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**„ US-Russian geopolitics in the re-making:
Minimum Nuclear Deterrence Doctrine, and the unravelling
of the INF Treaty (1987) “**

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Abstract

US-Russian geopolitics in the re-making: Minimum Nuclear Deterrence Doctrine, and the unravelling of the INF Treaty (1987)

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Nuclear deterrence has been a critical aspect in governing bi-lateral relations between the United States of America and Russia during the Cold War since the 1950s, and this has gradually again increased in prominence during the last decade and a half. The essential focus is placed on the concept of 'minimum' nuclear deterrence and its link to one of the major pillars of post-Cold War international security; the Intermediate-Range Nuclear Forces Treaty (INF Treaty). This was signed in Washington on 8th December 1987 between the United States, and the USSR; coming into force on 1st June 1988. It eliminated all nuclear and conventional missiles, including their launchers, with ranges of 500–1,000 kilometres (310–620 miles – classified as short-range) and 1,000–5,500 km (620–3,420 miles – classified as intermediate-range). But, the treaty did not cover sea-launched missiles and Intercontinental Ballistic Missiles (ICBMs). Nevertheless, by May 1991, 2,692 missiles were eliminated, followed by 10 years of on-site verification inspections. Lauded as a breakthrough for nuclear-armaments control, the INF Treaty has no expiry, and so continues with unlimited duration, with the existence of a special commission to preside over disputes. However, recent geopolitical episodes, as well as increasing accusations of violating the INF Treaty provisions between the United States and the Russian Federation have not only severely affected, but also raised serious questions about this agreement's longevity. To examine the sustainability of this treaty, it needs to be explored under the framework of other major nuclear and arms-control agreements. Furthermore, by analysing American and Russian strategic objectives within the context of their nuclear-weapons programmes, this thesis intends to outline viable policy options to potentially preserve the INF Treaty, or in case of its near-term dissolution, also alternative routes in limiting nuclear escalation between the two states.

Die Neugestaltung der Russisch-Amerikanischen geopolitischen Beziehungen: Die minimale nukleare Abschreckungsdoktrin und das Auftrennen des INF-Vertrags (1987)

Thomson Ambooken

Die nukleare Abschreckung war während des Kalten Krieges seit den 1950er Jahren ein kritischer Aspekt in den bilateralen Beziehungen zwischen den Vereinigten Staaten von Amerika und Russland, der in den letzten eineinhalb Jahrzehnten allmählich wieder an Bedeutung gewonnen hat. Der wesentliche Schwerpunkt liegt auf dem Konzept der "minimalen" nuklearen Abschreckung und ihrer Verbindung zu einem der wichtigsten Pfeiler der internationalen Sicherheit nach dem Ende des Kalten Krieges, dem Intermediate-Range Nuclear Forces Treaty (INF Treaty). Dieser wurde am 8. Dezember 1987 in Washington zwischen den Vereinigten Staaten und der UdSSR unterzeichnet und trat am 1. Juni 1988 in Kraft. Er sah die Vernichtung aller nuklearen und konventionellen Raketen, sowie deren Trägerraketen mit einer Reichweite von 500-1.000 km (310-620 Meilen - klassifiziert als Kurzstreckenraketen) und 1.000-5.500 km (620-3.420 Meilen - klassifiziert als Mittelstreckenraketen) vor. Aber der Vertrag erstreckte sich nicht auf seegestürzte Raketen und Interkontinentalraketen. Dennoch wurden bis Mai 1991 2.692 Raketen vernichtet, gefolgt von 10 Jahren in denen Vor-Ort-Kontrollen stattfanden. Der INF-Vertrag, der als Durchbruch für die atomare Rüstungskontrolle gelobt wird, läuft nicht aus und wird daher auf unbestimmte Zeit fortgesetzt, mit einer Sonderkommission, die bei Streitigkeiten den Vorsitz innehat. Die jüngsten geopolitischen Ereignisse, sowie die zunehmenden gegenseitigen Vorwürfe der Vereinigten Staaten und der Russischen Föderation, gegen die Bestimmungen des INF-Vertrags verstoßen zu haben, haben jedoch nicht nur schwerwiegende Auswirkungen auf die Langlebigkeit des Abkommens, sondern auch ernste Fragen hinsichtlich dieser aufgeworfen. Um die Nachhaltigkeit dieses Vertrags zu untersuchen, muss er im Rahmen anderer wichtiger Nuklear- und Rüstungskontrollabkommen gesehen werden. Darüber hinaus soll im Zuge dieser Masterarbeit, durch die Analyse amerikanischer und russischer strategischer Ziele im Rahmen ihrer Nuklearwaffenprogramme, tragfähige politische Optionen aufgezeigt werden, um den INF-Vertrag zu erhalten oder, im Falle seiner kurzfristigen Auflösung, auch alternative Optionen zur Begrenzung der nuklearen Eskalation zwischen den beiden Staaten aufzuzeigen.



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Pledge of Honesty

On my honour as a student of the Diplomatic Academy of Vienna, I submit this work in good faith and pledge that I have neither given nor received unauthorized assistance on it.

Vienna, 15 August 2018

Thomas

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List of Abbreviations

A2/AD	Anti-Access/ Area Denial Systems
ABM	Anti-Ballistic Missile Treaty
ALBM	Air-launched Ballistic Missile
BMD	Ballistic Missile Defences
BMDO	Ballistic Missile Defence Organization
BMEWS	Ballistic Missile Early Warning System
CFE	Conventional Armed Forces in Europe Treaty
CTBT	The Comprehensive Nuclear-Test-Ban Treaty
DCA	Dual-capable Aircraft
DDPR	Deterrence and Defence Posture Review
DoD	United States Department of Defence
EPAA	European Phased Adaptive Approach for Missile Defence
GDP	Gross Domestic Product
GLCM	Ground-launched Cruise Missile
GZM	Global Zero Movement
IAEA	International Atomic Energy Agency
INF	Intermediate-Range Nuclear Forces Treaty
ICBM	Intercontinental Ballistic Missile
IRBM	Intermediate-Range Ballistic Missile
LRBM	Long-Range Ballistic Missile
LRTNG	Long-Range Theatre Nuclear Force Programme
LSRO	Long-Range Standoff Weapon
US MD	United States Missile Defence Installation
MAD	Mutual Assured Destruction
MDA	Missile Defence Agency
MIRV	Multiple Independently Targetable Re-Entry Vehicle
MRBM	Medium-Range Ballistic Missile
NATO	The North Atlantic Treaty Organisation
NDA	National Defence Authorization Act
NMD	National Missile Defence
NPR	Nuclear Posture Review

NPT	Non-Proliferation Treaty
NRF	NATO Response Force
NWS	Nuclear Weapon States
OSCE	Organization for Security and Co-operation in Europe
PRC	People's Republic of China
RAP	NATO Readiness Action Plan
SALT I/ II	Strategic Arms Limitations Talks I/II
SDI	Strategic Defence Initiative (nicknamed “Star Wars”)
SIOP	Single Integrated Operational Plan
SLBM	Submarine-launched Ballistic Missile
SORT	Strategic Offensive Reductions Treaty
SRBM	Short-Range Ballistic Missile
SRF	Strategic Rocket Forces
START I/II	Strategic Arms Reduction Treaty I/II
SVC	Special Verification Commission
TBM	Tactical/ Theatre Ballistic Missile
TNW	Tactical Nuclear Weapon
UAV	Unnamed Aerial Vehicle
UK	United Kingdom
UN	United Nations
UNGA	United Nations General Assembly
UNSC	United Nations Security Council
USA	United States of America
USAF	United States Air Force
USSOCOM	United States Special Operations Command
USSR	Union of Soviet Socialist Republics
WMD	Weapon of Mass Destruction

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1. Introduction: Nuclear Deterrence Doctrine, and the INF Treaty (1987)

The notion of nuclear security and strategy has undoubtedly become a key facet of international relations in the modern day, and this is none the truer in informing the relations of the former Cold War rivals, the United States and the Russian Federation. The essential focus of this research study, and thesis will be to consider the concept of nuclear deterrence and its link to one of the major pillars of post-Cold War international security, the Intermediate-Range Nuclear Forces Treaty (INF Treaty) signed in Washington on 8th December 1987 between the United States of America (USA), and then USSR (Union of Soviet Socialist Republics); and which came into force on 1st June 1988. Recent events and actions have severely affected and raised questions about the viability of this agreement's sustainability in the present day, not least by causing concerns about a new Cold War-like arms race between the United States and Russia. Such aspects tie down the importance of exploring this topic within the contemporary framework of international relations, primarily between the opposing camps of Russia, and the United States alongside the Western Europe. By linking it to this specific and significant treaty that was signed during a period fraught with tensions in the Cold War during the late 1980s between two power blocs, this topic draws upon historical relevance to the modern-day setting of relations between the United States and Russia. The INF Treaty eliminated all nuclear and conventional missiles, including their launchers, within ranges of 500–1,000 kilometres (310–620 miles – classified as short-range) and 1,000–5,500 km (620–3,420 miles – classified as intermediate-range). However, the treaty did not embrace sea-launched missiles and ICBMs (inter-continental ballistic missiles). Nevertheless, by May 1991, exactly 2,692 missiles were purged, succeeded by 10 years of on-site verification inspections. It has no expiry, and so continues with unlimited duration, with the existence of a special commission agreed upon by both the United States and the USSR's successor, the Russian Federation which are convened whenever disputes arise.

Ultimately, it is evident that this topic carries much weight and bearing, especially as nuclear strategy and the normative forms of deterrence that are followed, especially by the two foremost nuclear powers in the United States (US) and Russia affects not only bi-lateral relations between them, but also wider global geopolitics. In this sense, the focus shifts back to the foundations set by the INF treaty in 1987 following what was initially a stalemate in discussions between President Reagan and Premier Gorbachev at the Reykjavik Summit during the preceding year. Although that summit broke up in disagreement over the questions

surrounding American defence policy programmes, the extent of Soviet-American settlement over nuclear arms control and the breath-taking scope of this level of reduction has been rightly stated as truly astounding.¹ This research question becomes even more intriguing given the fact that non-proliferation, especially around nuclear weaponry remains a prevalent topic both in international and domestic politics. What's more, the resurgent state that we now see with Putin's Russia and its recent actions including supposedly infringing some of the provisions of the INF Treaty according to the Americans makes this a hot topic. It also poses questions on the long-term viability of maintaining this major cornerstone of post-Cold-War international security (much like the Strategic Arms Reduction Treaty - START agreement that was recently renewed and ratified in 2011). The reality remains that studying, researching, and further understanding this topic can also help pinpoint and illuminate alternative approaches plus counter-measures that are being employed by the United States in reaction to the flagrant (if not fully proven violations of the INF treaty) actions of the Russia. This has been contributed by the latter's obvious increasing levels of militarization. After all, this has become a lot more deducible given Russia's controversial involvement plus meddling in ongoing and live conflicts within eastern Ukraine (having annexed the Crimea in early 2014), and Syria.

Beyond this, by evaluating such a research question, the thesis will also help provide knowledge to the reader on specific policy actions that are employed by nuclear power states that uphold to principles; chiefly, the strategy of 'minimum deterrence'. Within nuclear strategy, 'minimum deterrence' is basically an application of the deterrence theory condition under which a country contains only a certain necessary number of Tactical Nuclear Weapons (TNWs) which are required to deter an attacking enemy. Therefore, pure minimal deterrence can be understood as a doctrine of 'no first use'. On balance, of all the declared nuclear weapons states, it is the USA and Russia that hold the greatest numbers and, also possess the greatest diversity in their nuclear stockpiles. A report by Robert Norris and Hans M. Kristensen published in volume 67 in the *Bulletin of Atomic Scientists* (cited in Stoddart 2008), approximate that the United States has 798 strategic delivery platforms with up to 1,950 nuclear warheads plus a further 200 non-strategic warheads in Europe and a reserve stockpile of 2,850 – so, around 5,000 in total.² Likewise, according to a similar report from Norris and Kristensen

¹ Mohan, Raja C. "The peace scenario after the INF treaty." **India International Centre Quarterly**, Vol. 14, no. 4 (1987), pp. 2.

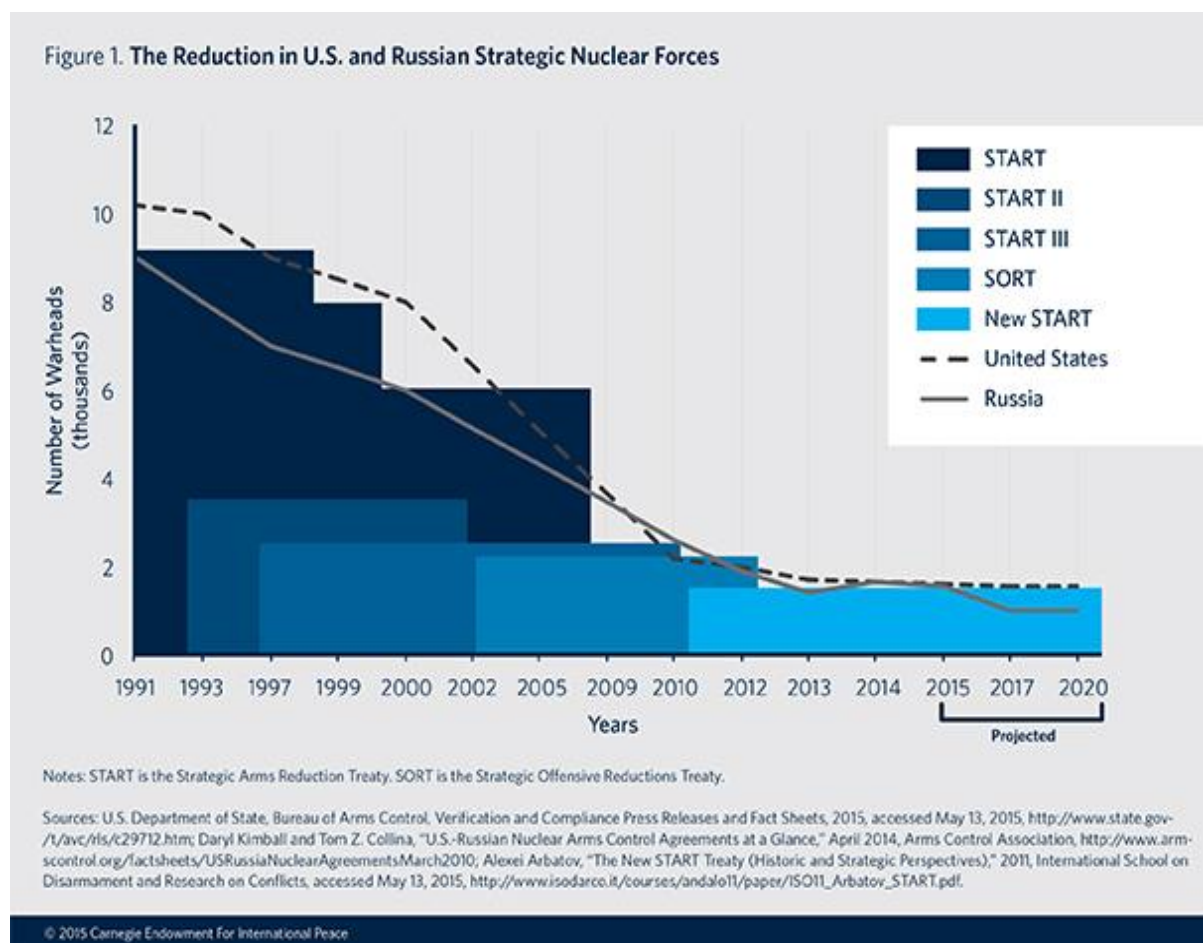
² Stoddart, Kristan. "Minimum Deterrence in Theory and Practise", pp. 1. Accessed April 15, 2018. URL: https://www.bisa.ac.uk/index.php?option=com_bisa&task=download_paper&no...1

in volume 66 of the same journal (cited in Stoddart 2008), Russia is estimated to still have 1,090 strategic delivery platforms with up to 4,600 nuclear warheads, and up to 7,300 in reserve or awaiting decommissioning from the Soviet era. Moreover, Russia has roughly 1,968 warheads available for Anti-Ballistic Missile (ABM) and air-defence systems – bringing together a staggering total of over 12,000 nuclear warheads of all types.³ It remains to be seen exactly what course will be taken by the United States under the Trump administration in terms of counter-measures that would be in response to accused violations of the INF arrangements by Putin's Russia. Thus, with this study, and the intended research question, the intention would be to not only to chart historical connections from the INF treaty framework, but, to hopefully explore future actions whilst understanding current policies. And undoubtedly this involves exploring 'minimum deterrence' both in theory and practice, stretching from policy objectives to actions. Ultimately, through such a lens of analysis it is intended to also explore the viability of minimum deterrence as well as alternative policies that operate or can be applied. Still, it is difficult to ascertain the manner in which US-Russian relations will evolve in the coming months and years, but what is evidently clear is that the frostiness has not ebbed away despite the promise of a thawing of tension given the emergence of the Trump administration which initially seemed pro-Russian. Rather, due to the volatile conflicts that are ongoing in Ukraine and Syria that have experienced either tacit or overt Russian involvement, it is inevitable that the topic and issue of nuclear missiles and weaponry constantly enters the fray and comes into the mainstream of US-Russian geopolitics.

In terms of a systematic approach to the research question, the purpose is to also use comparative methods when it comes to evaluating the range of theoretical frameworks that will require attention whilst delving into the topic. This would also comprise reflection on the cause-effect nature of matters - in this case, related to specific policy actions of the United States and Russia - using the INF Treaty as a base in terms of what has occurred in the field of nuclear security between them since. To supplement this structure, a number of policy options around 'minimum deterrence' and nuclear strategy will also be analysed and evaluated using identified recent legislation and federal acts that has been laid out by the American side; so as to also gauge American responses to Russia. In doing so, it is important to state that whilst this topic will be also assessing the conventional build-up of the nuclear arsenal as well as the development of new weapons - among them ICBMs capable of carrying nuclear warheads -

³ Stoddart, Kristan. "*Minimum Deterrence in Theory and Practise*", pp. 1.

the research elements are focused on possible policy options and strategic objectives going forward will also be largely speculative. Despite that, such observations will be guided by the policies already in action, and the existing evidence of nuclear deterrence strategies pursued the United States and Russian Federation. As alluded to above, the framework of the INF Treaty and its provisions will also need considerable attention whilst evaluating such existing policies and possible directions they may take. Though the treaty has stood the test of time in being held together by its legal validity, practice of its conditions as well as its enforcement in policy is being increasingly weakened. It is expected in several circles that if not falling by on the wayside soon enough, it is in dire need of reform or replacement – in an even more definite manner than the New START agreement (2011) – in order to be effective in adapting and continuing deterrence according to contemporary circumstances. In fact, the table below gives a visual glance to how the arms-reduction treaties within their various formats have affected the numbers of US and Russian strategic nuclear forces. However, it should be noted, that to this day, the most comprehensive coverage of this area remains under the INF Treaty.



Source: Accessed January 15, 2018. URL: <http://carnegie.ru/2015/06/16/unnoticed-crisis-end-of-history-for-nuclear-arms-control-pub-60408>

2. Approach of the Research Question

What are the specific strategic options deployed by nuclear states to advance the effectiveness of the minimum deterrence doctrine? The answer to such questions in terms of nuclear weapon states (NWSs), the focus will need to lie with the two former Cold War foes of Russia and the USA. It is hoped that this study will help comprehend the strategic objectives of the Russian Federation who are apparently issuing a new calibre of missiles that threaten the foundations of the INF Treaty, and also help explore the strategic options of the United States in response to this. Thus, other questions that can perhaps be answered as part of this study include looking at specific military options that can be used to advance the effectiveness of the minimum deterrence doctrine? This could be both within and outside the existing INF Treaty framework between the United States and Russia. The crux of this research question, and study will be tied to the two disciplines of international relations, and history. But, of course, they will overlap significantly with other areas fields, and will primarily use major theories stemming from the realm of political science. The research question will also consider the possible paradox of whether the increased practice of minimum deterrence is actually making the likelihood of the use of high-yield nuclear weaponry thinkable. This is despite the obvious moves taken by both the United States and Russia in downsizing their respective nuclear arsenals over the past three decades as portrayed in *Figure 1* in the previous section - both under the model of the INF Treaty and other agreements on arms-control and non-proliferation.

As well as paying attention to the aspect of US-Russo relations that have been affected by this treaty and subsidiary agreements dictating the recent actions of both states, the idea is to also consider a much-underwritten scholarly area of nuclear weapons. This is to analyse the concept of 'minimum deterrence' and the relevance this has had in informing the foreign and defence policy actions of nuclear powers in this day and age, explicitly, the United States and Russia. Moreover, studies on non-proliferation and deterrent policies too have generally focused little on this particular topic of 'minimum deterrence'. In terms of nuclear strategy, the pretext of 'minimum deterrence' (also referred to as minimal deterrence) is for a state to possess only a requisite number of nuclear weaponry to prevent an adversary from launching an attack. This remains in stark contrast to the extreme Mutual Assured Destruction (MAD) deterrence doctrine that was followed for much of the Cold War. This shared fear of the huge magnitude of suffering and damage posed to local populations and infrastructure remained a key reason behind the fortunate lack and escalation of an all-out nuclear fallout between the Cold War

power blocs - despite a few close calls - outside the period of 'détente' in the 1970s. The idea of pure minimum deterrence is still prominent in the present day within the policies of several NWSs. Even though during the Cold War, both the Soviet Union and USA were focused on each creating robust first as well as second-strike competences, in contrast, the People's Republic of China (PRC) has consistently applied minimum deterrence to their nuclear programmes, and similarly India also pursues a strategy that they define as 'Minimum Credible Deterrence'. Still, it should be remembered that 'minimum deterrence' symbolises just one method of settling critical security dilemmas in international relations such as by encouraging the avoidance of an arms race. However, there are a number of drawbacks to the implementation of such a strategy with nuclear arsenal, including the fact that a minimum deterrence posture can embolden a nation whenever it faces off or defies a more powerful NWS. Finally, pursuing minimum deterrence throughout arms negotiations enables countries to undertake reductions exclusive of turning more vulnerable. But, once this threshold of minimum deterrence is reached, further reductions may become undesirable as they would escalate the said nation's vulnerability and concurrently would likely entice a rival to discretely enlarge its own nuclear capabilities.⁴ Furthermore, other relevant terms here in terms of nuclear strategy and the effects it has in influencing US-Russo relations in the wake of the INF Treaty include policies such as 'massive retaliation', and 'flexible approach'. In addition, it will be supplementary to gauge how policy stances in both the USA and Russia have evolved. To do so, one will need to contend with terminology such as '*counter-value*' and '*counterforce*' targeting. Whilst the former in terms of military doctrine essentially means the targeting of an opponent's non-military assets such as cities and civilian populations which are of value (long-held as the most effective of nuclear and militaristic deterrents), 'counterforce' targeting, on the other hand is the specifically aiming at an opponent's military forces and facilities.

2.1 Overview of 'deterrence' as a concept in scholarly work

Even though this area of 'minimum deterrence' in regards to nuclear strategy has been seldom explored in wide ranging literature, there does exist in terms of written works several noteworthy texts to consider on the wider topic of deterrence. This includes Thomas Schelling's 1966 classic work titled "*Arms and Influence*", where it is argued that military strategy is now equally, if not more, the art of coercion, as well as intimidation and 'deterrence'.

⁴ Nalebuff, Barry. "Minimal Nuclear Deterrence." *Journal of Conflict Resolution*, Vol. 32, no.3 (1988), pp. 424.

Schelling also stipulates that the capacity to harm another state is now being utilised more as a motivating factor for opponents to avoid open conflict whilst simultaneously and indirectly influencing the state's behaviour. Fundamentally, to be coercive or deter another state, violence must be anticipated and avoidable by accommodation. Therefore, it can be summarized that the use of the power to hurt as a bargaining power is the foundation of deterrence theory, and is most successful when it is held in reserve.⁵ This also includes Robert Powell's 2008 work which also considers the effectiveness and shortcoming of nuclear limitation theories, including different forms of minimum deterrence itself, for example, 'credible' and 'pure' minimal deterrence.⁶ These include the major theories that are intended to be explored and analysed as part of this research question, and this emanates from well-articulated and comprehensive studies such as John Mearsheimer who takes a close empirical and sharp contextual approach to the area of great power politics which is a major feature in shaping logic behind nuclear deterrence theories.⁷ In this regard, there is the added advantage of considering with hindsight the musings of authors who wrote in the late 1980s and 1990s on topics such as the ramifications of the INF Treaty on European and Global security, non-proliferation efforts, and arms control agreements. This is made all the more interesting given how events have since unfolded, and recent events point to a cyclical nature of proceedings whereby there seems to be emerging again a major East-West divide, centred on Russia and the United States. This is even before considering China, and other security threats posed by rivalries between other nuclear-triad countries such as India and Pakistan, plus the presence of rogue states like North Korea creating their own advanced nuclear programmes and ordnance.⁸

By taking such considerations on board, it is critical not to distinguish the US-Russian dynamics of nuclear strategy as well as their duopoly over the majority of the world's nuclear arsenal from the wider global perspective, particularly when it comes to geopolitics. Still, the overarching reality remains that the primary developments when it comes to influencing the direction of non-proliferation actions as well as nuclear-arms technological advancements, the United States and Russia both remain at the forefront. Also, despite the threats posed by the nuclear arsenal of nations like Iran and North Korea (which now appears to be gradually

⁵ Schelling, Thomas C. *Arms & influence: with a new foreword & preface*. 2009, pp. 3.

⁶ Powell, Robert. *Nuclear deterrence theory: the search for credibility*. 2008.

⁷ Mearsheimer, John J. *The tragedy of Great Power politics*. New York: W.W. Norton & Company, 2014.

⁸ Ward Wilson, "The Myth of Nuclear Deterrence." **The Nonproliferation Review**, Vol. 15, No. 3 (November 2008), pp. 435.

dissipating) to global security, it remains the case that any major trigger for a serious escalation in conflict is in the hands of both the United States and Russia. This is seen by the various accusations thrown by both sides in recent years on infringements of the INF Treaty, for instance in regards to the Russian development of new missile technology.

3. Theoretical Framework

This chapter underlines the theoretical framework that will be involved in analysing and shaping the study by drawing on a number of prominent theories in the field of international relations, political science, and war strategy. The most notable of these will come under the definition of ‘offensive realism’. As theorized by political scientist John Mearsheimer, ‘offensive realism’ posits the notion that the international system is inherently anarchic given human nature, that in turn prompts state actors and policy makers to adapt an ‘offensive’ state-centred perspective of foreign policy that comes across aggressively, seeking to build up one’s own power at the expense of its opponents, regardless of the cost.⁹ Here, the idea of the ‘balance of power’ equilibrium as defined by historical tenets in the international state system dating back to the Treaty of Westphalia in 1648, and the Congress of Vienna in 1815 is perceived as untenable. For offensive realists, there is no recognition of balances, and instead they see states as channelling their efforts on military power to exacerbate security matters and assure their own survival. However, Paul Schroeder, for one, has criticized the balance-of-power theory, instead suggesting that “*band-wagoning*” (dependence on alliance systems or joining the stronger side) amongst states was far more widespread than balancing.¹⁰ Yet, as per the offensive realist discourse, it can be argued that such features are visible with Putin’s actions in leading a burgeoning, reviving, and continually militarizing Russia; and which thereby upsets the ‘balance of power’, primarily in Europe. This has a direct effect on this research topic, as it sways the way in which the nuclear strategy of an unpredictable Trump-led United States, and a menacing Putin-led Russian Federation with increasing territorial desires will develop. In this way, ‘offensive realism’ comes across as individualistic and martial, and so is in straight opposition to the point-of-view of ‘defensive realism’ that is enshrined in being cooperative and diplomatic. This opposing theory of ‘defensive realism’ was first scholarly theorized by Kenneth Waltz, who put forth the impression that the international system, whilst

⁹ Ibid.

¹⁰ Powell, Robert. *In the Shadow of Power: States & Strategies in International Politics*. Princeton: Princeton University Press, 1999, pp. 155.

chaotic, does observe closely the idea of ‘balance of power’, that is a self-correcting mechanism.¹¹ It causes states to pursue a ‘defensive’ set of policies that aim to preserve their own integrity and existence whilst sticking to the status quo as much as possible. It shares sentiments with ‘realpolitik’. This ideal as mentioned above, plays a crucial role to this day as it previously did during the 19th Century when policy makers and state leaders were expected to promote moderation and defensive cooperation with their territorial neighbours, and even rivals. It therefore focuses on a collective mentality fixed on maintaining harmony and preventing aggression before it occurs. Notable examples in the present day include NATO.

As per his framework, Waltz details that theories of international politics which concentrate on just the national level are reductionist, whereas those theories that envisage of causes operating on the international level as well are systemic.¹² Added to the mix has been Waltz’s updated version of realist theory, known as neorealism emphasizing the role of ‘power’ “*which has dominated American international relations theory since the early 1980s.*”¹³ Such defensive stances adopted by the US and Russia at times are thus better understood by taking into account such theoretical models. The deterrence explanation on the non-use of nuclear weapons is essentially a realist one, as realism emphasizes the key position of material power and interests, within the anarchical structure of the international relations system, which in turn tries to explain political outcomes.¹⁴ Studying the concept of deterrence as a theory, also reveals three main waves of deterrence as well as an emerging fourth wave that is unique unlike the previous ones. This is due to the case that there seems to be a more noticeable separation between theoretical and empirical questions in relation to realism and nuclear deterrence, respectively as they were previously studied together.¹⁵ Looking back, the first wave developed in the immediate aftermath of the Second World War, as the world grasped the strategic implications of a nuclear age, however it lacked any impact on policy-making. The second wave which followed suit in the late 1950s which incorporated game theory models into studies of deterrence succeeded in becoming conventional wisdom by assisting scholars to better comprehend the tactics of foreign policy actors. The established third wave in the modern-day

¹¹ Waltz, Kenneth N. *Realism and International Politics*. New York: Taylor & Francis Group, 2008.

¹² Waltz, Kenneth N. *Theory of International Politics*. New York: McGraw-Hill Higher Education, 1979, pp.18.

¹³ Doyle, Michael W., and G. John. Ikenberry. *New Thinking in International Relations Theory*. Boulder, CO: Westview Press, 1997, pp. 267.

¹⁴ Tannenwald, Nina. *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945*. Cambridge, MA: Cambridge University Press, 2007, pp.4

¹⁵ Lupovici, Amir. “*The Emerging Fourth Wave of Deterrence Theory: Toward a New Research Agenda.*” *International Studies Quarterly*, Vol.54 (2010), pp.705.

has revealed through empirical research that deterrence theory had to be revised to account for elements including risk-taking, misperceptions, as well as domestic and bureaucratic politics. By doing so, overtime it has provided solutions to several of these issues. This third wave has also manifested itself in the theoretical models of international relations scholars including John J. Mearsheimer within his models of conventional deterrence and offensive realism.¹⁶

3.1 A Dichotomy of Realist Theories – ‘Offensive’ and ‘Defensive’

Besides using this major theoretical dichotomy of ‘offensive’ and ‘defensive’ realism as a starting point for analysis of policy actions, the research question is also intended to touch upon other political science models. This includes considering the conceptual significance of domestic-international linkages, including notions of compatibility and consensus. Domestic-international linkages examine relations between two level of analysis - the state level and the international level. Whereas classical realism sees the states-system completely isolated from the international system (because states all act as per the same patterns on the international level), the concept of linkages does account for the influence of the domestic structure on foreign affairs. This will bring into light tangents for thought such as chain of command characteristics in nuclear strategy, and policy-making that have been a longstanding area of attention within this topic of nuclear deterrence.¹⁷ It will also reflect on the different types of leadership – for instance, ideologically driven and pragmatic - that will help explain actions and reactions to such minimum nuclear deterrence policy, as well as the prospects for the INF Treaty continuing. The manner in which the Americans and Russians exercise their prerogatives and utilise their nuclear strategies now is expected to outline the ways in which ‘minimum deterrence’ is being implemented.¹⁸ This is more or less in response to perceived violations of existing non-proliferation agreements, namely the INF Treaty itself, and in many ways much of is being influenced by the security and intelligence entanglements of both the US and Russia, especially in shared regions of influence, now including the Syrian quagmire.

Furthermore, there are other major theories behind security studies. This includes the theoretical foundations surrounding the contemporary post-Cold War international system. It

¹⁶ Ibid, pp.706.

¹⁷ Cimbala, S.J. “Strategic “defensivism” and post-reset blues: US–Russian nuclear arms reductions, missile defenses and minimum deterrence.” **Defense & Security Analysis**, Vol. 30, no.1, pp. 40.

¹⁸ Doty, Paul. “The minimum deterrent & beyond.” **Daedalus**, Vol. 138, no. 4 (2009), pp. 133.

would consider the arguments advanced by proponents of uni-polarity in this modern-day state system such as Zbigniew Brzezinski, Henry Kissinger, and Josef Joffe. In contrast, many international relations neo-realists consider uni-polarity as a cause of potential instability and peril, that ultimately influences other state-actors to attempt to counterbalance the power of the hegemon by utilizing their hard power (e.g. Kenneth Waltz on Structural Realism) or soft power (as advanced by Joseph R. Nye). Calls for containing Russia are most notably identified with former US National Security Advisors, Zbigniew Brzezinski and Henry Kissinger, and have surfaced with the greatest clarity surrounding the debate on whether the North Atlantic Treaty Organization (NATO) should formally expand and offer membership plus protection to former Eastern European members of the Warsaw Pact.¹⁹ Both dread the interweaving effect of a security vacuum in Eastern Europe. But, Brzezinski for one is wrong when he assesses Russia's position as its latest irregular phase of imperial devolution. After all, Russia reunified with Crimea in 2014, and prior to that in 2008, carried out a successful military campaign in Georgia. During 2015-2016, for the first time following the collapse of the USSR, Russia launched a military campaign overseas - in Syria. Accordingly, Russia demonstrates not imperial devolution, but an 'imperial renaissance'.²⁰ This fact will undoubtedly hold a major key to the analysis of several aspects of this research question, and enables a better perspective on how minimum deterrence can be applied going forward, especially when it comes to nuclear security between the United States and Russia. Even though it remains a constantly evolving area of policy, there are definitely historic trends and patterns to how deterrence has operated in international relations.

4. Historical Underpinnings

In terms of an overview of the historical developments of US-Russian relations, particularly in the realm of nuclear and weapons technology, one needs to undoubtedly consider the different phases of the Cold War, and the ramifications it had on the intense arms race which ensued. Throughout the early period of the Cold War in the late 1940s and 1950s, there was a genuine amount of suspicion and mutual distrust which escalated into the hastily implemented nuclear weapons programmes, particularly in the Soviet Union. After all, the Soviets were perceived to be playing catch-up to American nuclear technology and capabilities, conducting their first

¹⁹ Posen, Barry R., and Andrew L. Ross. "Competing Visions for U.S. Grand Strategy." **International Security, Vol. 21, no. 3 (1996)**, pp. 37.

²⁰ Waltz, Kenneth N. Realism and International Politics. 2008.

atomic bomb test (codenamed RDS-1) on 29th August, 1949, over four years after the successful completion of the Manhattan Project by the Americans in July 1945. Throughout these two initial decades as the Cold War developed, both sides looked to develop a number of delivery platforms for nuclear weapons. In essence, there came to be three types of these delivery methods which proved to be successful leading to the coining of the term ‘nuclear triad’. This contained bombs or missiles delivered by air, ICBMs that are usually deployed in missile silos on land or otherwise vehicles, and finally those that are capable of being fired from ballistic missile submarines or known as SLBMs. Eventually, by the 1970s it was increasingly feared that the combined conventional forces of the USSR and its military alliance of the Warsaw Pact in Eastern Europe could easily overcome NATO forces in the West. Concurrently, there was genuine concern and hesitation of developing further powerful weaponry in the belief that this would only provoke a catastrophic nuclear exchange. Thus, significant moves were made simultaneous to the continued developed of nuclear technology to introduce weapons that could greatly reduce collateral damage whilst also remaining efficient to counter advancing conventional military forces. This included low-yield neutron bombs that caused little thermal radiation and fallout as well as suppressed radiation missiles. Such agendas were what led to the implementation of MAD, by the 1970s in the nuclear weaponry and policy directions of both the USSR and US. This was of course based on the deterrence theory that the threat of using powerful weapons against the enemy prevents the opponent's use of similar weapons. In effect, such a strategy is a type of Nash equilibrium in which neither side, once armed and possessing such destructive technology has a real advantage in inciting conflict, but, also at the same time to disarm its arsenal due to the fear of being outgunned. This is the stark reality of the geopolitical context of the present-day world, which remains as volatile as ever, if not even more so in the present than three decades ago during the formation of the INF treaty.

Having been led by Soviet Foreign Minister, Eduard Shevardnadze, the political negotiators directly involved the academic community within the policymaking process, and it was crucially with the support of Soviet Premier, Gorbachev that the INF Treaty of 1987 was accepted by the Russian side along with further agreements with the West including the Conventional Armed Forces in Europe (CFE) Treaty in 1990, and START I in 1993.²¹ The INF

²¹ Alexei Arbatov in Born, Hans, Bates Gill, and Heiner Hänggi (eds). *Governing the Bomb. Civilian Control and Democratic Accountability of Nuclear Weapons*. Oxford: Oxford University Press, 2010, pp. 54-55.

Treaty, therefore irrefutably changed the character of Soviet-American relations significantly, and just as anti-nuclear scientists predicted, the Democratic Congress in the US responded to this disarmament accord by slashing the budget request for Reagan's Strategic Defence Initiative (SDI) and mandating that its testing remained within the parameters of the ABM Treaty.²² On the Soviet side, Gorbachev especially was invigorated by the INF Treaty. Facilitating a great deal of this was the fortuitous situation of policy reforms such as '*perestroika*' (or 'restructuring') that was part of Gorbachev's wider programme of '*glasnost*' (or 'openness') targeted at the political and economic reconstruction of the USSR which by the late 1980s was gradually fragmenting. For the USA on the other hand, following a major modernization of the US nuclear posture during the 1980s the INF Treaty was a much needed mechanism to regulate proliferation. Yet, the American weapons arsenal still consisted of approximately 21,000 Tactical Nuclear Warheads (TNWs) in late 1991.²³ Moreover, noteworthy critics of the Treaty included Henry Kissinger and former Supreme Allied Commander of NATO, Bernard Rogers who at the time feared the decoupling of NATO from the US strategic nuclear security agenda due to the removal of American Pershing and cruise missiles from European soil.²⁴ However, fortunately for Europe and deterrence policies with Russia, this has so far not been the case. Besides, these weapons have afforded a fruitful transatlantic link for more than five decades by linking Europe's freedom with the US policy gesture of providing a "*supreme guarantee*" of security.²⁵

4.1 The Post-Cold War setting

Eventually with the fall of the Iron Curtain and Communism in Eastern Europe, the Caucasus and Central Asia by the end of 1991, huge stockpiles of nuclear arsenal and weaponry were left unattended and open for misuse making the prospect of a rogue party getting their hands on them increasingly likely. Whilst, any such major incident has been staved off thus far, what we have witnessed definitely over the past decade and a half has been a sort of Russian resurgence under Putin, who appears to be in an untouchable position of political authority and

²² Wittner, Lawrence S. *Confronting the Bomb: A Short History of the World Nuclear Disarmament Movement*. Stanford, CA: Stanford University Press, 2009, pp. 191.

²³ Roberts, Brad. *The Case for U.S. Nuclear Weapons in the 21st Century*. Stanford: Stanford University Press, 2015, pp.12.

²⁴ Boutwell, Jeffrey. "The INF Treaty and European Missile Defenses." **Bulletin of the American Academy of Arts and Sciences**, Vol. 41, no. 6 (1988), pp. 20-21.

²⁵ Anderson, Matthew P. "NATO Nuclear Deterrence The Warsaw Summit and Beyond." **Connections**, Vol. 15, no. 4 (2016), pp. 30.

placed nuclear power as one of the central precepts of her the state's foreign and security policy. In tandem, we have seen tenets of Mearsheimer's 'offensive realism' feed through especially for Russia's geopolitical stance. Not only has there been a seemingly predictable return to an anarchic international state of affairs, with Russia looking to increasingly reassert dominance on the global stage, but there have been significant efforts at redeveloping and modernizing the Russian armed forces. This is witnessed by the vast military exercises like 'Zapad-2017' that Russia have recently carried out in Eastern Europe, more often than not using an ally state like Belarus as a launching platform. Whilst this is from Russian eyes a response to what they perceive as a NATO build-up on their Western borders receiving buffering from the United States, it is unmistakably a show of force on part of the Russians to demonstrate the capability of their conventional forces, and implicitly at least the capability of their nuclear arsenal. Recent accusations and friction have been created by what the West deems as not only threatening developments and advancement of Russia's militaristic might, but also its missile capability. Such views posit the view that the Russians are increasingly testing and infringing upon even several INF Treaty guidelines as well as other NPT agreements.

Figure 2: Map of selected Russian Missile Bases plus range of their GLCMs



Source: Accessed January 19, 2018. URL: <https://www.brookings.edu/blog/order-from-chaos/2017/03/21/multilateralize-the-inf-problem/>.

The map in *Figure 2* outlines the threats posed by the potential range of existing Russian ICBMs, and this has fed into the Western narrative culminating into an understandable concern over recent advancements in Russian missile technology. Many of the recent developments in Russians arms have centred upon the perceived breaches in the acceptable range of missiles as outlined by Article II (6) of the treaty which states that “*The term "shorter-range missile" means a GLBM or a GLCM having a range capability equal to or in excess of 500 kilometers but not in excess of 1000 kilometers.*”²⁶ In this case, the believed range of some of Russia’s Ground-launched cruise missile (GLCM) weaponry clearly exceeds that of the approved range according to the original text of the treaty as laid out in 1987 following on discussions from the Reykjavik Summit in 1986. It is unsurprising in this sense that recent consternations have arisen between the former Cold War foes. For their part, Russia has long maintained that the validity of these agreements including the key legal codification of the INF Treaty has to be revised, especially as they consider it as something of an anachronism – after all, the past two decades have seen the rise of new nuclear power states such as India, and Pakistan on whom the principles of the INF are not attached. To some extent, this is expected given Russia’s historic fear and tendency of receiving the label of a ‘victim’ which backdates to the Napoleonic Wars (1803-1815). This has gone on to serve its ardent propensity to fervently take all necessary security precautions, especially those to avoid an invasion.

Whilst this can be understood in *realpolitik* terms as actions undertaken by states to guard their frontiers from external forces, given her position as the rival superpower to the United States since the Cold War, the modern-day Russian Federation ironically also posits the opposite picture of an unpredictable aggressor through its militaristic build-up and expansive foreign policy actions. This is none the truer in as witnessed in the Crimea during 2014, and of course, this has contributed to the current standpoint of the West that has included imposing immense pressure on Russia through targeted economic sanctions. Eventually, Russia implemented the concept of strategic stability in terms of its foreign policy objectives which saw counterforce (first-strike) capability being downgraded in place of a more reliable delayed second-strike conventional and nuclear posture.²⁷ Yet, even in the present day, Russia continues to maintain

²⁶ "Treaty Between The United States Of America And The Union Of Soviet Socialist Republics On The Elimination Of Their Intermediate-Range And Shorter-Range Missiles (INF Treaty)." Bureau of Arms Control, Verification & Compliance (AVC), Treaties & Agreements. December 08, 1987. From U.S. Department of State. Accessed January 18, 2018. <https://www.state.gov/t/avc/trty/102360.htm>

²⁷ Alexei Arbatov in Born, Hans, and others (eds). *Governing the Bomb. Civilian Control and Democratic Accountability of Nuclear Weapons*, pp. 68-69.

a relatively large TNW force with numerous Ballistic Missile Defence (BMD) sites in Europe to offset NATO's growing conventional superiority and expansion to the east. It seems that the leaders in Moscow are adopting more vindictive foreign policy measures as they feel that they are not just threatened by the US and NATO, but moreover, encircled and humiliated, at least prior to 2014. They have gone on to increase their vociferous opposition to US and NATO policies as they also fear the destabilising effects in their own backyard by the so-called colour revolutions (or popular democratic uprisings in post-Soviet states) such as in Kyrgyzstan (2005), Belarus (2006), and most recently, the 'Velvet Revolution in Armenia (2018).

5. Understanding the strategic objectives of Russia

Within the context of contemporary issues surrounding the longevity of the INF Treaty, it is highly relevant to frame an understanding of them by taking into adequate consideration the strategic objectives of Russia. In fact, without tackling this head-on it would be far more constrained to explore future policy alternatives as well as chart existing progress in NPT agreements. With the return of Vladimir Putin to the helm of government as President in 2012 following a four-year hiatus as Prime Minister, Russia once again has continued to flex her geopolitical muscles, and much of this has stemmed from the recent controversies over continuing Russian covert presence in destabilizing the Ukraine, as well as more overt involvement in the Syrian Conflict; both regions that are in turmoil and civil war. Coupled with this, has been a genuine and clear-cut drive in increasing defence spending, which is accounting for a higher part of the national Gross-Domestic Product (GDP), as well as the reported development of new weaponry that have the capability of acting not just as ICBMs but having the potential to be used as TNWs as well. Understandably, this has grown to be a source of severe consternation in the West, particularly with the USA, and its European allies, many of whom are subsumed within or are in the process of joining NATO. But, firstly, it needs to be considered whether Russia is genuinely undergoing something of a geopolitical 'imperial renaissance' and how much of its weapons and armaments policies are actually in breach of the INF Treaty provisions. In addition, it needs to be investigated how much of this increased defence industry spending and innovation is going to be viable, and what they may mean for deterrence policies going forward. Thus, together these analyses should provide a much better insight into the Russian rationale behind its foreign policy as well as recent activities around missile technology, and how it is utilizing its capabilities there.

5.1 An ‘imperial renaissance’ in Russian foreign affairs

One obvious and visible feature of Russia’s security policies since the last decade has been expressively more aggressive posture towards the West. Following the tumultuous 1990s which enveloped the Russian Federation following the dissolution of the former USSR, the accession of President Putin, first in 2000, and then again in 2012, Russia has undertaken a more stubborn attitude towards its defence policy and security relations with the USA. Even prior to the worsening of US-Russian tensions during the last couple of years, hallmarks of this could be during the first decade of the 21st century, such as with the American withdrawal from the ABM Treaty in 2002, which led to the Russians initially threatening a departure from the INF Treaty, that fortunately did not pave through. In effect, this stubbornness has also translated into the conduct of Russia’s foreign relations with her neighbours and the West. This has extended from the short-lived war with Georgia in 2008 over the breakaway Russian-backed regions of South Ossetia and Abkhazia, to the annexation of the Crimea in 2014 alongside the backing of separatists in Eastern Ukraine and the Donetsk Basin. As infuriating and concerning as it may be to the USA, NATO, and the EU in particular, the truth remains that Russia is in a position to showcase militaristic capabilities given the rapid advancement of her military assets since the turn of the most recent decade. Not only has there been an increased focus and emphasis on the technological enhancement of Russian armed forces, but a lot of this has come with much public approval and support. The domestic scene and the Russian economy appears to have stabilized on the surface-level, buoyed by the tremendous success and financial gain of hosting the 2018 FIFA Football World Cup. This has come following a tough few years beforehand in light of more targeted Western sanctions in response to Russian military involvement in Crimea and the Ukraine that caused much disruption to the domestic socio-economic situation. This was despite the fact that Russia continues to reap much income through its energy sector, as it remains buttressed by vast oil and gas reserves. Interestingly, this fact too has become relevant in her dealings with the West, as several Central and Eastern European states remain dependent on Russian energy sources, and have been held to ransom during diplomatic disputes.

In addition, one needs to bear in mind that this current epoch of an apparent Russian ‘imperial renaissance’ has come with other costs such as Russia’s increased isolation in security and policy affairs with Europe thank to its punitive measures in neighbouring conflicts further afield such as by interfering in the Syrian Civil War. That being said, there have been much

efforts on part of NATO in particular, and to a certain extent, the USA to engage with Russia, especially in the area of nuclear security. After all, it ultimately cannot be discounted that Russia remains a hugely critical component in ensuring global stability and peace in this field. Moreover, there remain shared interests for both the USA and Russia in cooperating as strategic partners in areas such as combating Islamic fundamentalism and consequently preventing the spread of terrorism, particularly in Central Asia. As well as this, Russia would be best served in her interests to continue to hold a firm dialogue with the USA over nuclear strategy and missile development as well as striving to preserve some semblance of the INF treaty framework, as a rise in instability in this sector would further threaten her own assets. Nevertheless, this seems not to have deterred Putin's Russia in pursuing more jingoistic policies geared towards beefing up the state's own defences and securing her own borders. Forays into areas newer areas of hybrid warfare have led to increasing accusations of Russia using domains such as cyber and space to target her enemies, most recently seen with the scandal surrounding possible clandestine Russian involvement in the 2016 US Presidential campaign. On top of this, problems have arisen from espionage episodes like the 'Skripal' affair which witnessed the attempted assassination of an exiled Russian dissident in the United Kingdom allegedly by agents belonging to Russian military intelligence. But, the prevailing consensus remains that Russia is most likely to continue in conducting its geopolitical affairs in an avaricious manner, especially as Putin enters his fourth term as President and having constitutionally extended his period in office for six years until 2024.

5.2 Developments in Russian missile technology.

Recent advancements in Russian missile technology has unsurprisingly been the issue causing most friction for the INF Treaty, specifically the presence of two types of missiles and their capabilities as illustrated in *Table 1*. This also extends to latest developments reported in April 2018 such as the hypersonic KH-47M2, codenamed as the Kinzhal missile and its implications for US nuclear strategy. Russia has in fact stated that it is a high-precision air-launched ballistic system intended to evade U.S. missile BMDs if utilised. Given its 2,000km range, it is also nuclear capable which is what makes this Russian hypersonic missile distinct from its American counterparts. Interestingly, the Chinese have also been reported to be pursuing such a strategy which severely tests not just the position of the INF Treaty but also US-Russian agreements over the New START, but, China is not a party to these arms-reduction controls. Anyhow, it is still to be seen how far Russia can develop and advance its missile technology in

the near future, with much scepticism existing in the West. However, given that Russia identifies threats from its western borders including NATO expansion, “*such sophisticated weaponry only strengthens Russia's nuclear deterrence posture.*”²⁸ Ultimately, it cannot be denied that the development of technology such as hypersonic missiles), future arms control treaties would simply become a whole lot more complex to achieve let alone enforce. It is difficult to not consider the genuine threat an irrational pre-emptive strike these advancements provide, also given the rapid and swift nature of the weapon systems. Furthermore, as the information in *Table 1* denotes the main two Russian suspect missiles in use that have been called out by the US to be in breach of the INF Treaty includes the Iskander missile known as the SSC-8, and the RS-26 rocket, both manufactured by the armaments firm, Novator. Causing increased concern to the West, have been reports that recent Russian cruise missiles used for strikes in Syria were SS-N-30A sea-launched cruise missiles. These missiles are referred to as the Kalibr, actually comes under a family of Russian sea-launched cruise missiles.²⁹

Table 1: Attributes of suspected Russian ICBMs in violation of the INF Treaty (1987)

Suspect Missiles

The U.S. believes Russia is violating the Cold War-era INF Treaty with these rockets.

	SSC-8	RS-26
Other Possible Names	9M729, SSC-X-8	Rubezh, SS-X-31
Type	Ground-Launch Cruise Missile	Intercontinental Ballistic Missile*
Possible Launcher	Road-mobile Iskander	Road-mobile transporter erector
Nuclear Capable	Yes	Yes
Possible Maximum Range	Around 1,550 miles	Around 3,600 miles†
Status	Allegedly deployed	Tested

*Russia has yet to declare the RS-26 an ICBM. If the weapon instead classifies as an intermediate-range missile, it could fall under the INF Treaty ban. If it is an ICBM, it would fall under New START Treaty restrictions. †The missile has been tested at shorter ranges that fall within the distances banned by the INF Treaty.

Sources: Arms Control Wonk, NASIC, CSIS, Russianforces.org

THE WALL STREET JOURNAL.

Source: Accessed February 17, 2018. URL: <https://www.wsj.com/articles/pentagon-moves-to-develop-banned-intermediate-missile-1510862789>

²⁸ Ghoshal, Debalina. "Russia's New Kinzhal Missile and What It Means for the US." Daily Sabah. April 29, 2018. Accessed April 30, 2018. <https://www.dailysabah.com/op-ed/2018/04/30/russias-new-kinzhal-missile-and-what-it-means-for-the-us>.

²⁹ Lewis, Jeffrey. "Russian Cruise Missile Revisited". Arms Control Wonk, October 27, 2015. Accessed 19 December, 2017. URL: <https://www.armscontrolwonk.com/archive/207816/russian-cruise-missiles-revisited/>

In all recent cases of accusations from the US of possible Russian abrogation of the INF Treaty, it is held that the missiles under suspicion are capable of having their ranges increased to fall under between 500 and 5,500 km (300 miles to 3,420 miles) which is outlawed under the provisions of the INF Treaty. Russia, for her part maintains that these missiles are under compliance of the INF, and have levelled their own accusations against newer American advancements in the field of missiles technology to be violating the treaty. They also hold that their focus remains on TNWs and ICBMs that fall outside of the spectrum of the banned range of the INF Treaty. Moving forward, it seems that the Russians appear determined to endeavour to match American expansions in the armaments industry as far as possible, and to bridge this very technological gap that has been existing since the 1970s. Russia also views the realm of missile weaponry to be amongst its most powerful deterrent assets, and this is very much the case. Though still fairly more backward in terms of its technology and equipment in comparison to the Americans, Russia continues to possess more Tactical/ Theatre Ballistic Missiles (TBMs), Silo-based ICBMs as well as conventional bombers than the USA. This should not be taken lightly, especially when considering how to approach the negotiations surrounding the control and non-proliferation of nuclear weapons. Incidentally, unlike in the USA and the West, public opinion still has not reached the point in Russia to properly influence policy in the area of nuclear development and strategy nor sufficiently to promote non-proliferation. Moreover, activities in the sector of nuclear-arms remains almost under the sole directive of the Presidential Office and Defence Ministry.

5.3 The Security Paradox

In essence, Russia appears to be in something of a security paradox. On the one hand, it seems to be more actively and earnestly following a bellicose approach to nuclear and defence strategies. Whilst it has clearly been demonstrating the capabilities of its military assets, especially missiles in nearby conflicts, Russia appears to be increasingly hemmed in by the pressures it has gained through pursuing such an approach. This has predominantly been through continuing targeted political and economic sanctions from the West, contributing in effect to more impasse over geopolitical disputes. Nonetheless, Russia is able to use its leverage of a privileged position of a great power such having a Permanent 5 (P-5) seat within the United Nations Security Council (UNSC) in dictating affairs and if necessary blocking solutions to serve its own objectives. There also appears to be an increasing drive to move from the ideals of 'minimum' deterrence back towards a stasis more akin to the Cold-War era atmosphere of

MAD. This has been visible from two major military exercises that Russia has very recently carried out or is in the process of doing so. The first was ‘Zapad-2017’ on her western borders and by the Baltic states as if to portray a direct powerful statement to NATO due to the increasing militarisation of the latter’s own assets and weaponry close to Russia’s proximity. Interestingly, the nuclear component was given particular heed to during the course of the ‘Zapad-2017’ exercises as that Russia often merges both conventional and nuclear dimensions into war scenarios. And this event was giving them an opportunity to test its escalation dominance against NATO.³⁰ Unquestionably, this aura of intimidation with Russia’s military manoeuvres have raised plenty of concerns amongst the US and her European allies. Most recently, during September 2018, Russia is set to carry out its largest military exercise since the Cold War involving around 300,000 troops and 36,000 vehicles.³¹ Whilst this is on first glance normative of the rotational exercises that Russia routinely observes in her four defence sectors, this upcoming exercise, coined ‘Vostok-2018’ will involve the active use of a wide range of TBMs and GLCMs. More eye-opening is the involvement of roughly 3,200 Chinese troops which perhaps comes as the most prominent recent example of a thaw in Sino-Russian relations. This is significant because as part of her security paradox, Russia also has had to front-off and bear in mind the increasing threats posed by China to its south, which of course is now another proven NWS as well as global economic powerhouse. Whether this will change moving forward remains to be seen. But, there is a real possibility that there could arise a situation whereby Russia and China combine together to produce an even larger balanced deterrent against the American TNWs and all major missiles in deployment, both in Europe, and the Asia-Pacific region. Therefore, the major security dilemma faced by Russia, is how to adapt to the profound changes taking place in international relations with the West and China, whilst preserving its own national foreign policy identity, geopolitical role, and respect from the other great powers without facing added security threats.³²

On the whole, it remains paramount to Russia that the overarching importance of her defence policies and nuclear strategy should include a buffering up and increased innovation of her

³⁰ Jankowski, Dominik P. "Ten Things You Need to Know about Russian Military Exercises." New Eastern Europe. September 14, 2017. Accessed June 09, 2018. URL: <http://neweasterneurope.eu/2017/09/14/ten-things-you-need-to-know-about-russian-military-exercises/>.

³¹ Kofman, Michael. "Vostok-2018: Russia and China Signal Growing Military Cooperation." Russia Matters. September 10, 2018. Accessed September 11, 2018. URL: <https://www.russiamatters.org/analysis/vostok-2018-russia-and-china-signal-growing-military-cooperation>.

³² Arbatov, Alexei G., and Abram Chayes (eds.). *Managing Conflict in the Former Soviet Union: Russian and American Perspectives*. Cambridge: MIT Press, 1997, pp. 420.

assets – in particular, missile technology – for security even if it invites more direct hostility in the near-term. This of course, could come in the form of more American ICBMs and leave Long-Range Standoff weapons (LSROs) being positioned nearer to Russia. Friction caused by this was seen during 2014 when Moscow added that the American MK 41 Vertical Launching System had come into focus as the US was planning to install those launchers in Poland and Romania as part of its BMD shield plan. The Russians also risk an adverse situation through actively appearing to move against the provisions of not just the INF Treaty but also the framework of other missile and arms control agreements such as the New START and Strategic Offensive Reductions Treaty (SORT). Soon enough, Russia may place itself in a situation where despite an increase in its military capabilities and nuclear arsenal, it is outgunned and outmanoeuvred. This is a realistic scenario given the likelihood of more nations joining NATO in the Western Balkans, and more concerning to Russia - Georgia and Ukraine. Not only would this be directly next to her borders, but the prospect of US manned BMDs as well as ICBMs being placed there poses a major security headache to Russian military planners.

Nevertheless, the likelihood of a massive build-up and stationing of American missile weaponry closer to Russia remains unlikely for the time being, at least over the next half decade, given the interest of both nation-states to maintain the balance-of-power situation. Despite the unpredictability surrounding some of its recent geopolitical actions, it remains plausible that Putin's Russia will pay heed, and at least continue to preach 'minimum' deterrence even if it continues to subtly move away from it. Likewise, it remains possible that Russia is using something of a replica of the US modelled format of 'extended' deterrence that has been practised since the Cold War extending its security and possibly nuclear protection towards former Soviet states including Belarus, Moldova and Central Asian countries. However, this has come with mixed success, as Russian backing for other allies like the widely loathed governmental forces of President Bashar Al-Assad in the Syrian Civil War is draining important resources and gaining Western hostility as well as interference in the war. However, unlike the 'Cold' proxy conflicts of previous decades such as Cuba, Ethiopia, Vietnam etc. where the two superpowers indirectly faced off against each other through supplying opposite sides in a conflict, within the present day scenario of Syria, both the USA and Russia have had a shared goal. This relates to combined strategic goal to gradually eradicate ISIS (Islamic State of Iraq and Syria), otherwise known as Daesh from the Near East. Looking ahead, it seems difficult to expertly predict that Russia will be able to resolve its security paradox, and despite the initial promise of a better dialogue between the Trump administration and Putin's Russia,

there appears to be little optimism that strategic tensions and issues surrounding nuclear deterrence can be resolved in the near future. To be precise, despite their protestations, the Russian government and military are both fully conscious of the extraordinary challenges confronting the US if it ever wanted to execute a first strike. An additional worry for Russian military strategic planners and policy-makers is that further deep reductions along with significant technological developments in the West could really undermine the survivability of Russia's nuclear arsenal, hence compromising Russia's central deterrent capability.³³

6 Contemporary Nuclear Security Policies of the U.S. Government

The area of nuclear security dogma within American governments have certainly been a very complex area of policy-making, that has undergone a number of evolutions, and much of this has come from varied forms of deterrence in practice - with a discernible move away from 'minimum' deterrence under the Trump administration. This appears to be towards a mixture of 'credible' and 'extended' deterrence that can symbolise something of a new 'dual-deterrence' strategy. 'Extended' deterrence as a policy does defer from other formats such as 'central' deterrence (tasked with prioritising domestic security from foreign threats) as it projects nuclear deterrent measures beyond into theatres of extension (e.g. the USA protecting Europe or Japan as a nuclear power guarantor) or instead for extensive purposes (to compel a political act e.g. peace negotiations in the Korean Peninsula).³⁴ This was despite the fact that 'central' deterrence was assumed to enjoy a higher level of credibility than 'extended' deterrence according to a number of international relations experts as it focused on attacks against the most vital interests in a sovereign territory which in turn would provide sufficient impetus to order a nuclear riposte.³⁵ Yet, dual deterrence has been criticised as a policy that does not foresee any revolutionary new utilities for America's nuclear arsenal, nor does it seem to promote wide-ranging changes to US force structures, instead appearing to primarily "provide a basic framework for approaching the much-needed recapitalization of the US nuclear enterprise."³⁶ At the same time, there have been more broader debates sparked over

³³ Acton, James M. *Deterrence During Disarmament: Deep Nuclear Reductions and International Security (Adelphi series)*, 1st ed. London: Routledge, 2011, pp. 60.

³⁴ Bobbitt, Philip. *Democracy and deterrence: the history and future of nuclear strategy*. Houndmills: MacMillan Press, 1988, pp. 8-9.

³⁵ Freedman, Lawrence. *Deterrence*. Cambridge, UK; Malden, MA: Polity Press, 2004, pp. 35.

³⁶ Wiitala, Joshua D., "Challenging Minimum Deterrence." *Air and Space Power Journal*, Vol. 30, no. 1 (2016), pp. 26-27.

the type of strategy that the USA should employ with its nuclear arsenal such as counter-value or counterforce targeting. This has developed from the '*countervailing*' strategy modified from MAD by Presidential-Directive 59 (PD-59) under President Jimmy Carter in July 1980. The notion of a 'countervailing strategy' came to the fore in the 1980s which basically stressed that the intended response to a possible USSR attack was no longer to focus on counter-value targets including cities and population centres, but, rather to place the emphasis on eliminating the Soviet leadership first, before proceeding to attacking counterforce targets. Security policy experts such as Walter Slocombe have illustrated that it was not designed as a 'first-strike' policy, rather one of explicit deterrence dealing with what the US could and (depending on the scale of a potential Soviet attack) would do as a retaliatory attack.³⁷

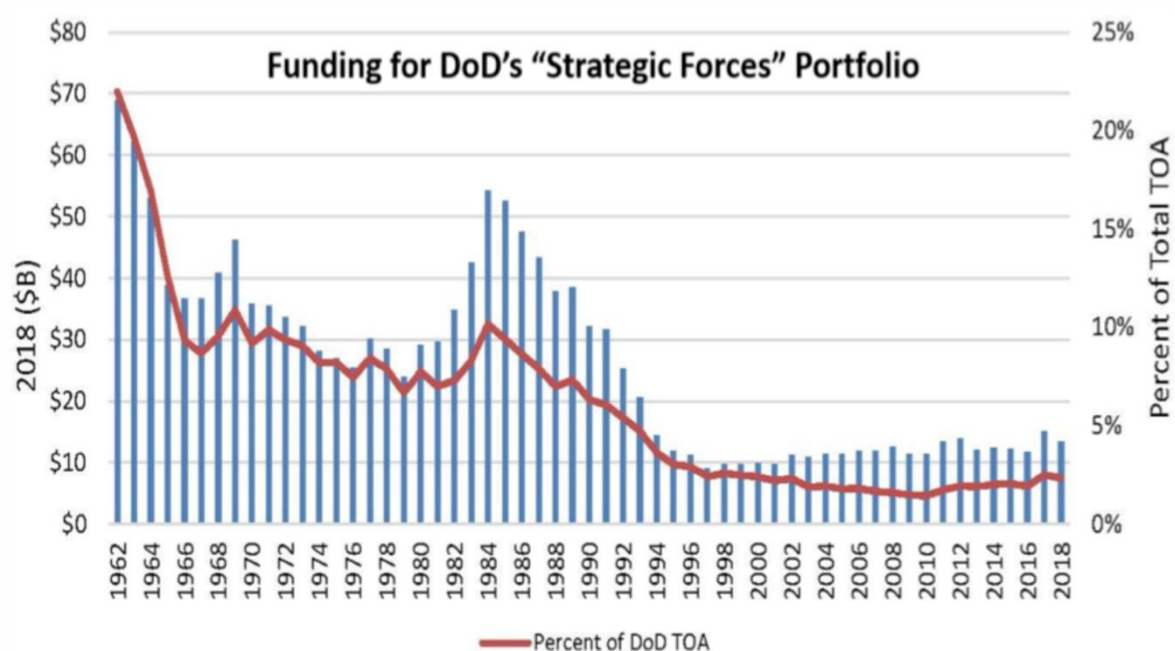
Some argue that the US nuclear deterrent should be eliminated altogether because its existence represents an outdated Cold War rationale. However, this is far being directed just by a Cold War-era mind-set, because the reality is that nuclear deterrence underpins the national security of the United States and will continue to do so for the foreseeable future, as it harnesses its position as the sole global superpower in the present day. In fact, funding for the strategic nuclear programme in the United States has been sped up and rapidly increased in recent fiscal years, as outlined by the recent National Defence Authorization (NDA) Act for 2018 which has pledged \$626 billion for the State Defence Department's base budget and another \$66 billion for operations. Moreover, the act comprises of a 2.4 percent pay raise for military personnel.³⁸ In fact, *Table 2* helpfully outlines how despite the marked decrease in the Department of Defence's (DoD) Total Obligation Authority (TOA) or direct funding for 'strategic forces' - which include all forms of ballistic missiles since the Cold War - the proportion of expenditure in this area as part of the national defence budget has increased over the gradually and steadily since 2010. Whilst part of this can be explained by the post-9/11 efforts through the 'War on Terror', it must be noted that 'strategic forces' also contains nuclear carrying weaponry such as ICBMs amongst the wider category of conventional forces. Principally, there is now a clear move in the US Government under the new regime, especially from Republican officials to undertake a more concerted effort to modernize American nuclear arsenal. And this has been substantiated with a relatively large degree of public support. The

³⁷ Miller, Steven E. *Strategy and nuclear deterrence*. Princeton: Princeton University Press 1984, pp. 252-254.

³⁸ U.S. House of Representatives. 115th Congress, 1st Session. Legislation - H.R.2810 - National Defense Authorization Act for Fiscal Year 2018. Accessed January 17, 2018. Available: <https://www.congress.gov/115/crpt/hrpt404/CRPT-115hrpt404.pdf>

changes in the stance of the US government since the late 1990s can be summarised as thus with the Clinton and Obama administrations who sought arms control with Russia due to the perceived values of legally binding reductions plus the added benefits of transparency and predictability, while also strongly supporting non-proliferation.³⁹ In contrast, the George W. Bush regime, rejected arms control as being a barrier for positively transforming the political relationship with Russia. The Trump administration appears to be more inclined to be building its own approach, with a far lesser emphasis on non-proliferation.

Table 2: Changes in funding for the U.S. DoD “Strategic Forces” sector



Source: Defense Department, “Strategic Forces”

Source: Accessed 05 March, 2018. URL: <https://warontherocks.com/2018/04/americas-endangered-nuclear-deterrent-the-case-for-funding-two-critical-capabilities/>

6.1 A traditional precedent? – MAD Doctrine

During the Cold War period, the running mantra of American nuclear defence strategy and policy-making was the system of Mutual Assured Destruction (MAD) doctrine. It was of the belief among US as well as Soviet security officials that sparking a global thermo-nuclear war would not only prove to annihilating for the world, but, even the prospect of succeeding in one

³⁹ Roberts, Brad. *The Case for U.S. Nuclear Weapons in the 21st Century*, pp.42

was slim. This conundrum essentially developed into the two superpower states scrambling against each other in a global arms race whilst still possessing huge arsenals of nuclear missiles and TNWs to tacitly as well as overtly deter the other. The essence of counter-value targeting thereby became prominent as part of US defence policy under the wider encompassing practice of MAD as counterforce targeting decreased in its appeal during the 1960s and 1970s. This was due to the fact that it was believed that a fairly small nuclear arsenal was adequate enough to act as an effective deterrent to an opponent by the danger posed to their civilian population and assets – in sum, minimum deterrence. In turn, this could be used to compel the enemy to reduce their own nuclear stockpiles. This amended version of MAD was perceived as the most plausible scenario of a victory in a nuclear conflict. What evolved out of this policy under President Ronald Reagan was the creation of the SDI, also nicknamed ‘Star Wars’. The driving initiative behind this programme was to develop space-based technology in the form of BMDs to destroy Soviet ballistic missiles before they could hit US territory. However, this was much criticised in both the USSR and by American allies, notably, British Prime Minister, Margaret Thatcher as a policy that severely harmed the concept of deterrence, especially that of the minimal deterrence by taking away the elements of proportionality and reciprocity. But, the Americans for their part, maintained that this was very much part of a rational deterrence stance. This appears to also be evident in the present day situation under President Trump who appears to be focused on bargaining power, even though explicit policies imply the opposite in signalling power such as the development of new technology like hypersonic missiles which seem set to be aimed at gaining coercive credibility whilst upsetting military balances.

Nevertheless, the USA simultaneously appears to be scaling back on its defence commitments particularly to a fair degree with the practice of ‘extended’ deterrence’ within Europe. This notion of ‘extended’ deterrence relates back to the 20th century whereby the US focused on providing a nuclear umbrella protection to its allies in Europe and elsewhere, primarily against Soviet aggression through deterring using TNWs and ICBMs. During the 1970s, several critics of the MAD strategic doctrine attacked this as highly immoral since it implied the destruction of innocent civilians; yet, others favoured such as policy as it also entailed nuclear attacks on an opponent’s leadership, industry, and communication systems which though devastating for civilians, would effectively hamper an adversary.⁴⁰ Intriguingly, similar debates exist over building BMDs as some proponents against advancement in this field criticize the strategic

⁴⁰ Nye, Joseph S. *Nuclear Ethics*. New York, NY: The Free Press, 1986, pp. 10.

doctrine of ‘assured destruction’ as MAD has officially long ceased to be the official policy of the USA since the late 1980s and the end of the Cold War. They are further questioning why more is not being done to completely depart from the concept of ‘assured destruction’ without increasing the prospects of a nuclear conflict. Evidently, there was genuine détente in tensions during the 1990s, as the USA officially stripped MAD as part of its nuclear strategy, whilst the Russian Federation sought to rebuild itself whilst it also tried to radically reduce its nuclear arsenal and secure the looser elements caused by the fragmentation of the Soviet Union. There were sincere attempts to build upon the Strategic Arms Limitations Talks known as SALT I (1969) and SALT II (1979). This resulted in the signing of the START I (1991) and START II (1993) which both aimed to limit multiple-warhead capacities and restrict the amount of TNWs on both sides. As the latter was not ratified by the US Senate, a successor treaty known as New START was sanctioned in February 2011 and is now pending a renewal in 2021. Though, the concept of ‘extended’ nuclear deterrence has had a long and reasonably successful history. However, most of that occurred during the Cold War under strategic situations which have dramatically altered with the demise of the Soviet Union, and this has meant that extended deterrence has had to operate in newer challenging circumstances such as the threat posed by nuclear-armed third states, the downward pressures on nuclear arsenal as well as the restructuring of alliances and fresh geopolitical fault-lines.⁴¹

In terms of American defence policy, as mentioned in the previous section, there is a more obvious drive within higher echelons of the American government to kick-start new weapons programmes in response to perceived Russian transgressions of many of the post-Cold War security framework of international nuclear-arms control treaties, in particular the INF Treaty. In actual fact, related to this proliferation-stance has been the proposal of the Pentagon to develop a separate DoD nationwide nuclear modernization fund which would ostensibly pay for the expenses to upgrade the existing US nuclear triad by the mid-2020s.⁴² And it has been suggested by American foreign policy specialists that as the national grapples with how to preserve a sustainable nuclear deterrent, it should forge a funding mechanism comparable to that of the US Special Operations Command (USSOCOM) that was set-up in the 1980s.⁴³

⁴¹ Trachtenberg, David J. “*US Extended Deterrence How Much Strategic Force Is Too Little?*” **Strategic Studies Quarterly**, Vol. 10, no. 5 (2016), pp. 88.

⁴² Steeves, Geoffrey. “*Toward Strategic Nuclear Funding The USSOCOM Model.*” **Strategic Studies Quarterly**, Vol. 11, no. 2 (2017), pp. 119.

⁴³ Ibid, pp. 120.

There also remain major questions on how the Americans will proceed in trying to encourage nuclear de-escalation. And, this does not just concern Russia, but also both established challengers such as China and newer rogue threats like North Korea to international nuclear security. It is here that the United States will need to adopt a balancing act, but how much of a ‘flexible’ approach they can employ, chiefly in regards to nuclear deterrence remains to be seen. The creed of nuclear disarmament and ideals set by the NPT (Non-Proliferation Treaty) agreement signed in 1968 (currently observed by 191 nations – but excluding NWSs including India, Israel, and Pakistan) seem to be of less overriding importance to American security and nuclear policy. That is not to say that the principles of the NPT will be abandoned by the USA, but given their active forays into developing and continually modernizing their nuclear weapons arsenal, alongside similar Russian active displays in this area leaves a lot to be desired for future arms control agreements and nuclear weapons treaties. Yet, beforehand, there was in stark contrast to this current period, a more pronounced direct willingness to openly engage and cooperate with the Russian Federation, however, in the grand scheme that particular period between 2009 and 2012 may come to be seen as something of an anachronism. This is an aspect worth considering as it heralded a new phase of US-Russian cooperation on several subject matters, and enabled a resolution of a number of disputes that was of cause for concern, including those in the area of nuclear deterrence. That short phase has been characterised as something of a temporary reset in relations and allowed for a harmonization of defence policies between the two superpowers.

6.2 The Obama ‘reset’ and the resurgence of ‘extended’ deterrence

The recent short period between 2009 and 2012 during President Barack Obama’s second term in office has been seen a facilitating greater dialogue and coordination between the US and Russia on a wide array of strategic affairs. Spurred by the willingness of Dmitri Medvedev, who was then on the presidential helm, President Obama found in his counterpart a more transparent stance from the Russians and an interest to engage more openly. More remarkable was that it had come in the wake of the Russo-Georgian war of 2008, and the period also fell during the Tulip Revolution in Kyrgyzstan during 2010, both of which were seen as destabilizing factors for Russian’s domestic and foreign security. There were also concerns regarding the increased presence of US troops alongside NATO forces in Europe. However, this period managed to see a compromise being reached between the two states, as the US decided against moving forward with a high-tech missile defence shield including multiple

Unmanned Aerial Vehicles (UAVs) to act alongside NATO's Response Force (NRF) in Poland and Czech Republic. Instead Obama shifted focus and attention to Iran, citing intelligence reports that the nuclear development programme there was of more immediate concern to global security. Here too, the Russians and Americans collaborated to place joint pressure on Iran, who had by then lost the Russians as a supplier of uranium, and other raw materials. This would eventually go on to result in the Joint Comprehensive Plan of Action, or 'Iran Deal' for non-proliferation, signed in 2015 between Iran, the UN P+5, Germany and the EU. Besides, this short period between 2009 and 2012 also witnessed the ratification of the New START (signed in Prague during 2010, and coming into effect by 2011) which formally put in place more curtailed limitations on the nuclear arsenal and delivery launchers of both the United States and Russia. Despite such progress this short phase would soon give way to the more recent episodic cases of nuclear and ballistic missile tensions between the two nations.

Already, by 2014, once Putin had regained his position as President, there were outcries from the US about possible Russian infringements of the INF Treaty. In that year, the U.S. government officially claimed that Russia had tested a GLCM of intermediate range that directly infringed the INF Treaty. Though the Obama administration sought to persuade Moscow to return to full compliance, it appeared that the Russians had already deployed that missile.⁴⁴ The range of this GLCM designated as the SSC-8 was assumed to have a range of 2,000 km (about 1,200 miles) that could directly harm several European capitals from bases in Western Russia.⁴⁵ By this point, it had become very obvious to US officials that Russia was willing to pursue a more confrontational approach, and in effect we once again began to see a resurgence of 'extended' deterrence by the US during the last two years in office of President Obama. There was the increased dispatch and training of US military personnel in Europe, alongside an increase of NATO troops stationed in the Baltic states. Furthermore, the USA deployed the Aegis Ashore missile defence system in Romania, much to the consternation of the Russians. In effect, this outlined how the US in the face of Russian stubbornness and once again the closure of transparency over dialogue in relation to nuclear arms-control, was willing to exert influence and pressure through its alliance systems including NATO, and also, the EU. Regarding US proposals in the present scenario, there appears to have been an implicit change

⁴⁴ Pifer, Steven. "Order From Chaos: Multilateralize the INF problem." Brookings, March 21, 2017. Accessed January 19, 2018. URL: <https://www.brookings.edu/blog/order-from-chaos/2017/03/21/multilateralize-the-inf-problem/>.

⁴⁵ See Figure 2 on pg. 14.

in focus and emphasis once more under President Trump. This has come following on from the transition with the previous administration, and it is here that the rules of ‘extended’ and ‘minimum’ deterrence are coming to be seriously tested by the nuclear security policies of the USA. It does then effectively raise questions of the new form of deterrence that may take shape in nuclear policy-making going forward, a far-cry from the Obama ‘reset’ phase at the turn of the decade. Though much of what can be predicted now remains speculative, it does certainly seem that there appears a genuine move away from ‘minimum’ deterrence under President Trump given the agenda of the most recent Nuclear Posture Review (NPR). This latest NPR designed for 2018 is set to be the fourth in a series after 1994, 2001, and 2010 and they have contained substantial uniformity across the board as well as certain significant innovations.⁴⁶

6.3 The NPR under Trump, and a ‘new’ wave of deterrence

Under the current US administration, the first NPR under President Trump for 2018 places the focus on Russia, and provides the leading rationale for many of its proposed policies. This includes proposals to spend over \$1 trillion to modernize what some see as outdated elements of the US ‘nuclear triad’ – consisting of a three-pronged military force structure all capable of carrying nuclear warheads including GLCMs, SLBMs, and Air-launched Ballistic Missiles (ALBMs) – and if implemented in its current form, it could certainly stimulate a new arms race with Russia. This would be hugely detrimental to global security.⁴⁷ Some security policy experts assert that at the highest strategic level, the US may possibly find itself in a position lacking the range of capabilities required to really hold main targets at risk which may cause adversaries to no longer imagine that the US would be willing to fight and triumph in a nuclear conflict – a fundamental aspect to the credibility of American deterrence.⁴⁸ Thus, it may only leave LSRO weapons as the only credible, stealthy and viable low-yield option available to the American President. This does pose a dangerous precedent going forward in place of verified bilateral de-escalation talks that can be much more confidence-building both for the political elites and the general populace in both countries. The presiding US administration will almost

⁴⁶ Payne, K.B. “Thinking a new about US Nuclear Policy toward Russia”. **Strategic Studies Quarterly**, Vol. 11, no. 2 (2017), pp. 13.

⁴⁷ Unal, Beyza. “Donald Trump’s challenge to the taboo around nuclear weapons should worry us all”. *New Statesmen*, January 12, 2018. Accessed January 24, 2018. URL: <https://www.newstatesman.com/world/2018/01/donald-trump-s-challenge-taboo-around-nuclear-weapons-should-worry-us-all>

⁴⁸ Lowther, Adam B. “The Long-Range Standoff Weapon and the 2017 Nuclear Posture Review”. **Strategic Studies Quarterly**, Vol. 11, no. 3 (2017), pp. 18-19.

certainly proceed with the narrative of continuing to develop not just conventional weapons arsenal, but also expanding their ballistic and cruise-missile technologies which are capable of moving TNWs. This will be imperative for American power projection.

One thing is clear: in developing new low-yield nuclear weapons, US deterrence strategy would get closer to that of Russia's, which is to de-escalate a conflict by actually escalating the military threats, including the possible limited use of nuclear weapons. This strategy is known as "*escalate to de-escalate*".⁴⁹ However, reframing the use of nuclear weapons in this way would be a grave mistake. Instead, this departs from confidence-building measures, bilateral engagements, and verified de-escalation negotiations as part of a global nuclear non-proliferation leadership strategy, an area where both Russia and the USA have previously enjoyed considerable success.⁵⁰ Thus, it is difficult therefore to pertain this attitude to general non-proliferation agreements and talks, and it appears that going forward, there seems to be a general lack of clarity about the exact deterrence stance that President Trump intends to take with Russia. This is partly as his administration seems to be more absorbed at the present to find a solution with North Korea as has been done recently with Iran. However, this pushes to the back-log dealings with Russia, and could have the harmful potential of encouraging them to test the rules of the INF Treaty further. In the same light, it must be asked whether a second 'Dual-Track' decision akin to what NATO employed in the late 1970s would help encourage Moscow back to the negotiating table? This effectively involved the threat of deploying from ICBMs whilst simultaneously pushing for negotiations with the Russians. Still, in the present day it is unclear that one could find a similar consensus between the USA and NATO for such an approach, as "*the leaderships in Moscow and Washington in the 1980s were pursuing more consistent and predictable policies and were more interested in reversing the nuclear arms race than their successors are today.*"⁵¹ The latest NDA approved by the US Senate also appears to be putting the USA on a much more left-field conservative approach towards future nuclear-arms control agreements, and therefore places the notion of 'minimum' deterrence under immense strain to continue being viable as a policy option. It is also perfectly possible

⁴⁹ Unal, Beyza. "Donald Trump's challenge to the taboo around nuclear weapons should worry us all". URL: <https://www.newstatesman.com/world/2018/01/donald-trump-s-challenge-taboo-around-nuclear-weapons-should-worry-us-all>

⁵⁰ Ibid.

⁵¹ Pifer, Steven, and Oliver Meier. "Are We Nearing the End of the INF Treaty?" Arms Control Association. January/February 2018. Accessed July 25, 2018. URL: <https://www.armscontrol.org/act/2018-01/features/we-nearing-end-inf-treaty>

that the US could also be retreating back into a form of isolationism, at least from European affairs, content that its current prerogatives of combating international terrorism, securing its domestic borders against illegal immigration, as well as further advancing its armed forces are ample as a generally more active deterrent. The focus of the current administration appears to be elsewhere in the Asia-Pacific region and the Middle East rather than being shrewd in deterring Russia and de-escalating issues with them. Yet, an official statement by the US Department of State in December 2017 titled, "*Trump Administration INF Treaty Integrated Strategy*" stipulated that it "*includes a review of military concepts and options, including options for conventional, ground-launched, intermediate-range missile systems*".⁵² Though the statement goes on to stress that the US intends to abide by the INF Treaty obligations, with such measures intended to induce Russia into compliance, the tone set for the future of the treaty itself seems ominous given the build-up of strategic weapons by both sides. To date, neither power has yet withdrawn from arms-control treaties related to strategic offensive weapons, however, the US has previously left the ABM Treaty of 2002 plus withdrawn from the unratified, but still politically binding SALT II agreement from 1986.⁵³

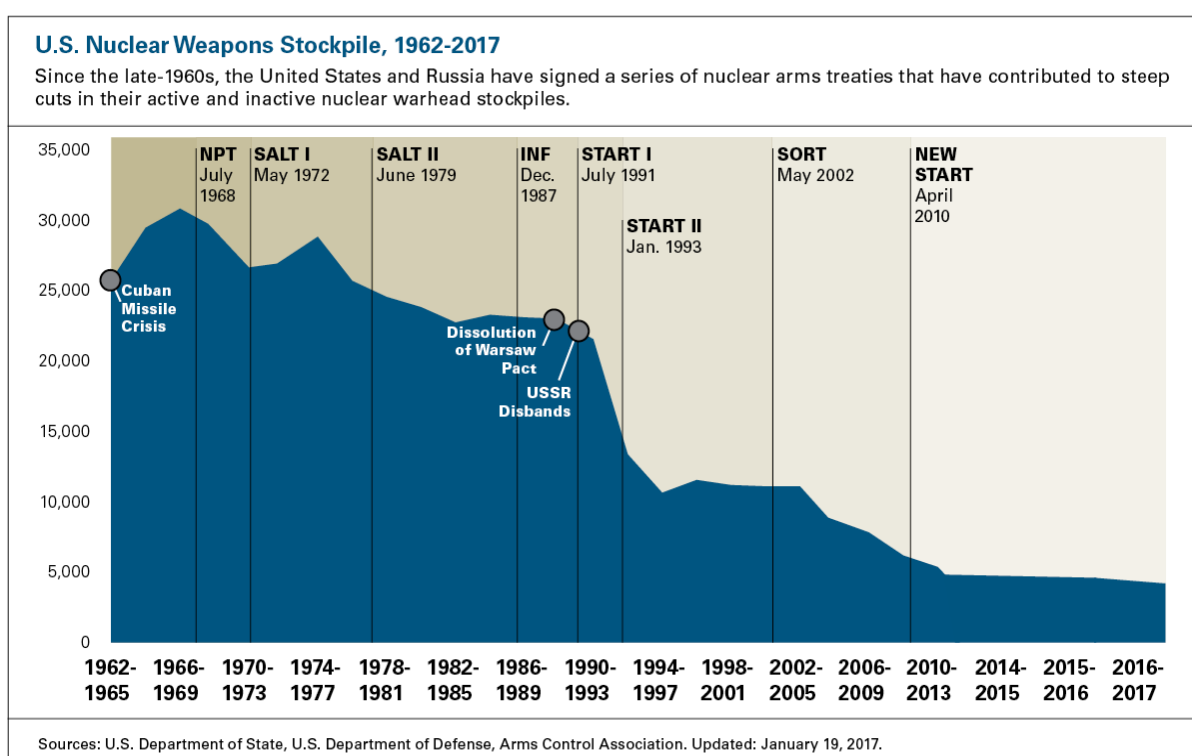
Nonetheless, it's cannot be discounted that the USA will be looking to place pressure on Russia to comply by the existing provision of the INF Treaty, and if faced with any serious violation, appears well set to take adequate measures and responses to curb any possible escalation of nuclear conflict for the time being. In this way, it can be held that the likelihood of minimum deterrence continuing as an official doctrine of policy can gain momentum over the next decade. But, faced with the issues of the INF Treaty being possibly being increasingly manoeuvred around, the importance of other nuclear and ballistic missile agreements such as New START came into sharper focus. On the whole, however, it also seems reasonable to suggest that the Trump administration, in light of the 2018 NPR current policy represents a new alternative deterrent strategy which can possibly be termed as 'dual deterrence' as it seems to involve a tentative build-up of weapons including ballistic missiles, whilst maintaining a more withdrawn sense of 'extended' deterrence to allies in Europe. As more nations pursue the path for NATO membership, the USA will probably find itself gradually extending its 'nuclear umbrella' to more countries, including post-Soviet states that still remain in geopolitical terms

⁵² Bureau of Public Affairs: Office of Press Relations, from U.S. Department of State. "*Trump Administration INF Treaty Integrated Strategy*." News release, December 08, 2017. Accessed January 22, 2018. URL: <https://www.state.gov/r/pa/prs/ps/2017/12/276363.htm>

⁵³ Acton, James M. *Deterrence During Disarmament*, pp. 72

within Russia's 'sphere of influence'.⁵⁴ All this while, it lacks other elements of policy that might allow it to succeed effectively, as it fails at the moment to put prudent pressure on Russia to open dialogues on nuclear deterrence and control. It also lacks aspects from the 1980s that allowed the INF Treaty to be signed and succeed which included a fairly bold proposal, a broad agenda, and NATO unity.⁵⁵ And, of course, this is on top of a shared lack of enthusiasm on part of Washington and Moscow to negotiate a successor to the INF Treaty. As *Table 3* below shows there is a major gap in arms and nuclear-control agreements, meaning more is needed beyond the New START operating until 2021 to reduce nuclear proliferation. In sum, the challenges confronting American policymakers are profound as they need to develop ideas for waging conventional war against potential nuclear-capable adversaries that permits the US military to achieve its objectives, but, also diminishing the incentives for nuclear escalation.⁵⁶

Table 3: The Reduction of U.S. Nuclear Weapons Stockpile, 1962-2017



Source: Accessed 12 December, 2018. URL:

<https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat>

⁵⁴ Trachtenberg, David J. "US Extended Deterrence How Much Strategic Force Is Too Little?", pp. 71.

⁵⁵ Sestanovich, Stephen. "Can Reagan Show Trump How to Save the INF Treaty?" The American Interest. August 20, 2018. Accessed August 25, 2018. URL: <https://www.the-american-interest.com/2018/06/15/can-reagan-show-trump-how-to-save-the-inf-treaty/>.

⁵⁶ Lieber, Keir A. and Daryl G. Press. "The New Era of Nuclear Weapons, Deterrence, and Conflict." *Strategic Studies Quarterly*, Vol. 10, no. 5 (2016), pp. 40.

7 Proliferation or an Arms to Control?

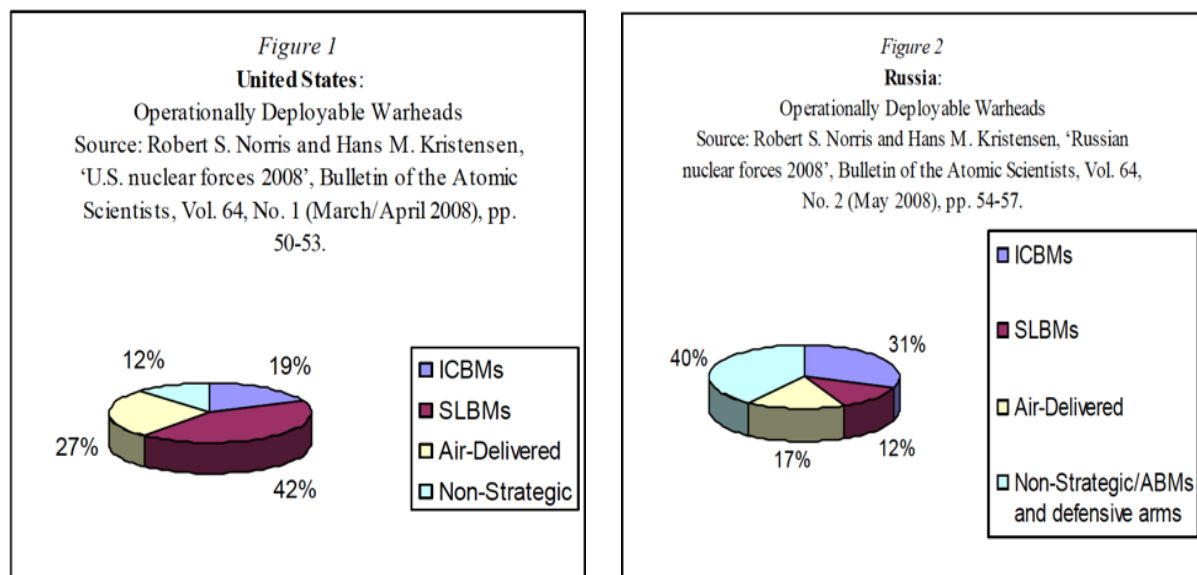
Given the current context of disagreements and rising tensions between USA and Russia over nuclear security policies, it seems a pertinent case to consider whether it may well be time to look past the long-standing INF Treaty following its three decades in existence since coming into force on 1st June 1988 through either increased proliferation of nuclear weapons to act as more powerful deterrents or instead newer arms control agreements? It is here then, one must consider possible alternative to the notion of minimum deterrence, as ‘deterrence’ itself as a thinking and practice in military strategy have continuously evolved and changed. Much of these changes have understandably reflected the political climate of the time. What is clear is that within the current setting, it is getting increasingly problematic for the INF Treaty to continue functioning as one of the primary and overarching nuclear arms-control treaties in effect. What’s more, the notion of ‘minimum’ deterrence which is championed by many of the principles of the INF Treaty is being eroded away by the main two nuclear power states in the USA and Russia. Herein, this chapter aims to analyse the current framework of the main NPT agreements that operate alongside the INF Treaty – most crucially the New START (renewed in 2011) and Nuclear NPT (that came into effect on 5th March 1970, encompassing most the globe). Added to this will be an attempt to outline the possibilities of their continuance in the face of increasing challenges of NWS who seeks to further innovate their weaponry - three of whom in India, Israel, and Pakistan are not even privy to the NPT. In doing so, there is to be an outline of the supposed violations of the INF Treaty levied against both the USA and Russia by each other as well as investigating the role of third party actors such as NATO who influence ‘minimum’ deterrence in the nuclear-policies sphere. Finally, there is to be an evaluation of the possibilities of action that may enable the INF Treaty to continue to be durable, or in lieu of its existence, potential policy alternatives that primarily the US and Russia could find to ensure ‘minimum’ deterrence, and a de-escalation of nuclear tension.

7.1 Analysing the longevity of existing NPT agreements

An analysis of the existing NPT agreements need to firstly take into account what has been achieved thus far, particularly in the context of arms-control. As seen in the two side-by-side pie-charts in *Table 4*, the US and Russia have some clear disparities in the types of operationally deployable warheads that they both possess. Whilst the US has a significantly larger number of Submarine-launched Ballistic Missiles (SLBMs) than Russia, the latter

possesses a much larger share of its warheads as more conventional weaponry such as Anti-Ballistic Missiles (ABMs) and ICBMs. This can be best explained by the presence of a much more advanced American Navy whilst Russia, given its immense land mass, has traditionally focused on ground-based military assets. The effects of the INF Treaty are visible as neither officially contain Intermediate-Range Ballistic Missiles (IRBMs) any longer, though both are well-known to have missile technology that can reach the distance ranges made void by the INF Treaty. The treaty's effects themselves was highly successful in eliminating 2,692 missiles within 3 years of coming into effect in 1991. In terms of specifics, several noteworthy missile class lists were destroyed such as the Soviet SS-20 Saber which was of stark concern to NATO and the West during the Cold War, as well as American Pershing 1a and Pershing II missiles which put most of the Russian subcontinent within range from missile silos based in Central Europe. Thanks, in part to the 'Dual-Track' Decision implemented by NATO which did result in an episode dubbed as the 'Euro-missile Crisis' in 1979, it did manage to pave the way for the discussions that took place at the Reykjavik Summit in 1986, which in turn helped the establishment of the INF Treaty the following year. It continues with an indefinite period of effect. Similarly, the Nuclear NPT, first signed in 1968 - though initially set up with the consensus of last 25 years - has since been amended to last without expiry by the signatories.

Table 4: Comparison of U.S. and Russian operationally deployable warheads



Source: Stoddart, Kristan. "Minimum Deterrence in Theory and Practise". Accessed April 15, 2018. URL:

https://www.bisa.ac.uk/index.php?option=com_bisa&task=download_paper&no...1

Meanwhile the New START Treaty which has been most recently renewed until 2021, effectively replacing the SORT Treaty that expired in 2012, and acts as a follow-up to START I is meant to reduce the number of strategic missile launchers by around half altogether for both the US and Russia. As a result of New START the make-up of operationally deployable warheads for both the US and Russia have both changed in comparison to the statistics shown in *Table 4*. The overall US nuclear arsenal for example, has been reduced by more than 75 percent between 1990 and 2014.⁵⁷ However, this treaty still fails to address the thousands of inactive nuclear warhead stockpiles that are present in the United States and Russia, and in fact was recently criticised by President Trump as being inefficient and favourable towards the Russians during his first official telephone call whilst in office with President Putin in February 2017. All in all, it has become gradually and increasingly more difficult to ascertain not just the durability of these existing nuclear arms reduction treaties but their feasibility in controlling nuclear proliferation. However, the progress made up to this point should not be overshadowed by this reality, as both Russia and the US eliminated close to 50,000 nuclear weapons in two decades between 1988 and 2008, with further reductions envisioned with New START by its renewal period in 2021.⁵⁸

7.2 An outline of ‘accused’ U.S. and Russian violations of the INF Treaty

In order to evaluate whether the INF Treaty can be preserved going forward, there needs to be a breakdown and some scrutiny of the reported violations of the actual treaty by both countries. There are a number of incidents that have put the treaty in serious jeopardy in the near-term. Starting with the gradual extension of Russian military activities in Syria, there have been accusations that the Russians have been developing at least two different ground-launched missiles, the SSC-8, and RS-26 which can be fired using Iskander launchers that are considered to be in violation of the INF Treaty due to their capabilities of range, though the Russian vehemently deny this. It has also been reported by American military officials that Moscow is also considering adding nuclear capability atop ABMs as well as within torpedoes, depth charges, cruise missiles and even ALBMs and SLBMs.⁵⁹ Correspondingly, the Russian’s have responded with their own allegations of American infringement due to its testing of rocket

⁵⁷ Roberts, Brad. *The Case for U.S. Nuclear Weapons in the 21st Century*, pp. 47.

⁵⁸ Doty, Paul. *"The minimum deterrent & beyond."* pp. 135.

⁵⁹ Chilton, Gen. Kevin P. *"On US Nuclear Deterrence"*. **Strategic Studies Quarterly**, Vol. 11, no. 4 (2017), pp. 11.

boosters and drones that can fly in excess of 500km and deliver ordnance on targets. Russian analysts pinpoint the American of deployment of land a ship-based cruise-missile launcher called Mk41VLS which can fire Tomahawk cruise missiles and SM-3 interceptors as well as IRBMs. These are part of the American BMD infrastructure that is currently present in Romania and known as the Aegis Ashore missile defence system.⁶⁰ The US on its part has contested that this would not be possible due to technical and software modifications which would be required. The main body of the Treaty itself divides the prohibited weaponry into three general categories: missiles, launchers, and associated support equipment even if conventionally armed under Articles IV and V. In fairness to this specific violation against the US, the treaty does not account for the case of the Aegis Ashore system as the negotiators did not envisage three decades ago the possibility of a ship-based launcher for this IRBMs.⁶¹

Generally, there has been a constant barrage of back-and-forth accusations by both countries, and this has come about particularly over the past 4-5 years setting in tone a highly uncertain future for the INF as well as nuclear-arms reduction treaties. Added to this has been the unsettling nature of the defence policies followed by the governing regimes in both countries, which have also shaken to a certain extent the foundations of the post-Cold War international security framework. It has also been making 'minimum' deterrence amongst other strategic objectives as untenable. Though the original INF Treaty contains no official language for any form of temporal 'suspension', the most recent defence budget bill for 2019 presented to the US Congress calls for the growth of a new missile system that would clearly contravene the structure of the INF Treaty.⁶² This has effectively gone a step further than the national defence budget bill in 2018, when Congress authorised the DoD to spend in the region of \$58 million to initiate a programme to produce a dual-capable GLCM with a maximum range up to 5,500km.⁶³ Such moves not only pose a danger to the very existence of the INF Treaty, but such unconcealed moves to nullify the provisions of the treaty is likely to spur the Russians to

⁶⁰ Ryan, Kevin. "After the INF Treaty: An Objective Look at US and Russian Compliance, Plus a New Arms Control Regime." *Russia Matters*. December 07, 2017. Accessed July 17, 2018. URL: <https://www.russiamatters.org/analysis/after-inf-treaty-objective-look-us-and-russian-compliance-plus-new-arms-control-regime>.

⁶¹ Ibid.

⁶² Stowe-Thurston, Abigail. "The Wrong Response to Russia's INF Treaty Violation." *Bulletin of the Atomic Scientists*. August 31, 2018. Accessed September 02, 2018. URL: <https://thebulletin.org/2018/08/the-wrong-response-to-russias-inf-treaty-violation/>.

⁶³ Ryan, Kevin. "After the INF Treaty". URL: <https://www.russiamatters.org/analysis/after-inf-treaty-objective-look-us-and-russian-compliance-plus-new-arms-control-regime>.

continue with their own possible violations. Ultimately, in this manner, the INF Treaty is likely to inevitably disintegrate. In sum, as has been outlined, these wide range of accusations of violation of the INF Treaty by both sides reveal the extent to which principles of defence strategy including ‘minimum’ deterrence seems to be gradually falling by to the wayside. Instead, both the US and Russia seem well-set to continue their ongoing nuclear, ballistic missile, and armaments research and development programmes that will sooner or later likely infringe much more noticeably on not just the INF Treaty, but also the New START. Likewise, the added step of putting these suspect weapons and technology into action or combat as lately seen with the Russian 3M14 Kalibr (labelled as SS-N-30A) SLCM in Syria raises the added possibility that these weapons whether already in violation or not – gain the prospect of being fine-tuned and modified further to actually do so in the near future. Also, this undoubtedly fosters an atmosphere of mutual hostility and suspicion between the two governments of Russia and the USA. The lack of transparency unlike what was evident in the 1990s and for a short period between 2009 and 2012 also genuinely harm the prospects of nuclear-arms reduction agreements and provisions of not just being adhered to, but also renewed.

7.3 The Role of Third Party Actors

Figure 3: Map depicting Russian and NATO conventional military assets in Europe



Source: Accessed 12 February, 2018. URL: <http://www.spiegel.de/international/world/us-delivers-ultimatum-to-nato-regarding-russian-missiles-a-1182426.html>

The primary third party actor acting directly within the context of US-Russian nuclear strategy in Europe as well as one that has been very much involved in negotiations between the two states has been NATO. Originally spearheaded by the France, UK, USA, this alliance system has more than doubled in membership since its foundation in April 1949 from 12 states to 29, with 4 more officially observed and listed as aspiring members. As displayed on the map in *Figure 3*, it is obvious why NATO posits a major say in how nuclear defence objectives are implemented in Europe, as it shares a huge land border with the Russian Federation, both on its eastern and southern flanks. What is remarkable is that in the almost three decades since the culmination of the Cold War, as well as the dissolution of the USSR, a number of former Soviet bloc nations have joined this transatlantic security partnership. This has not only been a major source of frustration for Russia, but has also heightened fears of being soon being surrounded on all fronts along its borders in Europe and potentially in the future, the Caucasus, given Georgia where the vast majority of the population are in favour of an eventual accession into NATO. Not only is NATO modern-day mission tasked with preserving harmony and peace in Continental Europe as well as the balance-of-power here, but also to work in conjunction with the USA to deter aggression from Russia. It was just in December 2017, that NATO Secretary-General, Jens Stoltenberg passionately defended the importance of the INF Treaty by commenting, *"I'm part of a political generation in Europe which really grew up with the very intense debate related to the deployment of the SS-20s and the Pershing,"* before adding, *"We also very much welcomed the INF Treaty which then eliminated all these weapons in Europe. So, I think that the INF Treaty is a cornerstone."*⁶⁴ These statements also help underline the importance that NATO accords to maintaining the principles of nuclear security and deterrence enshrined by the INF Treaty. Indisputably, NATO is very much tied into helping solve the constantly increasing challenges to 'minimum' deterrence. The INF treaty in particular was though to place a premium on not just revitalizing NATO's conventional forces but also to shift attention to actual warfighting proficiencies than just relying on deterrence.⁶⁵

To a large extent, an evident theme of the existing nuclear-arms reduction treaties is that they fail to sufficiently capture the consequences of a mixture of changes in European geopolitics such as NATO enlargement, as well the continuing technological advancements of nuclear

⁶⁴ Barnes, Julian E., Paul Sonne, and Brett Forrest. "U.S., Russia Scrap Over Missiles." *The Wall Street Journal*, November 17, 2017.

⁶⁵ Record, Jeffrey, and David B. Rivkin. "Defending Post-INF Europe." *Foreign Affairs*, Vol. 66, no. 4 (1988), pp. 735-754.

weapons. Ultimately, however, the consequences of these changes have been to put at risk both sides of the NATO-Russia divide which were previously more protected against ICBMs and Weapons of Mass Destruction (WMD).⁶⁶ Nevertheless, there are a series of ways in which NATO may be able to overcome the issues of deterrence instability. A recent report by the European Leadership Network details that much of these problems stem from Russia's "*integrated strategic deterrence*" that is too focused on taking pre-emptive strikes in all possible domains of warfare whilst creating a nature of unpredictability in her actions.⁶⁷ On top of the report depicts that NATO follows a policy of "*modern deterrence*" which remains conflicted about projecting restraint and a concern that they are in too weak a position to deter Russia, with the negative interplay between these two faces causing misunderstanding in deterrence signalling which can be the cause a rapid escalation in a potential crisis.⁶⁸ Some analysts misinterpret the idea that in such situations demonstrating the deterrence resolve of the respective parties against each other would help induce or retain credible and/or minimum deterrence. In fact, as seen over the last four years since the annexation of Crimea, such actions can have greater proclivity to instigate wider crises and lead to more boldness to repeatedly infringe upon rules and restrictions – in this case, the INF Treaty, and other arms-reductions agreements. According to NATO policy analysts, the Russian concept of 'integrated strategic deterrence' is definitely more holistic than NATO deterrent tactics, as they also encompass ideas including 'compelling through containment', and because the Russian model adopts whole government-wide approach rather than just purely military components.⁶⁹

Unlike these more confrontational stances above, the best prescribed course of action instead to downplay tendencies for tensions and crises to develop appear to be to emphasise making the existing deterrence postures fail-safe against unintentional confrontations. This would most notably be through reducing the importance of nuclear arsenal as part of their deterrence positions as well as channelling a better and more nuanced style of crisis management that can help allay apprehensions during times of crisis. From a conventional strategy perspective,

⁶⁶ Rumer, Eugene. "*A Farewell to Arms . . . Control.*" Carnegie Endowment for International Peace. April 17, 2018. Accessed May 04, 2018. URL: <https://carnegieendowment.org/2018/04/17/farewell-to-arms-.-.-control-pub-76088>.

⁶⁷ Frear, Thomas, Lukasz Kulesa, and Denitsa Raynova. "*Russia and NATO: How to Overcome Deterrence Instability?*" European Leadership Network. April 27, 2018. Accessed April 28, 2018. URL: <https://www.europeanleadershipnetwork.org/report/russia-and-nato-how-to-overcome-deterrence-instability/>.

⁶⁸ Ibid.

⁶⁹ Frear, Thomas, Lukasz Kulesa, and Denitsa Raynova. "*Russia and NATO: How to Overcome Deterrence Instability?*" Accessed April 28, 2018. URL: <https://www.europeanleadershipnetwork.org/report/russia-and-nato-how-to-overcome-deterrence-instability/>.

NATO's emphasis following the Wales Summit of 2014 has been to implement the Readiness Action Plan (RAP) which is encapsulated by the two pillars of 1) assurance measures (increasing military presence and action to strengthen deterrence), and 2) adaptation measures (augmenting the effectiveness and of the NATO NRF).⁷⁰ This second step has also witnessed NATO increasing this presence via multinational rotational contingents since February 2016, especially in the Baltics. Yet, since the Warsaw Summit of 2016, NATO still needs to redefine and provide more clarity on how it will continue in terms of a nuclear alliance' with the USA.⁷¹ However, ultimately, rather than conducting a show of force on a more regular basis, more streamlined avenues of diplomatic dialogue can help solve deterrence issues between NATO and Russia. The same can hold true of course between the Americans and Russians, however, the picture is more juxtaposed as a lot more is at stake geopolitically between the two.

7.3 A future for the INF Treaty?

Though the current ongoing situation appears to deliver little promise and cause for optimism in maintaining the framework of the INF Treaty in the long-term, there are certainly ways in which it can be preserved or utilised as a foundation for succeeding nuclear arms-reduction and NPT treaties. In the USA, there is now a significantly more direct drive for the enhancement of its existing nuclear triad such as through intensified funding for newer more advanced armaments and missile technologies as seen with the increased tests around hypersonic missiles. Similarly, in Russia, the fear-inducing strategic benefits and deployment of advanced missile systems – for now, conventional - against its closer rivals is being harnessed, as well as gaining experience in battle situations further afield. In fact, President Putin himself has assertively dictated a central role for nuclear weaponry as part of Russia's foreign policy, especially given that Russia feels that the current framework of arms control agreements puts it a visible disadvantage in comparison to the USA. There is also the fact that the INF Treaty remains to this day, bilateral between the Russia and US which the former often uses as a point of contention, especially given the increasing prominence of rising NWSs like China, India, and Israel. As a result, several top Russian military officials and as well as a rising number of governmental figures feel far less inclined to continue with what in their perspective remains a relic of the Cold War era. In this sense, it seems far more complicated to gain the Kremlin's

⁷⁰ Anderson, Matthew P. "NATO Nuclear Deterrence The Warsaw Summit and Beyond." **Connections**, Vol. 15, no. 4 (2016), pp. 10.

⁷¹ Ibid, pp. 30.

support to continue with the INF Treaty, and perhaps even to find a successor for it. Furthermore, the military conditions which persuaded the completion of the INF Treaty appear far less applicable now. For instance, though the Russians continue to suspect a surprise NATO attack, the level of threat posed by their GLBMs and cruise missiles is far less than three decades. Nonetheless, Russia still contends that the INF Treaty in particular limits its ability to safeguard itself against a possible NATO assault.⁷²

In spite of these overriding issues and differing viewpoints that are on opposite ends of the spectrum, the INF Treaty still operates at present as something of an overarching precaution against any obvious development or ostentatious displays of nuclear arsenal by both sides, especially those under the banned distance ranges under the Treaty. As long as there appears to be the current stance edging towards eventual complete non-compliance with the INF Treaty, then it is understandable if both sides appear to take advantage of the capabilities of their nuclear arsenal and weapons programmes. As of now, however, neither side has been able to provide clear-cut proof of violation, and to this end, the likelihood remains that any actual infringement of the articles dictated by the INF Treaty, will continue to take place surreptitiously, well into the next decade. It should be underscored though that if the INF Treaty falls through, then global as well as European security will suffer a heavy blow. This has been dramatically and succinctly conveyed in another striking report by the European Leadership Network which hypothesizes that the fate of arms control as we now know it is also at stake with the still-existing INF Treaty which managed to single-handedly remove an entire class of US and Soviet/ Russian cruise missiles and GLCMs.⁷³ The report helpfully summarises the present situation of the INF Treaty by saliently arguing that no amount of military or socio-economic coercion by the Americans or NATO will likely bring back Russia into compliance. Though it may well not fully resolve the crisis, it can be contested that these would simply serve as an adjunct to negotiations, because continued and assertive diplomacy if channelled in the right way with a show of transparency or compromise by one side, is likely to bring the other side to the negotiating table. After all, Russia is clearly aware that in spite of its variety of nuclear arsenal, and increased modernization of its armed forces, it still would remain

⁷² Velez-Green, Alexander. "Moscow Has Little Reason to Return to the INF Treaty." Defense One. May 04, 2018. Accessed September 20, 2018. URL: <https://www.defenseone.com/ideas/2018/05/moscow-has-little-reason-return-inf-treaty/147977/>.

⁷³ Kubiak, Katarzyna. "The INF Treaty: The Way Forward." European Leadership Network. May 17, 2018. Accessed August 22, 2018. URL: <https://www.europeanleadershipnetwork.org/policy-brief/the-inf-treaty-the-way-forward/>.

outmatched in an all-out conflict against a combined US-NATO element. Therefore, even though they are increasingly in a position to galvanize its diplomatic clout and political power, especially in its closer geographical spheres of influence, Russia is highly unlikely to directly begin a nuclear war with the West. The report does however suggest some possibilities of solving the current limbo of the INF Treaty which it stipulates soon requires a positive breakthrough or otherwise discontinuation. Preserving it would be as alluded to previously in this chapter achieved by better crisis management and communication through diplomatic outlets with Russia. It also involves trying to assemble a better understanding through talks of Russian motives behind their alleged development of missile systems prohibited by the INF Treaty. In doing so it will become more visible to the West that these developments in Russian missile and nuclear technology are not solely a response to US or NATO actions, but furthermore that they are attempts to address shifts in military power taking place both Russia's Asian and European flanks.⁷⁴ However, in regards to dialogue with Russia, as one academic on nuclear policy, James M. Acton has summarised, a strategy involving diplomatic, economic, and military pressure as three vital components has to be executed in a manner which Moscow cannot overlook.⁷⁵ In doing so, it will dawn on Russia that, firstly, the costs associated with ongoing noncompliance will outweigh any benefits; secondly, these costs get rescinded if the compliance is observed again, and thirdly, it would aid them to save face and some prestige.⁷⁶

7.4 Alternative Policy Options – Doing away with ‘Minimum’ Deterrence

Having considered the prospects for the future durability of the INF Treaty, it is highly pertinent to consider and chart what other alternative policy options there might be. This would be especially true with the concept and practice of ‘minimum’ deterrence which in itself is seemingly being less and less adhered to by the US and Russia in terms of their strategic objectives and responses to each other, not least, within the realm of nuclear weapons. Opponents of deterrence dogma have articulated that this may not be such a detractor as it has fostered an assertive apolitical style that honoured preventative and punitive measures, which generated an atmosphere of distrust over negotiations, and mostly presented compromise as a

⁷⁴ Ibid.

⁷⁵ Acton, James M. "A Strategy for (Modestly Increasing the Chance Of) Saving the INF Treaty." Carnegie Endowment for International Peace. May 11, 2017. Accessed August 08, 2018. URL: <http://carnegieendowment.org/2017/05/11/strategy-for-modestly-increasing-chance-of-saving-inf-treaty-pub-69956>.

⁷⁶ Ibid.

weakness.⁷⁷ Sceptics of minimum deterrence also pinpoint a central issue with its practice in that a merely counter-value reactive attack garners the defender no plausible advantage, both offensively and defensively in the event of an actual exchange.⁷⁸ Contrastingly, advocates of minimum deterrence, stress that the need to keep a counterforce capability against another NWS or major power to address such a conceptual shortcoming is not very convincing, and that holding Russian cities at risk though standard counter-value targeting is satisfactory to deter their larger arsenal of GLCMs and non-strategic weapons. Such a perspective appears to signify an extension to Kenneth Waltz's realist analysis of deterrence policies and interchanges.⁷⁹ It should be taken into account as well that whilst there seem to be certain moves towards proliferation, particularly among the bureaucracy in both the current American and Russian administrations, there have also been attempts to maintain a reasonable level of reduction in WMDs such as operationally deployable warheads from the Cold War era. Using their positions as members of the UNSC, both states have also formed a united front when it has come to putting pressure on newer NWSs including Iran, and North Korea to comply with Nuclear NPT regulations. Of course, there is also the realization that especially the rise of China as a nuclear-power state with its economic prowess to fall back on, will in the subsequent decades require both the USA and Russia to accustom themselves to a multi-polar system of global nuclear superpowers. Despite, the overcast shadow looming over it, there are a number of possible policy alternatives for Russia and the USA to save the INF Treaty which include:

- Feasibly coordinating a new memoranda of understanding to establish definitions that would describe the characteristics of newer weapons technologies and also make it possible to delineate them from IRBMs and Short-Range Ballistic Missiles (SRBMs)
- Synchronising parameters for the testing of target missiles
- Develop new descriptions for attack UAVs as a new category of nuclear-capable arms subject to the INF Treaty.
- Reach better agreements on transparency measures in regards to the contested American SM-3 vertical launch systems in Romania and later Poland, as well as the Russian SSC-8 and RS-26 which are perceived to be in violation of the INF Treaty.⁸⁰

⁷⁷ MccGwire, M. "Nuclear Deterrence". **International Affairs (Royal Institute of International Affairs 1944-), Vol. 82, no. 4 (2006)**, pp. 771-784.

⁷⁸ Wiitala, Joshua D., "Challenging Minimum Deterrence", pp. 21.

⁷⁹ Ibid, pp. 22.

⁸⁰ Mizin, Victor. "Saving the INF Treaty." Carnegie Moscow Center. March 07, 2018. Accessed July 21, 2018. URL: <https://carnegie.ru/commentary/75708>.

Now, considering each of these suggested alternative policy options, firstly, the proposal to construct a new memoranda of understanding in allowing for a new class list of weapons that can be incorporated under the INF Treaty framework would certainly iron out any debates between the Russia and USA over which potential new missile technologies that might upset the provisions of the treaty. However, getting the two states to agree to this requires a general level of openness of their defence projects and this is unlikely to be forthcoming. But, conducted behind closed doors and with possible mutual concessions made, both states could achieve this policy measure using concerted diplomatic efforts. The second and third points also connect to the first in elaborating further on the treaty regulations by including contested types of weapons systems under the prohibited section of ballistic missiles and TNWs, which would help blur the lines less. And the final objective again reflects the need for compromise between the two state states in permitting the presence of site inspectors from each other to inspect the weapons under question, and to ensure going forward that they do infringe upon the INF Treaty. Whether these on-site verifications are to be conducted on a regular or an intermittent basis would need to be established. As already stated, ultimately, the future preservation of the INF Treaty would need a wider set of measures to effectively continue, and this in turn would increase the likelihood of ‘minimum’ deterrence to continue in practice. Thus, it would likely reduce the prospect of a new arms race between the US and Russia enveloping global geopolitics.

Despite the cracks underneath the surface, the importance and worth of the INF Treaty continues to be orated in the public eye, as seen with comments from the Russian Foreign Ministry in response to American accusations of violating the INF Treaty. The official statement was quoted as stating *“that Russia will continue to fulfil the INF Treaty in its entirety for as long as our partners do the same. We are ready to engage in a non-politicised, professional dialogue with the United States regarding the issues around the treaty”*.⁸¹ Whilst the comments could be brushed aside cynically as mere political propaganda, it is still useful in underlining how the Russian position is firm on having reciprocal rights if there is to be an efficient nuclear-arms control future with or without the INF Treaty. However, the tone also seems to state that they are willing to boldly pursue alternative policy options in the face of

⁸¹ The Ministry of Foreign Affairs of the Russian Federation. "Comment by the Information and Press Department on the 30th anniversary of the INF Treaty." News release, December 08, 2017. Accessed January 20, 2018. URL: http://www.mid.ru/en/web/guest/kommentarii_predstavitelya/-/asset_publisher/MCZ7HQuMdgBY/content/id/2982610.

more American ultimatums or harsher targeted sanctions. In exploring further policy alternatives to the INF Treaty, the idea of 'nuclear sharing' has been increasingly mentioned in diplomatic circles. Historically, this concept was used as part of the 1958 US-UK Mutual Defence Agreement. Similarly, it has been already part of NATO's nuclear deterrence policy whereby the participant members consult with each other and undertake common decisions on nuclear arms policy and maintaining the relevant technical equipment. In this case, there are 3 NWSs within NATO consisting of France, the United Kingdom and USA, but only the latter has offered weapons for nuclear sharing, currently stationing some 150 B61 bombs across six bases in locations including Germany and Turkey. As per the new American NPR in 2018, these weapons are to be replaced with newer models, commencing in 2020. This does not bode well for the possibility of 'minimum' deterrence continuing to operate as a policy measure, whether as 'credible' (with the ability to withstand an initial barrage before conducting an effective second-strike) or even 'pure' minimal deterrence (containing the assurance of 'No First Use' for the available nuclear arsenal).

When concentrating on 'minimum' deterrence as principle of practice, it simply represents one method of determining security dilemmas such as by eliminating the perceived vulnerability of states to continually expand upon their nuclear weapon stockpiles. At the same time, however, it can be difficult to prescribe the correct levels at which minimum deterrence can be accomplished. This is partly because it is also problematic to ascertain damage levels that would be unacceptable for an opponent. Moreover, minimum deterrence in practice can have the inconsistent effect of emboldening a state possessing nuclear capability such as China when confronting a superior NWS like the USA. It is crucial to remember that if the INF Treaty does go onto unravel, it will likely open the door to an arms race in the production and deployment of ballistic missiles weakening global security, an aspect that minimum deterrence as a strategy seeks to avoid.⁸² Not only that, such an event would undermine the support for and deteriorate adherence for other arms-control agreements including New START, and constraining attempts to establish new treaties. Stephen J. Cimbala, a distinguished researcher on US national security has outlined how a bolder approach in America's NPR can be combined with 'minimum deterrence'. He describes such a policy as strategic 'defensivism' meaning "*a policy stance that privileges reductions in offensive nuclear weapons*" whilst maintaining a general

⁸² Pifer, Steven, and Oliver Meier. "Are We Nearing the End of the INF Treaty?" URL: <https://www.armscontrol.org/act/2018-01/features/we-nearing-end-inf-treaty>.

standard of minimum deterrence that can be “*combined with additional deployments of improved missile defenses and offensive long-range conventional weapons.*”⁸³ Still, for such a strategic policy to be feasible, it needs to provide both deterrence against possible nuclear attack and intimidation aimed at US allies, as well as a clear-cut reassurance that the US can retain an appropriate amount of nuclear flexibility plus resilience in case of an unexpected disaster. In addition, another obstacle for a posture of minimum deterrence is its inability to account for the prospects of the a very limited range of use of nuclear weaponry in an otherwise conventional conflict as other weapons systems continue to revolutionize, even though the US enjoys both a nuclear and conventional force superiority over Russia.⁸⁴

Due to such shortcomings to minimum deterrence, there have been policy options already in discussion and which have been looked at in order to elongate the survivability of the INF Treaty. The most notable among this has been the idea of multi-lateralizing the treaty, or in other words, expanding its reach beyond just Russia and the USA, especially given its prior success in massively reducing both countries’ deployed strategic and non-strategic warheads. In fact, a decade earlier in 2008, there was being mooted amongst the American and Russian governments the notion of expanding the INF Treaty to other NWSs by heading a relevant initiative at the Conference on Disarmament in Geneva, although unfortunately this failed to get a response and as a result, the idea failed to gain any traction. The Russians themselves, who originated the idea, now seem to have no major interest in pushing on this through diplomatic channels given the failure of the US to actively support this as well. This is despite the recent protests of the Russian government about the fallible nature of the INF Treaty given its lack of coverage to newer NSWs. Also, to a large extent, the lesser NWSs including China have been reluctant to have the provisions on what they say as much more relevant for the significantly larger nuclear arsenals of the Russia and USA, apply to their own nuclear weapons capabilities which are nowhere near as big and very much still industrializing. Russia for its part is increasingly unwilling to proceed on widespread reduction on nuclear warheads unless it begins to apply to China, and other NWSs. The Americans also feel that in this regard future provisions should apply to other established nuclear powers in France and the UK which has created a sticking point between the USA and these two traditional European allies. Additionally, even though political imperatives held the prime responsibility for the West’s

⁸³ Cimbala, S.J. “*Strategic “defensivism” and post-reset blues*”, pp. 29.

⁸⁴ Wiitala, Joshua D., “*Challenging Minimum Deterrence*”, pp. 22.

negotiations with the Soviets that led to the INF and CFE treaties, the British and French governments from the outset were adamant in their objection to any inclusion of their own nuclear forces.⁸⁵ Moreover, policymakers in the US and Russia view the unlimited duration of the INF Treaty as a fundamental drawback, since if the original INF Treaty had a limited period of function, similar to that of START I, the US and Russia would have most likely started to negotiate a replacement treaty already in the 1990s accounting for the evolving dimension of international situation and its related challenges.⁸⁶ Instead, we appear to have reduced the INF to something of a status symbol and “lose value as an instrument of international security”.⁸⁷

Therefore, the idea of multi-lateralizing the INF Treaty seems unlikely to receive any significant level of endorsement from either the USA, Russia, or even other NSWs like China, India, and Pakistan. It has also led to separate talks being conducted by the West and Russia to curb the nuclear ambitions of rogue states like North Korea, and other volatile nations such as Iran. Finally, there is also the policy alternative, as has been already touched upon in this chapter which would be to construct a ‘new arms control agreement’. Some policy experts have postulated that even if the US and Russia continue to renew their production of SRBMs and IRBMs, it would still be possible to attain the original goal of the INF by flipping the focus towards nuclear warheads and in thereby reducing the threat of a pre-emptive first-strike which is the most destabilizing.⁸⁸ Essentially, with such an approach, a new arms-control reduction treaty can focus on controlling the actual nuclear warheads – both strategic and non-strategic – rather than just the delivery systems, which in effect would tackle head on the main issue facing non-proliferation. For ease of application, and given the multitude of political difficulties, it may well be best for any such new agreement to continue in a bi-lateral manner between Russia and the USA. Likewise, a new deal should account for technological advancements including latest weapons systems including missile-defence interceptors, air-launched systems, drones and any generally delivery systems capable of carrying TNWs.⁸⁹ Nuclear deterrence at its core after all, is treated as a numbers game by Russia and the USA. In a very thought-provoking work, two of Russia’s foremost security specialists, Alexei Arbatov and Vladimir Dvorkin have

⁸⁵ Davis, Lynn E. “Lessons of the INF Treaty.” *Foreign Affairs*, Vol. 66, no. 4 (1988), pp. 727.

⁸⁶ Sokov, Nikolai. “Are Arms Control Agreements Losing Their Value?” *The National Interest*. December 07, 2017. Accessed February 22, 2018. <https://nationalinterest.org/feature/are-arms-control-agreements-losing-their-value-23533>.

⁸⁷ Ibid.

⁸⁸ Ryan, Kevin. “After the INF Treaty”. URL: <https://www.russiamatters.org/analysis/after-inf-treaty-objective-look-us-and-russian-compliance-plus-new-arms-control-regime>.

⁸⁹ Ibid.

advocated serious arguments for the termination of ‘nuclear deterrence’ altogether, arguing that it is becoming increasingly irrelevant in the face of evolving present and real-world dangers including international terrorism, drugs and arms trafficking, ethnic and religious strife as well as illegal migration. By arguing that minimum nuclear deterrence itself has the paradoxical of enticing proliferation amongst rivals, they state that there are 3 steps to end nuclear deterrence including the “*de-alerting*” of American and Russian nuclear forces, developing a joint ballistic missile early warning system (BMEWS) with monitoring functions, and to jointly deploy BMD systems.⁹⁰ These steps if followed through by policy makers would herald a marvellous constructive strategic partnership between the two global powers for enhanced conventional defence, and also allow for a more extensive security accommodation of Russia. But it should not be discounted that policy-making about nuclear force structures are incredibly complex and interconnected as states must cope with “*capacity constraints while responding to international threats, adjusting to rivals' arsenals, and coordinating with nuclear allies.*”⁹¹ Overall, even though the challenges and initial difficulties may seem averse, policy-makers do have a range of options as outlined to potentially reduce the reliance of both the USA and Russia on their nuclear arsenal for acting as deterrents. Eventually, it will simply come down to the policy-makers and bureaucrats in power to find a middle ground using diplomatic tact order to press ahead with such measures.

At the very least, within the near-future it would be best served for global nuclear security and minimum deterrence in Europe, if the US continued to observe the INF treaty’s provisions, as American withdrawal from it would effectively enable the Russians from any legal obligation to observe its regulations. It would also have the crucial impact of preventing the Russians from manufacturing, testing, and then deploying INF and IRBM missiles without constraint. In doing so, the USA needs to concentrate its diplomatic efforts not just by initiating more sanctions that might just serve to embolden Russia’s stubbornness and which they can endure, but instead continue to diplomatically pressure for a new nuclear arms-reduction treaty. Therefore, the current Trump administration can take inspiration from how the Reagan’s government proceeded in the 1980s after the discovery of the Krasnoyarsk large phased-array radar that violated the ABM Treaty of 1972, by continuing to observe that treaty which

⁹⁰ Arbatov, Alexei, and Vladimir Dvorkin. *Beyond Nuclear Deterrence: Transforming the U.S.-Russian Equation*. Washington D.C.: Carnegie Endowment for International Peace, 2006, pp. 11

⁹¹ Gartzke, Eric, Jeffrey M. Kaplow and Rupal Mehta, “*The Determinants of Nuclear Force Structure.*” **The Journal of Conflict Resolution**, Vol. 58, no. 3 (2014), pp. 501.

concurrently pressed the Soviets into compliance and negotiating a new arms-reduction treaty which culminated with the INF Treaty and the Soviets dismantling the Krasnoyarsk radar in 1990.⁹² In essence, alternative policy options for the US would broadly require ‘flexibility’ in approach as well as moving from general minimal deterrence practices towards other facets including escalation control and survivability. On the other hand, for Russia, it will very likely benefit them if they were to reinitiate ideas to convince the Americans of multi-lateralizing the existing INF Treaty or any such new nuclear arms-control agreement. In the long-run, it would reduce Russian disenfranchisement and attract less hostile sanctions from the West which they view as a part of the lop-sided and unfair treatment of accusations that they receive. But, achieving such conventional force balancing or parity is very unlikely in the long run. For example, according to the director of the Russian Nuclear Force Project, Pavel Podvig, even if the USA manages to somehow coax Russia back into complying with the INF provisions, going forward it is inevitable that the Americans will continue to expand charges to more classes of conventional weaponry and missile delivery systems such as the Iskander-M launcher.⁹³

Still, there is also reasonable level of value in keeping minimum deterrence, as it enables certain NWSs to utilize their nuclear arms effectively in their primary capacity of acting as a credible deterrent versus a large-scale nuclear attack by an adversary plus existential hazards including a conventional invasion.⁹⁴ Even though the practice of minimum deterrence as a policy appears to ebbing away in arms relations between the US and Russia, it is still being efficiently applied between other rivals like India and Pakistan, as well as China who is reinforcing its own position as a growing military power and player with economic prowess in global geopolitics. On top of these suggested attempts at encouraging Russia to re-enter full compliance and observance of the conditions of the INF Treaty, the US and its allies can sustain the use minimum deterrence as a policy by continuing support for the government in Kiev and aid for Syrian rebels to ultimately make both conflicts unsolvable on Moscow’s terms without having prohibitive costs for Russia.⁹⁵

⁹² Pifer, Steven. *"The INF Treaty, Russian Compliance and the U.S. Policy Response."* Brookings. March 03, 2017. Accessed July 20, 2018. URL: <https://www.brookings.edu/testimonies/the-inf-treaty-russian-compliance-and-the-u-s-policy-response/>.

⁹³ Majumdar, Dave. *"Novator 9M729: The Russian Missile that Broke INF Treaty's Back?"*. The National Interest, December 07, 2017. Accessed January 22, 2018. URL: <http://nationalinterest.org/blog/the-buzz/novator-9m729-the-russian-missile-broke-inf-treatys-back-23547>

⁹⁴ Wiitala, Joshua D., *"Challenging Minimum Deterrence"*, pp. 24.

⁹⁵ Allison, Graham, and Dimitri K. Simes. *"A Blueprint for Donald Trump to Fix Relations with Russia."* The National Interest. December 19, 2016. Accessed June 18, 2018. URL: <https://nationalinterest.org/feature/blueprint-donald-trump-fix-relations-russia-18776>.

8 Conclusion

Having gone through this research and study, it is evident that the current framework of international security is under severe constraints and tension, especially the area of nuclear-arms reduction. The INF Treaty was not necessarily a pioneer of agreements, but arguably the most ground-breaking of those agreed during the Cold War between the USA and USSR, which has also helped define subsequent nuclear non-proliferation negotiations, and deals. Added to this, the concept and idea of minimum deterrence as an official policy dogma appears to no longer be the priority for the Russian Federation and USA, the two most foremost nuclear powers. Moving forward, it appears that there is a great deal of uncertainty about the future of minimum deterrence's applicability when it comes to bi-lateral nuclear arms relations between the two states. In addition, added to this complex make-up is the presence of newer NWSs, not least China, who are set to play a fundamental role in future arms-reduction talks using its economic prowess.

But, ultimately it will still be the primary nuclear hegemons in the US and Russia who will chiefly dictate affairs when it comes to treaties on TNWs. At the moment, in terms of policy alternatives, it is vital and makes more sense for the USA in particular to abide by the INF Treaty, despite it being in face of lingering questions about Russian commitment to its cause. With little clear-cut proof by either of the two superpowers regarding INF Treaty violations given the various accusations of infringement in recent years, it is likely that this atmosphere of mutual distrust will continue. At least, by public accounts, Russia is trying to honour its responsibilities as part of the New START Treaty, notwithstanding ongoing controversies regarding their seizure of the Crimea, and support for Ukrainian separatists as well as military aid for Al-Assad's regime in Syria. In adhering to the INF Treaty, the USA also assists with the continued implementation of New START, despite the increasingly belligerent stance of Congress as seen with the vastly increased defence budget that has been specifically for weapons and missile programmes as part of the expansive revamp of their nuclear 'triad' in the coming years. Hence, preserving the INF Treaty is very much in American national interest as well as Russia's, as it should in practice continue as a deterrent to reduce nuclear threats to both.⁹⁶ However, the situation is not helped by the current lack of transparency between Washington and Moscow's and the unpredictability of Russian strategic and offensive forces.

⁹⁶ Ryan, Kevin. "After the INF Treaty". URL: <https://www.russiamatters.org/analysis/after-inf-treaty-objective-look-us-and-russian-compliance-plus-new-arms-control-regime>.

To resolve this impasse, the best course of action as a policy alternative is for both to maintain some semblance of the INF Treaty. Coupled with this should be the continuance minimum deterrence in any of its formats in order to organise a new nuclear arms-reduction treaty that will transition from controlling delivering systems to specifically focusing on regulating both strategic and non-strategic warheads. As can be seen in *Table 5* below, this is important because it is still Russia and the USA that contain the vast majority of global nuclear warhead stockpiles. In attempting to redress nuclear threats and manage the likely conversion from pure minimal deterrence, the Trump administration will need to make smart decisions if it is to preserve the INF Treaty or build a successor to it, and this will need to include concerted action with its NATO allies for a better dialogue with Russia.

Table 5



Source: Accessed 01 March, 2018. URL: <https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat>

As this research has tried to outline, a number of policy alternative are at the disposal of both the US and Russia, though it is the former that is very much in the driving seat in accomplishing and perhaps enforcing effective nuclear arms-reduction treaties going forward. In the past treaties have contained provisions to deal with compliance problems as seen with the Special Verification Commission (SVC) set up by the INF Treaty to conduct on-site inspections as well as provide deal with disputes for the aggrieved party prior to escalating them as far as the UN

Security Council. To summarise, as complicated as diplomacy can be, it is not as messy as substituting it for enforcement by means of war or even sanctions in order to reduce nuclear dangers.⁹⁷ Henceforth, the US and Russia policy-makers should bear in mind the wider importance of the existing INF Treaty. This includes linking their strategic actions on other arms control treaties to it. From the American perspective, this could entail diplomatic compelling of Russia by threats not to extend New START beyond 2021 unless the Russians move back towards full observance and compliance of the INF Treaty. In combination, the US could use counterintelligence evidence of supposed Russian violation of other arms-control agreements to strengthen its position such as the Open Skies Treaty of 2002 that was aimed at establishing a programme of unarmed aerial surveillance flights over the territory of participating states, intended to act as confidence-building measure and increase mutual understanding.⁹⁸ The Republican party has also recommended to the Trump administration to prepare for a world without the INF Treaty if Russia cannot be brought back into compliance, such as by developing military response plans. This includes the development of certain elements such as counterforce capabilities to prevent attacks from IRBMs, expanding BMD systems domestically and abroad as well as countervailing strike competences as seen in Section 1243 of the 2016 National Defence Authorization (NDA) Act.⁹⁹ As a further alternative, there is even a third type of policy for military planners termed ‘infrastructure’ targeting aimed to hold at risk critical national assets such as energy nodes, fuel refineries, and transportation hubs.¹⁰⁰ It is believed by nuclear defence analysts that this removes the risks of instability from ‘counterforce’ targeting plus the collateral damage and moral outrage that would be sparked by ‘counter-value’ strategies.

For the present-day international setting, if the practice of ‘minimum’ deterrence is going to continue in some vein with nuclear-arms relations between Washington and Moscow, they must also find ways of managing the INF Treaty’s collapse, if it cannot be preserved. This is despite it going against the prevailing mood of arms proliferation in the military strategies of

⁹⁷ Krepon, Michael "The Most Dangerous Aspect of Trump's Nuclear Posture." Arms Control Wonk. January 23, 2018. Accessed April 12, 2018. URL: <https://www.armscontrolwonk.com/archive/1204665/the-most-dangerous-aspect-of-trumps-nuclear-posture/>.

⁹⁸ The Senate Republican Policy Committee. "Responses to Russian INF Treaty Violations – Senate Republican Policy." Medium. March 08, 2017. Accessed November 06, 2017. URL: <https://medium.com/@SenateRPC/responses-to-russian-inf-treaty-violations-f5f3a6e02de2>.

⁹⁹ Ibid.

¹⁰⁰ Boyd, Dallas. "Revealed Preference and the Minimum Requirements of Nuclear Deterrence." **Strategic Studies Quarterly**, Vol. 10, no. 1 (2016), pp. 65.

both nations at this present time. This can also be demonstrated by the not-so-discrete steps taken by both the Trump and Putin governments in reaffirming their commitment to nuclear modernization. As discussed in the previous chapter, there exist alternative policy routes to conserve the treaty such as prospects for the US to make a unilateral offer of missile defence transparency in order “*to break the stalemate, win moral and negotiating high ground*” as well as build pressure on Russia to come back into compliance.¹⁰¹ In addition, the role of third party actors is also fundamental, particularly in Europe with NATO who could try to convince Washington to deliberate verifiable limits on regional BMDs if Russia does resolve its non-compliance issues over suspect missiles.¹⁰² Equally, the West could also open a discourse especially with China and India to see whether the proposal to multi-lateralize the treaty with a comprehensive ban on all classes of ICBMs can be revived.

Ultimately, there are also risks involved with linking the outcome of New START’s extension to the compliance of Russia to the INF Treaty, because if the former is permitted to expire, then both the USA and Russia would lose the only remaining bi-lateral nuclear arms control agreement which still remains unaffected by accusations of violation, and fairly well complied with.¹⁰³ Not only that, but a robust diplomatic and media campaign will likely be needed in the USA and Europe which is designed to highlight Russia’s INF violations as well as mobilize America’s allies and partners to put more pressure on Russia to return to compliance.¹⁰⁴ This may very well be the best possible course of action moving forward, and unquestionably such efforts need to be supplemented with a stable and fair negotiations operating through diplomatic backchannels. Whilst it may be too ambitious with the current geopolitical climate, it definitely has the potential to force international pressure on both sides – particularly on Russia – to engage with the INF Treaty more earnestly. However, this will also require strategic patience to be of the order. Dissuasion of using nuclear weapons whether through defence or deterrence has a higher likelihood of success than compelling through enforcement. And, if the INF Treaty disintegrates then at least the failure of it should ideally be used as a helpful springboard for future negotiations aimed to enact much more modern and comprehensive nuclear-arms control arrangements.

¹⁰¹ Kubiak, Katarzyna. “*The INF Treaty: The Way Forward*.” URL: <https://www.europeanleadershipnetwork.org/policy-brief/the-inf-treaty-the-way-forward/>.

¹⁰² Ibid.

¹⁰³ Rumer, Eugene. “*A Farewell to Arms . . . Control*.” URL: <https://carnegieendowment.org/2018/04/17/farewell-to-arms-.-.-control-pub-76088>.

¹⁰⁴ Ibid.

Appendices

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