill-defined notion in conflict studies"[81] known as hybrid warfare.

Russia successfully utilized hybrid warfare in the annexation of Crimea.[82] and the same tactics seem to be playing out today in the rest of Ukraine. Although focus should be on countering hybrid warfare as part of a multi-domain approach, NATO should not forget that the conventional and nuclear arsenals of traditional adversaries are still threats that can be brought to bare in the battlespace.

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[79] Michael Ruhle and Clare Roberts, "NATO Review - Enlarging NATO's Toolbox to Counter Hybrid Threats," NATO Review, March 19, 2021, https://www.nato.int/docu/review/articles/2021/03/19/enlarging-natos-toolbox-to-counter-hybrid-threats/index.html.

[80] Jahara W. Matisek, "Shades of Gray Deterrence: Issues of Fighting in the Gray Zone," *Journal of Strategic Security* 10, no. 3 (2017): 2, http://dx.doi.org/10.5038/1944-0472.10.3.1589.

[81] Andrew Dowse and Sascha-Dominik (Dov) Bachmann, "Explainer: What Is 'hybrid Warfare' and What Is Meant by the 'Grey Zone'?," The Conversation, accessed April 20, 2022, http://theconversation.com/explainer-what-is-hybrid-warfare-and-what-is-meant-by-the-grey-zone-118841.

[82] Matisek, "Shades of Gray Deterrence," 19.

This chapter will identify the conventional and non-conventional threats NATO must address with its deterrence strategy. The most efficient way to do so is by identifying and grouping them into the two categories: state actors, and non-state actors. While non-state actors will be discussed, it is the state actor's category that will be more in-depth due to the aim of this paper. Also discussed will be the recent challenges related to these actors due to the prominence of hybrid warfare and the cyber domain. At first glance, it may be difficult to understand why a distinction between these two threats needs to be made. Both could seek to undermine and gain advantage over NATO in some way, be it economically, politically, or militarily. However, with the rapid pace of modern technology, and "the emergence of a multipolar world order,"[83] the core task of the state, and the actions it can take, vary greatly from those of the non-state actor.

Non-State Actors

There are many ways to describe a non-state actor, but the best way to understand the idea is that a non-state actor does not utilize or exercise "formal power over, or on behalf of, a given population."[84] Non-state actors represent an entirely different entity than state actors. Actors that are considered non-state can include "NGO's, charities, political parties, lobby groups, multi-national companies…but also terrorist groups, crime syndicates, and organized ethnic minorities."[85] Many of these non-state actors enjoy increased notoriety around the world, and can be extremely influential, sometimes more so than the states that they operate within. The rise of public-private partnerships (PPP) allows non-state actors to take on more

[83] Peter Wijninga et al., "State and Non-State Actors: Beyond the Dichotomy," STRATEGIC MONITOR 2014 (Hague Centre for Strategic Studies, 2014), 3, https://www.jstor.org/stable/resrep12608.8.
[84] "State and Non-State Actors in International Politics," 143, accessed February 10, 2022, https://www.ukessays.com/essays/politics/nonstate-actors-international-politics-1781.php.
[85] Wijninga et al., "State and Non-State Actors," 143.

responsibility and influence under international law (The United Nation's Global Company is a prime example of such a partnership).[86]

Of course, NATO is not concerned with charities and companies in the realm of collective defence. The non-state actors that NATO devotes attention to are the various terrorist networks that have plagued certain parts of the world for the last three decades, if not longer. Conflict with terrorists groups places an incredible drain on NATO, not only due to the 'boots on the ground' requirement, but due to the fundamental switch in tactics and skillsets required to counter an insurgency.[87] A good example is the recent war in Afghanistan, where the ISAF's 51 NATO nations and partners engaged in the fight against Al Qaeda and the Taliban with more than 130,000 troops on the ground at the peak of the conflict.[88] It is no easy feat for any alliance of countries to keep such an operation going, for counter-insurgency warfare requires specific sets of skills for soldiers to maintain, much different than a conventional war that NATO has traditionally been built for in the past.

State Actors

A state actor is "a type of polity that is an organized political community living under a single system of government."[89] Historically, conflict was waged between two or more states; the Second World War was a collection of states allied together in conflict, the Cold War was the USA and its allies in conflict with the Soviet Union, a communist state that had under its wing many countries. One can therefore conclude that the core task of a state actor was, traditionally, to ensure protection and security

[86] Wijninga et al., 144.
[87] NATO, "'NATO Air Power: Learning from the Past – Looking to the Future' - Lord Trenchard Memorial Lecture 2013 by Air Marshal Sir Christopher Harper, Director General of NATO International Military Staff, at the Royal United Services Institute -- London, United," NATO, accessed February 22, 2022, https://www.nato.int/cps/en/natohq/opinions_105917.htm.
[88] NATO, "ISAF's Mission in Afghanistan (2001-2014) (Archived)."
[89] "State and Non-State Actors in International Politics."

for all of its citizens, often entering into agreements of collective security via alliances if necessary.[90] Nowadays, the role of the state has evolved further than defence. Citizens expect much more of their government, so states now provide "social security, healthcare, transportation, education, and much more beyond law enforcement and defence."[91]

The ability of a state to keep its citizens safe varies greatly around the world. For example, in North America the USA and Canada are able to keep citizens safe with effective law enforcement and professional militaries. The ability to do so stems from a high GDP and a strong economy (although the lack of immediate adversaries at their borders plays a factor in this as well).[92] However not all states are as fortunate, and for various reasons, states can fail. A recent example of this is in Somalia in the early 1990s, when various armed resistance groups began competing for power after the Barre government was overthrown. Law and order collapsed, and in the absence of a central government, the nation was declared a failed state.[93] A failed state will usually result in power grabs by influential and powerful ethnic tribal groups that, in the absence of a centralized power, construct their own states within a nation, or attempt to join neighbouring nations. A state in this form must take very aggressive actions to regain security from the groups that have sprung up, usually requiring outside intervention to bring the state back to normalcy.

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[90] Wijninga et al., "State and Non-State Actors," 142.
[91] Wijninga et al., 142.
[92] The physical geography of North America, with oceans acting as buffer zones, eases USA and Canada's security concerns significantly when compared to European or Asian states. For more on this, see Robert Jervis, "Cooperation Under the Security Dilemma," World Politics, Vol. 30, No. 2 (January 1978), 194-196.
[93] Somalia faced incredible internal turmoil in the 1991 when northern clans declared an independent republic of Somalian after the collapse of the Siyad Barre regime. More info can be found at World Without Genocide, "Somalia - Making It Our Legacy," Organization, World Without Genocide, accessed February 10, 2022, https://worldwithoutgenocide.org/genocides-and-conflicts/somalia.

Even though non-state actors have seen a marked rise in influence in global politics, the state is still the most important actor.[94] Non-state actors such as intergovernmental organizations (United Nations for example) "do not possess the power to enforce state follow up with their decisions,"[95] meaning states alone have the power to shape activities within their sphere of influence.[96] State influence is therefore important, and increasing it can lead to an increase in hard and soft power internationally. Russia, for example, has increased their influence due to a steady rebuild of military prowess since the fall of the Soviet Union.[97] In addition, more ties with the economic stability (and energy requirements) of Europe has made Russian influence in the European Union a political issue, especially given the current invasion of Ukraine. Russian natural gas and oil pipelines supply a large percentage of European homes, with plans already in the works for a higher stake by Russia.[98] Another state that has dramatically increased its influence is China; a country that has exploded economically and contributed to the increase of the multipolar state of the world order.[99]

With the return of state actor influence on the world stage, US dominance was no longer guaranteed. The need for a state deterrence strategy, a robust conventional and nuclear concept, had returned. The primary state threat for NATO currently is Russia, and the state's aggression in Eastern Europe over Ukraine. Russia is considered a credible and very real threat not only due to its aggressive modernization

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[94] Wijninga et al., "State and Non-State Actors," 143.
[95] "State and Non-State Actors in International Politics."
[96] The influence of the state vs. non-state actors is still a debated topic; however, this paper agrees with the idea that the state remains the most influential entity in international relations.
[97] Magnus Nordenman, "Back to the Gap: The Re-Emerging Maritime Contest in the North Atlantic," *The RUSI Journal* 162, no. 1 (January 2, 2017): 1, https://doi.org/10.1080/03071847.2017.1301539.
[98] Becky Sullivan and Jackie Northam, "Explaining Why Natural Gas Plays Such a Big Role in the Russia-Ukraine Crisis," *NPR*, February 9, 2022, sec. World, https://www.npr.org/2022/02/09/1079338002/russia-ukraine-europe-gas-nordstream2-energy.
[99] Wijninga et al., "State and Non-State Actors," 146.

of conventional forces, but also due to its ability to skillfully conduct hybrid warfare operations that would not normally trigger an Article 5 response from NATO. The annexation of Crimea is a prime example of this. Troops without flags on their shoulders managed to secure the region without firing a single shot, providing a prime example of Russian prowess in the hybrid realm. Military doctrine in Russia has realized that warfare has taken on a multi-faceted role that differs greatly from the style of warfare conducted during the Cold War, supporting the notion that Russia will only wage hybrid warfare from now on. Hybrid warfare is something Russia can use to its advantage if operationalized correctly. Doctor of Military Sciences Alexander Serzhantov, at the Center for Military Strategic Research noted in 2019 that information technology, artificially built political struggles, and limited aims wars will complement strategy for achieving traditional goals.[100] On the subject of hybrid warfare, Dr Serzhantov notes that:

> Under such conditions, war is not declared, but begins and is conducted non-standardly, with a sufficiently long and secretive period of its preparation for the victim side. The blurring of the distinction between war and peace is another characteristic feature and trend of the 21st century.[101]

The important thing to note from the observations of Dr Serzhantov is that Russian strategic thinkers fully grasp how future conflict will be fought, and how to best take advantage of the age of misinformation and hybrid warfare. One need look no further than the current conflict in Ukraine to see how Russia is able to shape the battlespace in its physical and cyber realms for its own gain.[102] Hybrid tactics, coupled with a questionably rational leader in President Putin in command of modernized

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[100] A.G. Sokolov, "A.G Sokolov Interview with Aleksandr Vladimirovich Serzhantov, 'The Development Trends of Military Art,'" *Nezavisimaya Gazeta Online (Independent Paper Online)*, October 2019, http://nvo.ng.ru/nvo/2019-10-04/1_1064_tendenzii.html.
[101] Sokolov.
[102] Ibrahim Muradov, "The Russian Hybrid Warfare: The Cases of Ukraine and Georgia," *Defence Studies* 0, no. 0 (January 21, 2022): 8, https://doi.org/10.1080/14702436.2022.2030714.

nuclear weapons, necessitates an all-encompassing deterrence strategy from NATO. The ever-present threat of nuclear arms always casts a shadow on allied nations, and unlike NATO allies, Russian doctrine considers first-strike use of nuclear weapons as not only an option, but de-escalatory.[103] This sets the Russian threat apart from other countries, including the increasingly adversarial threat of China (China and India are the only nuclear-armed countries to have an unconditional no first use policy.)[104]

Russia is a unique threat for NATO. It is a neighbouring nation that has had many opportunities to become friends but has decided to not follow that path. For the past two decades, "NATO has worked to build a partnership with Russia, including through the mechanism of the NATO-Russia Council (NRC)."[105] Other Allied initiatives, such as the Open Skies Agreement, were thought to be pushing the relationship between NATO and Russia in the right direction.[106] Unfortunately, Russia's activities in the last decade or so have fought to erode that partnership, reduce stability, and have fundamentally changed the security environment for all parties involved. Russian resurgence did not come as a surprise if one knew where to look. Since 1990, Russia modernization of its military has taken shape, not just in equipment and personnel, but in how the military operates in areas of interest, most notably in the realm of nuclear policy.[107]

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[103] Jeffrey A. Larsen, "NATO Nuclear Adaptation since 2014: The Return of Deterrence and Renewed Alliance Discomfort," *The Journal of Transatlantic Studies* 17, no. 2 (June 2019): 174–93, http://dx.doi.org/10.1057/s42738-019-00016-y.

[104] "No First Use," Global Zero, accessed February 10, 2022, https://www.globalzero.org/no-first-use-faqs/.

[105] NATO, "Brussels Summit Declaration Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Brussels, 11-12 July 2018," NATO, accessed March 17, 2022, https://www.nato.int/cps/en/natohq/official_texts_156624.htm.

[106] Nuclear Threat Initiative, "Treaty on Open Skies," *The Nuclear Threat Initiative* (blog), accessed April 21, 2022, https://live-nuclear-threat-initiative.pantheonsite.io/education-center/treaties-and-regimes/treaty-on-open-skies/.

[107] See the previous discussion on hybrid warfare in chapter 3.

Nuclear policy returned to the forefront of NATO business in 2010, mainly due to a delay the re-signing of the new START treaty on February 5, 2011.[108] The new treaty extends to 2026 and includes limits on how many deployed nuclear warheads and intercontinental ballistic missiles (ICBMs) the USA and Russia may have at any time. Nuclear weapons should have taken a back-seat to deterrence and diplomacy since that date in 2011; however, since the annexation of Crimea, the idea of Russian doctrine allowing early use of nuclear weapons represent a clear and credible threat to NATO and its allies.[109] More on the modern deterrence response to the Russian threat will be covered in subsequent chapters. At this point, it is simply important to note that Russia presents a credible threat in traditional and non-traditional military avenues and is the best example of a state threat that NATO can currently provide, especially given the current (at time of writing) invasion of Ukraine by Russian Federation forces.[110]

Conclusion

NATO has acknowledged within the past decade that hybrid warfare, whether from a state or non-state, is something that needs to be taken seriously. Whether an adversary is a state, or non-state actor, the type of methods of warfare one can bring to bear in the present day are very similar. Hybrid methods, "such as propaganda, deception, sabotage, and other non-military tactics,"[111] are a regular part of military conflict now as much as tanks and aircraft. Hybrid warfare and operations within the grey zone of conflict is unique in that it can often blur the lines between conflict and peace, creating a level of discord and unrest within a population that can have a great

[108] USA Dept of State, "New START Treaty," United States Department of State, accessed February 10, 2022, https://www.state.gov/new-start/.
[109] Larsen, "NATO Nuclear Adaptation since 2014," 1.
[110] This paper was written in early 2022.
[111] NATO, "NATO's Response to Hybrid Threats," NATO, accessed February 22, 2022, https://www.nato.int/cps/en/natohq/topics_156338.htm.

effect on the efficacy of follow-on military action. Since 2015, NATO has had a strategy for working to counter hybrid warfare,[112] and each subsequent NATO Summit has further reinforced the original strategy, as tactics evolve, and adversaries adapt to NATO doctrine. It is still up for debate whether state or non-state actors will precipitate the greater threat to NATO in the future, however the current international climate has the pendulum swinging in the direction of state actors, as the world sees the return of great power competition. Although most of the attention is on Russia at the time, the Alliance cannot forget other state actors that would look to take advantage of international turmoil. States such as China have been diplomatically neutral with respect to the Ukrainian invasion, and partnerships such as NATO should be cautious. Furthermore, non-state actors that have terrorized nations in the past, such as Al Qaeda, have diminished but not disappeared. It would be folly to turn one's back to such dangerous entities entirely, even if Russia is demanding the majority of NATO's attention.

[112] NATO.

CHAPTER 4: THE SHIFT TO MODERN DETERRENCE

Introduction

No matter the changes to the faces of the threats facing NATO, be it a state or a non-state actor, the fundamentals of deterrence do not change. Regardless of the threat, there still exists the requirement for goal of convincing an adversary to not take aggressive action against a nation or an ally.[113] However, many differences in the breadth of conflicts being waged today make deterrence a largely different concept in action for NATO than it was back in the Cold War and then through the war in Afghanistan.

When Crimea was annexed in 2014, NATO's deterrence strategy required a purposeful shift to counter a conventional threat once again on its borders. It was at this time that two things became worryingly clear to NATO. The first was that conventional assets had atrophied since most resources and training had been focussed on non-state actors and terrorists for most of the 21st century. The second was that a Cold-War-era deterrence strategy that was largely conventional was no longer sufficient this time around; it was not an effective tool against the multi-faceted, hybrid threats that Russia could produce above and below the threshold of conflict. Thus from 2014 to present, a new formula for deterrence was tested to ensure NATO was able to reassure its allies that collective defence, the core principle behind NATO, was alive and well in the 21st century.

This chapter will provide an overview of the most important NATO Summits from 2014 and onward that played key roles in evolving NATO's deterrence strategy in Eastern Europe. It will also discuss the current makeup of NATO forces as part of

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[113] Nora Vanaga and Toms Rostoks, *Deterring Russia in Europe: Defence Strategies for Neighbouring States* (Milton, United Kingdom: Taylor & Francis Group, 2018), 28, http://ebookcentral.proquest.com/lib/cfvlibrary-ebooks/detail.action?docID=5517492.

its European deterrence strategy and provide some key takeaways before further analysis in chapter 5.

A Requirement for a Shift in Deterrence

There has been very little evidence to refute the fact that NATO's pursuit of modern deterrence is mostly about Russia, especially given the increased pressure on the Alliance due to the shocking Russian invasion of Ukraine in 2022. Since the Wales Summit in 2014, the majority of talking points in NATO Summit Declarations have been on the subject of Russia and the threat it presents in some shape or form.[114] Immediately following the annexation of Crimea in 2014, there were still some nations who felt uncomfortable, or were hesitant to admit that Russia was once again a potential adversary.[115] The eventual admission by European states that Russia presented a clear and present threat to their way of life in such a multi-faceted way was the catalyst for many of the deterrence shifts in NATO. The term multi-faceted is useful here because state on state aggression, due to the advent of cyber, grey-zone tactics, and disinformation has become much more difficult to define and to deter.[116] It also fits in very well with Russia's penchant for hybrid warfare.[117] The nation state of Russia shows similarities to the entity that existed during the days of the Soviet Union. Russia still adopts doctrine that pursues long term military objectives through the use of A2/AD and hybrid warfare,[118] utilizing conventional forces where it needs to.[119] There is of course the ever-present threat of nuclear weapons which poses the

[114] See NATO's E-Library: https://www.nato.int/cps/en/natohq/publications.htm
[115] Larsen, "NATO Nuclear Adaptation since 2014," 1.
[116] Łukasz Kulesa, "NATO's Evolving Modern Deterrence Posture: Challenges and Risks," n.d., 6.
[117] See chapter 3 regarding state actors and hybrid warfare.
[118] Kulesa, "NATO's Evolving Modern Deterrence Posture: Challenges and Risks," 5.
[119] Russia's 2022 invasion of Ukraine was a mix of hybrid warfare followed up with conventional forces in an attempt to take and hold key strategic objectives and "de-militarize" Ukraine. See: Muradov, "The Russian Hybrid Warfare."

most significant risk to NATO and by extension, the world, as Russia is keen to remind NATO of quite regularly.

Despite the threat of nuclear weapons, Russia has identified that the grey zone is where the most efficient and effective use of its resources will be. In 2018, the Institute for the Study of War in the USA released a publication on Russian Hybrid Warfare that noted "The Kremlin assesses that hybrid wars already dominate 21st century conflict and will continue to do so."[120] Russia's greater focus on hybrid warfare and the grey zone, essentially how Russia views warfare in the future, was a major factor that encouraged NATO to reconsider "its 20 years of emphasis on out-of-area expeditionary operations and its focus on the crisis management and cooperative security pillars of the 2010 Strategic Concept at the expenses of the core responsibility of collective defence."[121] In other words, NATO no longer saw terrorist regimes and non-state actors as the biggest threat to its existence; Russia was back, taking centre stage.

Due to the make-up of NATO forces prior to 2014, re-assessing and re-forming the collective defence structure of the Alliance did not occur overnight. As discussed before, most of the 1990s and early 2000s for NATO was spent countering a terrorist threat, requiring a greatly increased use of expeditionary forces and over the horizon logistics support, yet very little of conventional forces. One of the best examples of this was seen in the maritime and submarine components of NATO, assets that were heavily invested in during the Cold War due to the deadly threat of ballistic nuclear-equipped submarines. In 2010, The UK, a maritime nation, retired its entire maritime patrol aircraft fleet. Germany cancelled its procurement of new

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[120] Mason Clark, "Russian Hybrid Warfare ISW Report 2020," September 2020, 8, https://www.understandingwar.org/sites/default/files/Russian%20Hybrid%20Warfare%20ISW%20Report%202020.pdf.
[121] Larsen, "NATO Nuclear Adaptation since 2014," 1.

maritime aircraft around the same time, and France decided to modernize only a small portion of its fleet of *Atlantique* aircraft. In the subsurface realm between 2000 and 2016, assets for European nations decreased from 62 to 38, with many nations cutting their entire fleet as they no longer saw a need for a robust subsurface fleet.[122] The skillsets required for maritime and anti-submarine types of missions, as a result of these cuts, dwindled significantly as opportunities to hone skills were drastically reduced.

Magnus Nordenman has written a few articles on the subject of the degradation of NATO forces in specific skillsets such as ASuW/ASW, and in his article "Back to the Gap" he notes that "NATO member submarines have primarily played supportive, and sometimes ill-suited roles in Alliance and coalition operations."[123] For example, Operation *Active Endeavour* made use of submarines for intelligence-gathering, one of the first operations in response to the terrorist attacks against the United States in 2001.[124] The maritime world is but one example of re-prioritization of conventional forces by NATO, but the example can be seen in the land environment as well. Prior to the Crimean annexation, NATO minimized its forces in Eastern Europe, partially due to the need for troops elsewhere, but also due to various agreements (the Founding Act of 1997 being exemplary) regarding the build-up of forces along its borders.[125]

Many NATO nations were taken by surprise when Russia annexed Crimea, mainly due to the strengthening of economic ties that had taken place between Russia

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[122] Nordenman, "Back to the Gap," 5.
[123] Nordenman, 5.
[124] NATO, "Operation Active Endeavour (Archived)," NATO, accessed April 1, 2022, https://www.nato.int/cps/en/natohq/topics_7932.htm.
[125] NATO, "Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation Signed in Paris, France," NATO, accessed April 1, 2022, https://www.nato.int/cps/en/natohq/official_texts_25468.htm.

and the European Union throughout the 2000s. France was set to sell Russia a pair of Mistral assault ships that could be used as amphibious assault craft as well as helicopter carriers in 2014,[126] a sure sign that relations between the two countries had gotten to the point where there was a modicum of trust to not act against each other militarily. However, under intense pressure from NATO partners, and due to Russian actions in Ukraine, the French government decided to halt the sale, potentially setting back Russia's amphibious capability by years, and souring relations significantly.

Economically, Russian gas giant Gazprom began construction of Nord Stream 2, an expansion oil and gas pipelines running under the Baltic Sea from Russia to Germany and beyond in 2011. The project faced difficulties due to economic sanctions by European nations following the Crimean annexation, but not without pushback from NATO nations such as Germany, who viewed the economic gains of the project to outweigh the security costs, and recent transgressions of Russia.[127] Angela Merkel, then Chancellor of Germany in 2016, called US sanctions on Russian energy "peculiar,"[128] causing a minor rift in US/German relations, and showing the power that economic potential had in overshadowing military aggression in non-NATO states. The eventual cancellation of Nord Stream 2 in 2022 was not taken lightly. Russia supplies Europe with almost 40% of its natural oil and gas, thus any further souring of relations with Russia will almost certainly cause great economic fallout should Russia decide to stop providing these resources.[129]

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[126] "Ukraine Crisis: France Halts Warship Delivery to Russia," *BBC News*, September 3, 2014, sec. Europe, https://www.bbc.com/news/world-europe-29052599.
[127] "Germany Grants Permit for Nord Stream 2 Russian Gas Pipeline," *Reuters*, January 31, 2018, sec. Commodities News, https://www.reuters.com/article/us-nordstream-germany-permit-idUSKBN1FK15J.
[128] Deutsche Welle (www.dw.com), "Germany's Angela Merkel Slams Planned US Sanctions on Russia | DW | 16.06.2017," DW.COM, accessed April 1, 2022, https://www.dw.com/en/germanys-angela-merkel-slams-planned-us-sanctions-on-russia/a-39276878.
[129] In 2021 Europe (including Turkey) imported roughly 34% of total demand of gas and liquified natural gas (LNG) from Russia. Russia's gas exports to Europe are roughly one third of global LNG trade as of 2021. For further details on European dependence on Russian resources, see Anne-Sophie

The Decision to Deter

To counter the present Russian threat environment, NATO developed a strategy of modern deterrence with the aim of addressing conventional forces as well as hybrid threats. The transformation from expeditionary operations to the development of modern deterrence in NATO did not occur overnight. Indeed, it was an evolutionary process that is still ongoing, and thus far represents the best strategy in ensuring the collective defence of nations within the alliance. From 2014 to 2018, NATO held three summits where deterrence and collective defence were discussed and expanded upon at length: the Wales Summit in 2014, the Warsaw Summit in 2016, and the Brussels Summit in 2018.[130] Although there have been additional NATO Summits since 2018, these three summits were the main drivers behind the modern deterrence strategy that has been evolving since 2014. This is due to their significance in helping to fundamentally shift how NATO thought about defence on its own borders, and to better reflect the current state of military conflict. The following will provide an overview of these summits and an explanation of how they evolved modern deterrence strategy and developed beyond conventional deterrence.

2014 Wales Summit

The NATO Summit in Wales 2014 was something of a rebirth for the Alliance. Russia was front and centre, as evidenced by some of the first words spoken at the beginning of the Summit: "Russia's aggressive actions against Ukraine have fundamentally challenged our vision of a Europe whole, free, and at peace."[131]

Corbeau, "Columbia | SIPA Center on Global Energy Policy | Q&A | Europe's Dependence on Russian Gas with Anne-Sophie Corbeau," accessed April 21, 2022, https://www.energypolicy.columbia.edu/research/interview/qa-europe-s-dependence-russian-gas#_edn1.

[130] NATO, "Events," NATO, accessed January 29, 2022, https://www.nato.int/cps/en/natohq/events.htm.

[131] John R. Deni, "NATO's New Trajectories after the Wales Summit," *Parameters* 44, no. 3 (Autumn 2014): 1.

Collective defence and cooperative security were at the forefront of the discussions. There was dialogue on how to best manage these items in a time where NATO's initial desire was to downsize its command structure and take a collective breather from the exhaustive operations in Afghanistan.[132] Switching a defence strategy from expeditionary operations to territorial defence required a fundamental change in investment of resources, for each type of operation requires unique assets. For instance, Afghanistan would have relied heavily on strategic airlift, overseas intelligence, and deployable logistics networks. Territorial defence for NATO would require less on these, and instead more of a focus on heavy armour, mobile troops, and air defence, among others.[133]

The Wales Summit Declaration made special mention of hybrid warfare threats, showing that NATO was at least starting to realize the danger of covert, paramilitary, and civilian measures designed to take traditionally military objectives.[134] Strategic switches in NATO required a change in tactics for the soldier on the ground too, and the product of this change was the Readiness Action Plan, the first step toward NATO's much-needed exploration of modern deterrence.

NATO's Readiness Action Plan fundamentally changed how collective defence was handled in Europe. It was designed to deter Russian aggression and "bolster the organization's ability to respond to fast-moving crises, regardless of their origin,"[135] The RAP included establishment of a 5000 troop Very High Readiness Joint Task Force (VJTF), an increased air, land, and sea presence in Eastern Europe,

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[132] Deni, 2.
[133] For more information, see: NATO, "Wales Summit Declaration Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Wales," NATO, accessed January 22, 2022, http://www.nato.int/cps/en/natohq/official_texts_112964.htm.
[134] Traditional military objectives are those that make contribution to military action and offer distinct military advantages if disrupted or captured. Article 52(2) of the 1977 Additional Protocol of the Geneva Convention further outlines what defines a military objective.
[135] John-Michael Arnold, "NATO's Readiness Action Plan: Strategic Benefits and Outstanding Challenges," *Strategic Studies Quarterly: SSQ*, no. Spring (2016): 2.

and improved command and control (C2) elements.[136] Increased troop presence was coupled with multi-nation exercises in Eastern Europe, and an agreement by NATO partners to increase defence spending to 2% of GDP.[137] The VJTF operates as a mobile trip wire for NATO forces that are in a lower-readiness state in Europe, enabling the smaller force to observe the adversary, and alert the larger response force to Russian aggression. Also available to NATO would be additional "high-readiness and NATO's heavier follow-on forces" according to the Secretary General's Annual Report of 2020.[138] NATO also redeployed maritime forces to the Black Sea, creating Standing NATO Maritime Group 2 (SNMG2). SNMG2 was tasked with exercising freedom of manoeuvre within the Black Sea, as well as conducting multiple NATO exercises to "reassure allies in the region of the Alliance's collective defence and resolve.[139]"

In addition to the RAP, NATO members agreed on a Defence Planning Package that included several items needed for territorial defence:

- Enhanced training and exercises
- Command and control, especially for air operations
- Intelligence, surveillance, and reconnaissance (ISR)
- Ballistic missile defence
- Cyber defence
- Land force readiness[140]

The objective of the smaller, more agile readiness forces was to make persistent troop deployments more manageable and fiscally sustainable for Allied nations. A large

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[136] Arnold, 5.
[137] Arnold, 3.
[138] Jens Stoltenberg, "Secretary General Annual Report 2020" (NATO, 2020), 16, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2017_03/20170313_SG_AnnualReport_2016_en.pdf#page=35.
[139] NATO, "SNMG2 Completes Operations in the Black Sea," NATO, 2, accessed April 1, 2022, http://www.nato.int/cps/en/natohq/news_118349.htm.
[140] Deni, "NATO's New Trajectories after the Wales Summit," 5.

conventional force sitting in perpetuity in one position was no longer necessary, as a conventional deterrence strategy would dictate. Modern deterrence strategy would rely on these smaller forces to act as a screen, buying time for the larger follow-on forces and supplies to be called up from Allied territory.[141] Given the changes made by NATO its Eastern European build-up, it was clear that this was no longer a deterrence strategy shaped by great conventional powers. The threat of hybrid warfare, and the agility that such a strategy brought to the battlespace, was such that a conventional build-up was not only unnecessary, but not even viable. As NATO noted, "deterrence is not just about military balances, but also about interests."[142] This meant that it was no longer sufficient to build up and leave static a large military force on the Russian border; to do so would be costly and ineffective, for NATO countries were not willing to pay for such an entity with funds and personnel, nor were they willing to risk escalating conflict with Russia.

2016 Warsaw Summit

The Warsaw Summit in 2016 further reinforced the decisions made in 2014 in Wales and placed a renewed emphasis on deterrence and collective defence. NATO had multiple challenges to deal with at this time: Russia in the East, and a surging Islamic State of Iraq and the Levant (ISIL) terrorist threat in the Middle East.[143] The ISIL threat was contributing greatly to the refugee and migrant crisis in Southern European countries, placing a financial and economic drain on NATO contributors.[144]

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[141] Allied territory defined as NATO allied territory, or cooperating nations allowing NATO forces to re-supply and re-position within their borders.
[142] "NATO Review - Deterrence."
[143] NATO, "Warsaw Summit Communiqué - Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Warsaw, 8-9 July 2016," NATO, accessed March 17, 2022, https://www.nato.int/cps/en/natohq/official_texts_133169.htm.
[144] NATO.

It appeared that the skills gained during the war in Afghanistan would once again be needed to confront yet another terrorist threat.

On the Eastern front, NATO continued to condemn Russia actions in Ukraine and on European borders, furthering its deterrence and defence posture in the Baltic and Black Sea regions. NATO acknowledged that "the security situation has also deteriorated in recent years"[145] in these two regions and welcomed the cooperation of non-NATO nations in defence from Russia, namely Finland and Sweden. Much of the Warsaw Summit communique released in 2016 discussed the Russian threat at length, showing how gravely concerned the Alliance was with its eastern neighbour.[146]

Improvements to NATO's deterrence response to Russia in 2016 were numerous; however the most noticeable items were:

- Allied defence expenditure increased for the first time since 2009
- Introduced the adaptation measures of the RAP, creating a Very High Readiness Joint Task Force (VJTF)
- Allied commitment of air policing, maritime patrols and exercises[147]
- Establishment of multinational NATO Force Integration Units in Eastern Europe – battalion sized battlegroups present at all times in Latvia, Lithuania, Estonia, and Poland – with Canada leading the forces in Latvia
- Agreed on a counter hybrid warfare strategy
- Enhanced NATO Standing Naval Forces
- Recognition of cyber as a domain of operations in which NATO must defend itself
- Reaffirmation of NATO as a nuclear defence partnership, with USA strategic assets being the foundation[148]

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[145] NATO.
[146] See NATO's 2016 Warsaw Summit Communiqué for amplification, namely paras 9-19.
[147] NATO, "Doorstep by NATO Secretary General Jens Stoltenberg."
[148] NATO, "Warsaw Summit Communiqué - Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Warsaw, 8-9 July 2016."

When analyzing this list, one can see that in 2016 NATO was further realizing that conventional deterrence must be augmented with non-kinetic capabilities to fully provide collective defence as a core component of the Alliance. With the VJTF, and a further commitment to cyber, along with economic partnerships with non-NATO countries, modern deterrence strategy was beginning to take shape.

However, NATO was also realizing that European capability, and the contributions between NATO countries, was vastly inequal. As the Warsaw Summit confirmed, "80% of the states contribute only about one-third of the forces."[149] Smaller nations such as Estonia, with a military of 6,000 personnel, could not possibly contribute as much as a country such as Germany, with a military of 175,000.[150] The contribution of a country does not just mean less boots on the ground in conflict, it means less capability and effect in all environments. This equates to a smaller-contributing NATO nation having "less know-how, command and control capacities, and equipment and infrastructure for operations,"[151] meaning that there would be the very real possibility that some contributions by certain nations could be seen as liabilities and not assets. This meant that NATO needed to recognize that in order to continue to evolve its modern deterrence strategy, a further evolution in combined command structures and large formation training was necessary.

2018 Brussels Summit

Continued improvement upon NATO's Readiness Initiative was seen in Brussels in 2018, as NATO announced an "additional 30 major naval combatants, 30 heavy or medium manoeuvre battalions, and 30 kinetic air squadrons…at 30 days

[149] Friis, *NATO and Collective Defence in the 21st Century*, 34.
[150] Friis, 35.
[151] Friis, 35.

readiness or less."[152] These forces, known as the "Four Thirties" program, would be complementary to the Multinational Divisions in Eastern Europe that reached full capability in December of 2018.[153]

With these additional forces and the original high readiness forces already in Europe, mobility was the key. In Brussels, NATO introduced intentions to shorten border crossing times for land, sea, and air movements, and to identify main supply routes for military assets that would be utilized in future exercises. In NATO's summit declaration, cyber and space were also mentioned, showing NATO's resolve to round out their deterrence strategy in all domains, building upon what was recognized in Wales and Warsaw in regard to the importance of these domains.[154] Brussels was the first time that NATO formally recognized hybrid threats, announcing the launch of Counter Hybrid Support Teams, which aimed to provide allies with assistance when hybrid activities occur.[155]

Current NATO Posture and Key Takeaways

The development of NATO deterrence in Europe continued since 2018, seeking to develop forces in their ability to operate in uncomfortable or abnormal joint environments. It is clear from the developments of the NATO Summits and the global events that have occurred in recent years that conventional deterrence is no longer a viable solution to modern military competition. For state actor threats, NATO no longer has the luxury of Cold War Era doctrine, where nations were begrudgingly satisfied with the static build-up of forces along each other's borders, backed up by

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[152] NATO, "Brussels Summit Declaration Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Brussels, 11-12 July 2018."
[153] NATO.
[154] NATO.
[155] "Here's What NATO Achieved at Its Brussels Summit," *Atlantic Council* (blog), July 12, 2018, https://www.atlanticcouncil.org/blogs/new-atlanticist/here-s-what-nato-achieved-at-its-brussels-summit/.

the threat of nuclear powered, mutually assured destruction.[156] State actors these days, as touched on previously, are able to project power and threaten NATO in such a multi-faceted way, that conventional forces alone are no longer able to single-handedly deter the composite challenges faced. The rise of hybrid warfare, and the attractive prospects of limited aims objectives in warfare means that nations such as Russia can achieve their goals without provoking a full-scale attack by NATO. The most recent NATO summit that took place in June of 2021 correctly identifies this threat. In the communique from the summit, NATO discusses at length the intensification of Russia's hybrid actions, as well as its multi-domain capabilities including the recapitalisation of its nuclear forces.[157] This is why, in response to Russia, the Alliance has decided on a smaller, more agile readiness force concept, with the ability to provide heavier follow-on forces, if need be, as the situation dictates. This force presence is only one piece of modern deterrence, the other pieces exist being the nuclear, cyber, space, economic, and political realms, all working together to de-escalate the threat of war.

Deterrence modernization within NATO typically meant that the role of nuclear weapons took a back seat; this was how it was for most of the post-Cold War era.[158] This approach to nuclear arms brought cohesion among the Allies, since there were more than a few nations that, whether vocally or behind closed doors, who were "politically uncomfortable with if not borderline opposed to nuclear deterrence."[159] The unfortunately reality is that current events for NATO cannot adequately make

[156] Mutually assured destruction is a military doctrine term which is used to describe how a nuclear conflict would result in the complete annihilation of both sides in a conflict.
[157] NATO, "Brussels Summit Communiqué Issued by the Heads of State and Government Participating in the Meeting of the North Atlantic Council in Brussels 14 June 2021," NATO, accessed May 1, 2022, https://www.nato.int/cps/en/natohq/news_185000.htm.
[158] Larsen, "NATO Nuclear Adaptation since 2014," 13.
[159] Larsen, 1.

room for comfort, with Russia putting immense pressure on NATO through the invasion of Ukraine,[160] and Russian military doctrine not only permitting, but encouraging the early use of nuclear weapons as a de-escalatory device,[161] as baffling as that sounds to those in the west. Thus, it is that deterrence strategy for NATO not only needs to counter the Russian threat, it needs to provide de-escalatory powers for the nuclear threat, assuage the fears of those nations who do not agree with the use of nuclear weapons, as well as provide comfort to those allies particularly threatened by their proximity to Russia.

Conclusion

This chapter was meant as a brief update on NATO's most relevant summit meetings for the evolution of deterrence. From 2018 onward, NATO has held four more summits, with another planned in the summer of 2022 in Madrid, Spain. These summits are important to periodically evaluate the strategic direction that NATO is heading, as well as for heads of state to voice concerns. They make up the highest level of decision-making for the alliance, which explains why such broad, sweeping changes to NATO deterrence can be so effectively agreed upon during the two days of meetings.

Russia's approach to warfare is not incredibly different than during the era of the Soviet Union. It is more of an updated version of traditional Russian art of war, utilizing new technology and disinformation to its advantage. This allows Russia to operate below the threshold of conflict with its adversaries, something put to great effect in the current invasion of Ukraine. Any future confrontation with Russia, from a NATO perspective, will therefore need to contend with all aspects of deterrence. This

[160] NATO, "NATO's Response to Russia's Invasion of Ukraine," NATO, accessed March 20, 2022, https://www.nato.int/cps/en/natohq/topics_192648.htm.
[161] Larsen, "NATO Nuclear Adaptation since 2014," 1.

does not mean just Russian aggression, but the resiliency of the alliance plus the financial burden put on its members as more resources will no doubt be required to reassure NATO allies of the effectiveness of its deterrence strategy.

CHAPTER 5: MAKING MODERN DETERRENCE WORK FOR NATO

Introduction

Much has been discussed already in this paper on the background of NATO deterrence, state and non-state threats, and the evolution of modern deterrence that NATO has been pursuing since 2014. The pursuit of modern deterrence is an important step to get right for NATO, since the cost of winning a war against a state adversary (Russia, China, North Korea for example) is so astronomically high that even if victory was achieved, some would question whether the victory was worth it in the end. In many respects, nations coming to such a world conflict would represent a massive failure in global security policy,[162] and a failure in deterrence.

It therefore behooves NATO to get its deterrence strategy correct. As the situation in Eastern Europe unfolds, NATO is correctly realizing that the correct use deterrence is not just conventional forces, but non-military, non-kinetic effects that are essential to deter adversaries. The aim of this seminal chapter is to synthesize all the information discussed thus far into an analysis about why NATO's decision to adopt modern deterrence is the best course of action that the Alliance can take based on the current scenario on NATO's eastern flank. This will be done by discussing the limits of conventional deterrence, with an example through analysis of the Baltic Region's deterrence requirements. This chapter will then discuss what an effective modern deterrence response looks like, and where NATO can shore up some weaknesses in its strategy to ensure its strategy best reflects the threats of tomorrow as well as today.

The Limits of Conventional Deterrence

Traditional conventional deterrence, the use ground, air, and maritime forces to counter a threat, is just one piece of the modern deterrence puzzle. During the Cold

[162] Mueller, "Conventional Deterrence Redux," 77.

War era, conventional deterrence was a relatively important piece of deterrence; however the growing capability of nuclear weapons caused nuclear deterrence to eventually overshadow any conventional forces at play.[163] Conflict was not nearly as pan-domain as it is today either. The lack of space, cyber, and social media tools meant that any reaction to action by adversaries (outside of nuclear) was largely confined to conventional force use.

In present day, technology and the complexity of global economics has made it such that conventional forces being used in a silo to deter state threats is no longer sufficient. Conventional deterrence is reaching its limits in today's global climate is due to a few main reasons. First, the modern military force has changed. In particular, it is smaller and more agile than its predecessors in the Cold War era. Drastic reductions in standing forces have been seen in many countries; however, the quality of the remaining troops has increased significantly.[164] This was partly a natural evolution of soldier training and technology, but moreso a requirement of the type of warfare being conducted. The advent of the counter-insurgency style of warfare that most NATO countries had to adopt called for a higher quality individual soldier. Conventional forces were largely ineffective against terrorist organizations such as Al Qaeda in Afghanistan; thus a significant amount of resources were dedicated to creating more value in the individual through intelligence efforts, training and technology, rather than sheer numbers.[165] In order to return to a conventional force-centric deterrence strategy, significant investments into defence materiel and infrastructure would be required to build back up to the requirement force structures seen to make conventional deterrence effective. This would require a change in

[163] Cold War deterrence was two fold: static, conventional force build-up along traditional battle lines in Europe, as well as medium (and later on) and long range ballistic nuclear weapons.
[164] Istomin, "Does Lighter Mean Healthier?"
[165] Istomin.

mindset back to Cold War era tactics, where static lines of forces were stationed along borders. Based on current discussions within NATO and given the financial realities that NATO partners are facing, a return to large, static force deployments are something that nations simply do not have the stomach for, as the cost far outweighs the benefits.[166]

Second, today's battlespace is pan-domain: Conflict today is not simply a matter for a nation's defence department, it is a whole of government responsibility. The reach and effectiveness of information operations, economic sanctions, and cyber warfare cannot be understated. All of these things can be grouped together under the umbrella of hybrid warfare. For NATO, hybrid warfare involves a "fusion of conventional as well as unconventional instruments of power and tools of subversion."[167] To put more simply, this is the combination of multi-domain forces to achieve an effect that tends to ride the fine line between peace time actions and war. Cyber attacks on critical infrastructure, or state-backed political extremists working to incite violence within a target state or prime examples of hybrid warfare.

It is extremely difficult to discern whether some hybrid warfare actions cross the threshold of war or not, and therein lies the problem. As NATO further describes it, hybrid warfare "relates to ambiguity and attribution."[168] It is difficult to confidently point a finger at those responsible for effective hybrid warfare actions due to the nature of the actions themselves. For example, unmarked soldiers, or cyber actions can mask the original aggressor and make intent very difficult to discern from countries such as Russia. This makes hybrid actions in a battlespace incredibly

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[166] Kulesa, "NATO's Evolving Modern Deterrence Posture: Challenges and Risks," 8.
[167] Arsalan Bilal, "NATO Review - Hybrid Warfare – New Threats, Complexity, and 'Trust' as the Antidote," NATO Review, November 30, 2021, https://www.nato.int/docu/review/articles/2021/11/30/hybrid-warfare-new-threats-complexity-and-trust-as-the-antidote/index.html.
[168] Bilal.

difficult to counter and develop a response for, and proves that many conventional forces are, in essence, obsolete when it comes to the modern battlespace. A conventional deterrence response to a threat will only be able to counter a portion of the threat itself. Other tools are required to counter the full spectrum of threats that a hybrid war can offer,[169] such as an efficient and effective intelligence network, monitoring of social media, and communication between allies.

Third, the importance of non-military aspects of warfare has become a vital consideration because of existing interdependencies between nations today, the importance of non-military aspects of deterrence has consequently increased.[170] These dependencies include economic ties (natural resources, trade agreements) as well as political ties (alliances, unions, etc.). Because of this, non-military aspects have the potential to either strengthen or weaken deterrence. In the case of Russia, many European countries are heavily tied to Russia due to their dependencies on natural resources like oil and natural gas. The political will of NATO countries tied to Russia in this way may be inherently weaker than those countries within NATO that has significantly less ties.[171] These countries would be less comfortable with putting economic sanctions on Russia, or blocking trade altogether, if they feel it will hurt their own economics too much beyond a certain threshold. This creates an interesting dynamic when deciding on Allied actions to take against an adversary; not everyone will be at the same level of commitment.

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[169] The 2014 annexation of Crimea, utilizing unmarked soldiers posing as civilians as well as copious amounts of disinformation and diversion, was an effective example of hybrid warfare. See: Muradov, "The Russian Hybrid Warfare."

[170] Vanaga and Rostoks, *Deterring Russia in Europe*, 32.

[171] Matthew Kendrick, "Countries With Greater Economic Ties to Russia Are More Likely to Want Diplomatic Resolution to Ukraine Crisis," Morning Consult, January 11, 2022, https://morningconsult.com/2022/01/11/ukraine-russia-polling/.

A prime example of the limits of conventional warfare can be seen in the Baltic Region, where NATO nations with their proximity to Russia face the stark reality of oppression and pressure on their Eastern border every day.

The Baltic Region and Modern Deterrence:
Why Modern Deterrence Makes Sense

Crises have the potential to unite allies in ways not usually possible. The current invasion of Ukraine, a country that is not a NATO ally, is a prime example.[172] The notion that Russia can be so aggressive in Ukraine, a country on the doorstep of NATO, has caused many countries to re-imagine the lengths they will go to ensure domestic security. In the Baltic region, where NATO and Russian deterrence strategy meet head-on, the mere geography of the region makes modern deterrence a far better strategy than conventional deterrence. If Russia made a move in the region, the Baltic Sea would be one of the first places that Russia could interdict NATO movement with reinforcements due to its proximity to Russia and its strategic importance to NATO allies. Barring access to the sea, the best way to reinforce Latvia, Lithuania, and Estonia by NATO nations would be by land. However, Russia may contest the narrow corridor connecting Lithuania and Poland, creating somewhat of a roadblock, while Russia has unfettered access to NATO allies from the East.

Maintaining a credible conventional deterrence force in these states is also not feasible given the financial burden required for a persistent, modern force that would be required to stand up to Russian aggression. If that route were taken, the size of the force would have to be sufficient such that it would be able to hold its own against the full might of Russian forces until reinforcements could be provided.[173] NATO forces would also be in the effective range of Russia's A2/AD forces in western Russia,

[172] Ukraine is not a NATO member; however it is a member in the Partnership for Peace initiative
[173] Mueller, "Conventional Deterrence Redux," 84.

further complicating reinforcement, and prohibiting use of NATO air assets to gain and maintain air superiority unless air operations were conducted in Russian territory.

Although the reality of Eastern Europe paints a stark picture on the dangers from Russia, this is not meant to infer an attack on the Baltics is imminent, or in Russia's playbook. An attack such as this would occur only if Russia predicted an imminent NATO attack on its soil, and an attack on the Baltic region was a way of deterring this action or stalling it for a time. Whatever the reason, the outcome of any scenario in the Baltics does not seem attractive for Russia.[174] Conventional aggression in the region is not Russia's only tactic. Hybrid warfare, below the threshold of war, would be more likely to achieve any limited aims that Russia might have in the region. Conventional deterrence is largely useless at preventing actions such as these, and a combination of both denial and punishment, such as seen in a modern deterrence strategy, would be the best course of action against such manoeuvres.

The Optimal Mix of Deterrence Solutions for NATO

There is an optimal mix for modern deterrence. It is an employment of a smaller, more agile quantity of forces with the support of cyber capabilities, along with a resolute backing of economic and political sanctions that would seek to deny and punish an adversary in more ways than a conventional response could. In Canada, a response such as this could be called pan-domain and is the most well-suited strategy to the contemporary environment NATO finds itself in today. NATO's current deterrence strategy regarding Russia has shored up many of the traditional holes in the Alliance's defences through the use of the Enhanced Force Presence forces, the VJTF, and various economic resolutions that punish Russia's economy. However, even given the advantages that modern deterrence brings to NATO's

[174] Or NATO for that matter, if NATO wargames in Eastern Europe are accurate.

collective defence strategy, there would still be some aspects to consider for improvement. There are some aspects of NATO's deterrence effectiveness that continue to provide a challenge and should be improved upon to better counter future threats from Russia or otherwise.

Cyber

Cyber capabilities encompass actions in the cyber and information realm and represent an area that has the potential to cause more damage to NATO security interests than conventional attacks.[175] This is what caused NATO to recognize cyber as an operational domain during the 2016 Warsaw Summit. Cyber is particularly attractive to state adversaries of NATO because of the difficult in accurately attributing an attack to a state, making cyber warfare one of the more lucrative tactics in hybrid warfare. Individual countries have cyber strategies and capabilities at varying levels of security classification.[176] According to a paper by Erica Lonergan of the Army Cyber Institute and Mark Montgomery of the Foundation for Defense of Democracies (both US-based institutions), "NATO allies lack consensus on the appropriate application of offensive cyber power-especially below the level of armed conflict."[177] The paper goes on to explain how there is still uncertainty on when a cyber operation would become equivalent to an armed attack, and possibly trigger Article 5 within NATO. One of the main issues is that information sharing within NATO, given the relationships between allied countries, varies so greatly. For example, closely tied nations such as the UK, USA, and Canada have agreements in

[175] Richard Andres, "Cyber Gray Space Deterrence," *Prism: A Journal of the Center for Complex Operations* 7, no. 2 (2017): 91.
[176] The UK Cyber Doctrine is classified UK Secret. US Cyberspace Operations doctrine is un-class, with higher level documents at the NOFORN security classification.
[177] Erica Lonergan and Mark Montgomery, "Pressing Questions: Offensive Cyber Operations and NATO Strategy," Modern War Institute, January 25, 2022, https://mwi.usma.edu/pressing-questions-offensive-cyber-operations-and-nato-strategy/.

place that enable information sharing within secured means. Newer NATO partners do not have these ties in place, nor are standards the same for all NATO partners in terms of sensitive information storage and signals intelligence.[178]

Security and administration of cyber strategy aside, the strategy for deterring cyber-attacks on Allied nations is another area that is rather undeveloped. However, deterring a cyber-attack is exponentially more difficult to do than a physical one. The domain of cyber offence and defence moves and adapts so quickly that once a large organization such as NATO comes to an agreement on prescribed measures for deterring and sharing information regarding attacks, the technology will have evolved enough that the deterrence strategy in place may already be ineffective in defending from new aggressors. This means that probability of consequences for the aggressor and the chance that the confidence level of identification is so low that a government would not be able to accuse another state or non-state entity publicly with much confidence, further eroding the effectiveness of deterrence.[179]

Denial of attacks is not the only solution to cyber-attacks on NATO assets. If cyber-attacks cannot be effectively deterred by a state or by NATO, then NATO's responsibility to its members needs to be, as Bologna et al argue in their 2013 paper, one of "response, recovery, and restorative action in a resilience approach." [180] That is not to say NATO should not have a robust networked defence capability. Indeed, there are numerous cyber defence centers within NATO countries presently – Estonia being

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[178] Charlie Mitchell, "FDD, Army Cyber Institute Authors Release Paper Calling for Updated NATO Cyber Deterrence Policy," *Inside Cybersecurity*, February 1, 2022, https://www.proquest.com/docview/2624624889/citation/2AC06D1D214F41AFPQ/1.
[179] Andres, "Cyber Gray Space Deterrence," 97.
[180] S Bologna, A Fasani, and M Martellini, "From Fortress to Resilience," *Springer Briefs in Computer Science*, n.d.

one[181] – and NATO does have a published cyber defence policy.[182] However, it is in its infancy. Whether the briefness of the policy is intended to make aggressors guess or doubt capabilities, or if further amplification is forthcoming, remains to be seen.

Logistical Management

Having agile forces that are mobile enough to rapidly reinforce NATO allies is certainly an asset, but the infrastructure and logistical challenges of moving conventional forces still exists. The state of many Southern and Eastern NATO partners in terms of critical infrastructure, airfields, and railways is such that they would prohibit movements of large scale forces should a rapid reinforcement be required.[183] Frear, *et al.* discuss how "transit and border check procedures and customs control have been raised as one set of the most critical issues affecting military transit."[184] While this may seem like an administrative issue not worth a large amount of attention, it is these small issues that can add to a rapid response units time when a crisis occurs. Reinforcements for Russian troops, if they were operating in an Eastern European country, would be much quicker than most response force elements for NATO, especially if infrastructure quality is in question, or bottlenecked by large movements of conventional forces.[185] This critique does not even consider the logistical challenges of bringing reinforcements from allies across the Atlantic, where it could take weeks, if not months, to bring in reinforcements to Europe should the need arise in the current system.[186] Investment in infrastructure, which could be seen

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[181] NATO, "NATO Cyber Defence," July 2016, https://www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_07/20160627_1607-factsheet-cyber-defence-en.pdf.
[182] NATO.
[183] Thomas Frear, Lukasz Kulesa, and Denitsa Raynova, "Russia and NATO: How to Overcome Deterrence Instability?," n.d., 12.
[184] Frear, Kulesa, and Raynova, 12.
[185] Conventional forces (tanks, troops, vehicles) require an extraordinary amount of logistics to move long distances, often utilizing highways and commercial routes that would be utilized by civilians as well as military traffic.
[186] Frear, Kulesa, and Raynova, "Russia and NATO: How to Overcome Deterrence Instability?," 13.

as part of the 2% of GDP agreed upon by NATO allies, as well as logistical exercise training should be crucial for NATO's modern deterrence strategy moving forward.

Hybrid Warfare Resilience

Resilience can be understood as "a pragmatic way to tackle globalised threats to national security, [187] and is a key tool in securing the continued function of the state when threats are imminent. As one nation and not a collective of nations like NATO, Russia is better able to integrate the military and political domains to work together in a crisis. In conflict, Russia would thus be able to protect its citizens from propaganda and social media interference far better than NATO could.[188] The amount of influence a population has by a foreign aggressor in a conflict could have dire ramifications for not only support of the conflict, but on the amount of misinformation the population receives. This would have adverse effects on the resilience of a nation or organization. With the current war in Ukraine, it is clear that Russia is skilled at controlling the flow of information to its own citizens. For example, from 2015-2016 a package of laws knows as Yarovaya's Law was introduced that undermined encrypted communications and allows the Russian government to increase surveillance on internet users. This included online censorship of Russian websites, and critics of government actions[189] Censorship of information to the public provides clear advantages to Russia itself and creates roadblocks to Ukraine when attempts are made to erode support for the Russia aggression.

Modern Nuclear Deterrence

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[187] Anastasia Filippidou, ed., *Deterrence: Concepts and Approaches for Current and Emerging Threats*, Advanced Sciences and Technologies for Security Applications (Cham: Springer International Publishing, 2020), 29, https://doi.org/10.1007/978-3-030-29367-3.

[188] Frear, Kulesa, and Raynova, "Russia and NATO: How to Overcome Deterrence Instability?," 14.

[189] "Russia - Freedom House," Freedom House, accessed April 21, 2022, https://web.archive.org/web/20200124081915/https://freedomhouse.org/report/freedom-net/2016/russia.

NATO doctrine states that the "supreme guarantee of the security of the Allies is provided by the strategic nuclear forces of the Alliance, particularly those of the United States."[190] However, modernization of nuclear programmes, specifically in the USA, are progressing only slowly. Meanwhile Russia, which chose to accelerate transformation of its nuclear weapons programs, has already upgraded or modernized over 80% of its arsenal NATO's Nuclear Planning Group is the "senior body on nuclear matters and discusses policy issues associated with nuclear forces,"[191] and sets Allied nuclear policy. This policy's language has been limited since Russia's aggressive acts in Ukraine, and with Russian doctrine stipulating offensive nuclear measures should the scenario dictate, NATO should look at strengthening its direction in nuclear posturing, not simply because Russia is doing the same, but because predictability and communication are so incredibly important when it comes to nuclear de-escalation. A clear and concise NATO plan, one that is regularly re-visited (something that is often not the case),[192] would work to paradoxically stabilize the posturing of both NATO and Russia in Eastern Europe. Nuclear sabre-rattling is not required for nuclear deterrence to be effective. Clear communication with Russia is.

Conclusion

This was not an exhaustive list of recommendations or areas of improvement for NATO modern deterrence strategy, merely some of the more important areas where efforts should be made to shore up existing deficiencies. The important thing to

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[190] NATO, "Strategic Concept for the Defence and Security of the Members of the North Atlantic Treaty Organisation," 1.
[191] "Reinvigorating NATO's Nuclear Deterrence Posture through Transparency," *Atlantic Council* (blog), April 2, 2019, https://www.atlanticcouncil.org/blogs/new-atlanticist/reinvigorating-nato-s-nuclear-deterrence-posture-through-transparency/.
[192] Katarzyna Kubiak and Oliver Meier, "Updating NATO's Nuclear Posture: Necessary? Feasible? Desirable?," accessed March 28, 2022, https://www.europeanleadershipnetwork.org/commentary/updating-natos-nuclear-posture-necessary-feasible-desirable/.

remember is that modern deterrence is the framework where the whole-of-government approach to deterrence can occur. In more traditional senses of deterrence, conventional deterrence for example, there is not any room to approach these problems. With how quickly things can destabilize with Russia, it should be of utmost important to implement more improvements into NATO's modern deterrence strategy. The recent Summits that have taken place in the last ten years have already put NATO in a strong position for this. Work now needs to continue to ensure those efforts are not wasted.

CONCLUSION

Introduction

This paper and its intentions have been nothing ground-breaking in its ideas and content. However, telling the story of NATO deterrence strategy, where it has been and where it could go, is important for the continued evolution of modern deterrence and the pursuit of peace. Collective defence has been the highest priority for NATO since its inception, something that bleeds into its deterrence strategy regardless of the external threat. Deterrence strategy is meant to evolve and shift. As the world progresses, so does NATO, and so does its perspective on what effective deterrence looks like. Although the very core of deterrence is very similar today to what it was when NATO was formed, there is much more to consider in order to develop an efficient and effective strategy that is agile enough to pivot between threats with ease. This is the part where NATO falters, as seen in its lack of foresight, and slow adaptation back to a great power competition scenario in the 2010's. Even so, NATO represents still the world's greatest partnership of nations, and is proof that alliances truly are greater than the sum of their parts.

Chapter Summary

This paper commenced with a primer on deterrence theory in Chapter 1and identified some of the most cogent principles and definitions within, including the important differences between conventional and modern deterrence. During the Cold War, NATO strategy was an amalgamation of deterrence by denial, and by punishment. Denial being the static build up of forces, and punishment being the nuclear threat offered by the USA. US nuclear weapons are no longer in Europe. Instead, the USA provides extended deterrence to NATO through their long range missile capability from continental USA. Key aspects of deterrence to note were the

difference between conventional deterrence and modern deterrence, since the shift in NATO's strategy focussed on this.

Chapter 2 then looked at NATO's deterrence history, noting how deterrence had evolved through the difficult period of the Cold War. Looking at NATO deterrence historically allows one to see where the key shifts were in strategy and why those steps were taken. In NATO's case, steps taken to deter the Soviet Union were obvious; however, after the Cold War ended, NATO's shift to expeditionary operations did not require the same strategy. Adjusting deterrence strategy for an organization such as NATO is not as simple as flipping a switch. Many countries have to agree to make changes to their own forces in order to suit the strategic needs. Much like changing course in a large ship, these corrections take time. Expeditionary operations like those in Afghanistan required countries to develop new expertise in counter-insurgency operations, leaving other skillsets to atrophy. Atrophied skills that are not easily re-acquired, such as anti-submarine warfare, would have repercussions when the return of the great power competition occurred in the 2010s.

Following the discussion on the history of NATO deterrence, Chapter 3 examined threats to NATO, with state actors being the main threat identified. However, non-state actors still continue to present a credible enough threat that NATO needs to continue to be ready to confront. This is reinforced by the fact that every NATO summit communiqué has multiple paragraphs discussing the threat from either Al Qaeda or ISIL. Recent summits have correctly identified Russia to continue to be the greatest threat to NATO at this time, and the current invasion of Ukraine proves just that. Hybrid warfare will continue to be a challenge for NATO to overcome due to the multi-faceted nature of the threats that Russia can produce. The lack of government oversight in Russia on military operations allows it to be more

aggressive than NATO would be conducting the same type of strategy. Russia's ample use of hybrid warfare is why NATO deterrence strategy and the events unfolding in Eastern Europe require a modern deterrence solution, and not just a conventional one. NATO still has work to do in terms of perfecting its strategy given the attrition of skills and assets that had occurred in the past twenty years as many partner nations reallocated their resources to confront terrorist threats after September 11, 2001. However, given the steps being taken at each subsequent NATO Summit, one can see the final product taking shape, hopefully in time to stimy any further Russian aggression in Eastern Europe.

As Chapter 4 demonstrated, one of the most difficult things about crafting an effective deterrence strategy is proving its success. For instance, how does one prove that the actions NATO takes in coming years were the correct ones, given there are so many other variables on the international stage? This is similar to testing in software engineering, where the absence of bugs in one's software after testing proves one of two things: either one's software has no bugs, or one is not testing for the right bugs. In deterrence, a strategy could be contributing to an absence of conflict, or it could not be, and the reason for a lack of conflict could be something else entirely that NATO is not aware of.

Regardless of how one measures the success of a deterrence strategy, as Chapter 5 showed, it is incredibly important to ensure that the correct strategy is in place. This is especially important for an organization such as NATO, whereupon rests the defence requirements of many allied nations and their populations. For better or for worse, the world has changed dramatically since the Cold War: battlefields are no longer visible and easy to recognize, sometimes occurring in cyberspace or in nebulous areas such as social media and in the minds of the public. Conventional

deterrence no longer has the effect that it once had, and nuclear deterrence is not the solution that it once was, thus it falls to NATO to pursue a modern deterrence strategy that is able to deter and provide reassurance to Allied nations in multiple domains simultaneously.

Parting Thoughts

There is no silver bullet to deterrence strategy; one solution does not solve all of NATO's problems. The current shift in deterrence strategy will attempt to fit the present threat, and allies will make every effort within their power to meet that threat. But more is needed than just shifting assets to the threat of the day. If NATO is to succeed into the future, then it will need to be continually looking forward, analyzing where future threats can come from, so allies will be ready and prepared when the time to shift strategy occurs once again. While the world's eyes are (quite rightly) on Ukraine at the time of writing, it will be important to look past the current conflict and see what lies ahead of NATO beyond the horizon.

Foresight has and will continue to be a large part of deterrence strategy and planning due to the fact that no nation wants to be caught unawares without the right tools to fight the next conflict. This begs the question: how much deterrence planning is enough deterrence planning? How far into the future should NATO look to identify the next threat? How large should the stockpiles of supplies be, and how many troops should be on high alert? These are wicked problem like questions; problems that don't have a specific answer. The best NATO can do is continue to be vigilant, agile, and communicative in an ever-changing world filled with ever-changing threats.

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