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Overcoming ambiguity: Comparative study of Negative Security Assurances (Negative Security Assurances (NSAs)) and No-first use policies

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Gorica Popovic

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Univ. Prof. Dr. Heinz Gärtner

Abstract

In the same year the world celebrates 75 years of nuclear non use and witnesses the abandonment of treaties which served as pillars of nuclear arms control and disarmament. Such developments give rise to concerns regarding the renewed role of nuclear weapons in national and international security thinking and practice.

In such circumstances the space is open for the inclusion and examination of various trust-building tools through which non-proliferation regime could be revitalized and strengthened. Among those tools, Negative Security Assurances (NSAs) and No-first use policies stand out as both highly understudied and underemployed in practice. Existing research seems to be focusing mainly on predominant deterrence and other coercive strategies for restraining nuclear proliferation. This thesis aims to fill that research gap by answering two research questions: *How the concepts of NSAs and No-first use (NFU) relate to each other in the pursuit of goals underpinning the nuclear non-proliferation regime? How do these two concepts relate to and coexist with the theory of deterrence?* Building on the theoretical background of deterrence theory and relying on qualitative data analysis this thesis will try to explore the main features, scope, advantages and disadvantages of these two concepts, compare them and assess their relationship with deterrence and their contribution to the non-proliferation regime.

Ultimately, this thesis finds that both NSAs and No-first use policies, although understudied, could be very important tools for curbing nuclear proliferation and enabling disarmament. They have been on the constant wish list of nuclear non-possessors and if done properly they could help bring clarity and restrictions to nuclear doctrines, use and policies. Although the scope of their contribution differs, both concepts represent important trust-building measures and an important proof of responsibility for those who possess nuclear weapons. Such results justify the conclusion that both of these concepts deserve much more interest from scholars as well as from military and political practitioners.

Abstract

Im selben Jahr feiert die Welt 75 Jahre nukleare Nichtnutzung und wird Zeuge der Aufgabe von Verträgen, die als Pfeiler der nuklearen Rüstungskontrolle und Abrüstung dienten. Solche Entwicklungen geben Anlass zur Besorgnis über die erneute Rolle von Atomwaffen im nationalen und internationalen Sicherheitsdenken und in der Sicherheitspraxis.

Unter solchen Umständen ist der Raum offen für die Einbeziehung und Prüfung verschiedener vertrauensbildender Instrumente, durch die das Nichtverbreitungsregime wiederbelebt und gestärkt werden könnte. Unter diesen Instrumenten ragen die Negative Sicherheitsbeteuerungen (NSA) und die Politik des "No-first use" heraus, die sowohl stark unterbelichtet als auch in der Praxis unterbeschäftigt sind. Die bestehende Forschung scheint sich hauptsächlich auf die überdominante Abschreckung und andere Zwangsstrategien zur Eindämmung der nuklearen Verbreitung zu konzentrieren. Die vorliegende Arbeit soll diese Forschungslücke durch die Beantwortung zweier Forschungsfragen schließen: Wie verhalten sich die Konzepte von NSA und NFU bei der Verfolgung von Zielen, die dem nuklearen Nichtverbreitungsregime zugrunde liegen? Wie verhalten sich diese beiden Konzepte zur Abschreckungstheorie und wie koexistieren sie mit dieser? Aufbauend auf dem theoretischen Hintergrund der Abschreckungstheorie und gestützt auf eine qualitative Datenanalyse wird diese Arbeit versuchen, die Hauptmerkmale, den Umfang, die Vor- und Nachteile dieser beiden Konzepte zu untersuchen, sie zu vergleichen und ihre Beziehung zur Abschreckung und ihren Beitrag zum Nichtverbreitungsregime zu bewerten.

Letztlich kommt diese Arbeit zu dem Schluss, dass sowohl die NSA als auch die No-First-Use-Politik, auch wenn sie nicht ausreichend untersucht wurden, sehr wichtige Instrumente zur Eindämmung der nuklearen Verbreitung und zur Ermöglichung der Abrüstung sein könnten. Sie stehen auf der ständigen Wunschliste der Nichtbesitzer von Atomwaffen, und wenn sie richtig gemacht werden, könnten sie dazu beitragen, Klarheit und Einschränkungen in die Doktrinen, den Einsatz und die Politik der Atomwaffen zu bringen. Obwohl der Umfang ihres Beitrags unterschiedlich ist, stellen beide Konzepte wichtige vertrauensbildende Maßnahmen und einen wichtigen Beweis der Verantwortung für diejenigen dar, die Atomwaffen besitzen. Solche Ergebnisse rechtfertigen die Schlussfolgerung, dass beide Konzepte sowohl von Wissenschaftlern als auch von militärischen und politischen Praktikern viel mehr Interesse verdienen.

Abbreviations

ASEAN Association of Southeast Asian Nations.

CBW Chemical and biological weapons.

CCD Conference of the Committee on Disarmament.

CD Conference on Disarmament.

CTBT Comprehensive Nuclear-Test-Ban Treaty.

ENDC Eighteen Nation Committee on Disarmament.

IAEA International Atomic Energy Agency.

INF Intermediate-Range Nuclear Forces Treaty.

NAC New Agenda Coalition.

NATO North Atlantic Treaty Organization.

NFS No first strike.

NFU No-first use.

NNWS Non-nuclear weapon states.

NPT Treaty on the Non-Proliferation of Nuclear Weapons.

NSAs Negative Security Assurances.

NWFZ Nuclear Weapon Free Zones.

NWS Nuclear weapon states.

PrepCom Preparatory Committee.

PSAs Positive Security Assurances.

TNDC Ten-Nation Committee on Disarmament.

UNGA United Nations General Assembly.

UNSC United Nations Security Council.

UNSCR United Nations Security Council Resolution.

WMD Weapons of Mass Destruction.

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Introduction

"Whatever the problem whether it concerns questions of military strategy, of coalition policy, or of relations with the Soviet bloc - the nuclear age demands above all a clarification of doctrine. At a time when technology has put in our grasp a command over nature never before imagined, the value of power depends above all on the purpose for which is to be used "

- (Kissinger, 1969, v)

"There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the conduct of a new order of things "

— (Machiavelli, 2008, 21)

In 1983, President of the U.S. Ronald Reagan proclaimed that: "A nuclear war can never be won and must never be fought." Glass (1983). This almost utopian ideal got a breath of fresh air when many decades and presidents later, another U.S. Commander-in-Chief, Barack Obama, in his first big foreign speech made powerful and, some would say, overly ambitious claim that his presidency would finally bring about "America's commitment to seek the peace and security of a world without nuclear weapons" Traynor (2009). Although it does have a nice ring to it, coming from the sole country that has ever used nuclear weapons such claims were welcomed, but still to be taken cautiously. This was not the first time someone wished for a world without nuclear weapons and it probably will not be the last time someone failed to actualize such vision. Nevertheless, bold statements and plans that Obama's presidency took on gave a valuable momentum to nuclear disarmament that has not been seen for years. Fast forward to the year 2019, we witnessed leaders of two nuclear frontrunners – US and Russia, abandoning the Intermediate-Range Nuclear Forces Treaty (INF) Treaty which represents one of the non-proliferation regime's strongholds,

thereby possibly jeopardizing the future of the New START Treaty and not leaving much to hope for regarding the Treaty on Prohibition of Nuclear Weapons. Moreover, this year marks the 75th anniversary of nuclear non use, or as McGeorge Bundy called it, "the most important single legacy" (Bundy, 1988, 587), combining one of the greatest human mistakes and one of its greatest achievements in one phrase. Needless to say, the cultivation of such universal nuclear abstinence through decades of changes and challenges in international environment was not an easy endeavour. Still, the celebratory atmosphere expected to follow triumphs of such magnitude seems to be imperceptible, and a rather reticent pride and profound uncertainties for the future apparently took the center stage. Nuclear non-proliferation regime seems to be at yet another historical low and an easy way out is nowhere in sight. Nowadays, old doctrines and strategies do not seem to provide stability and security for which they were employed in the first place. That creates a rather paradoxical situation which does noot strip any value from this tremendous milestone that is nuclear non-use, but it does reveal a lot about its character. In addition, it reveals an opening for new thinking on old tools and calls for alternative approaches that could revitalize the non-proliferation regime.

The very constant existence of nuclear weapons, along with their modernization and adaptations demanded by the ever changing and evolving international security environment, makes it crystal clear that those who value them as security leverage might not be able to prevent others from following the same logic. Therefore, if the non-proliferation of nuclear weapons is to be preserved as a goal, then the efforts and creativity invested in the constant upgrade of the current nuclear arsenals and ambiguous nuclear policies should be reallocated to clarity and trust building measures and doctrines. One of the options could be renewed and strengthened negative security assurances NSAs) provided to non-nuclear weapon states (Non-nuclear weapon states (NNWS)) in order to pacify their fears of being attacked/threatened with nuclear weapons. Although maybe imperfect, NSAs have long been part of the non-proliferation regime and NNWS rhetoric but have never managed to fully satisfy the idea for which they were called for in the first place. The other option of interest for this thesis would be the policy of no first use (NFU) which, as its name signals, deprives nuclear powers from using these weapons first. Almost as old as the nuclear age, NFU policy has been long debated, both advocated and rejected and is still considered to be a valuable step forward in the overall stability and progress of the non-proliferation and disarmament efforts.

Both of these instruments, at least judging by the nuclear weapon states, have been very hard to 'sell' and remained an 'honorable mention' in discussions regarding marginalization of nuclear

weapons and possible shifts in related doctrines and policies. Nevertheless, for as long as nuclear weapons exist, any time is a good time to start making a case for new approaches, even with 'old' instruments such as NFU and NSAs and explore the ways in which they can be adapted to the needs and challenges of the present. Otherwise, waiting for the best time or favorable security environment may be like waiting for Godot.

1.1 Research Problem at Stake - The non-proliferation stalemate

In order to understand the scope of the problem it is necessary to look back to its beginnings. To start with, this carefully nourished universal behaviour of nuclear non use was not a straightforward success nor is it by any means guaranteed. It's also not a final act but a fragile process that constantly needs to be adjusted and reaffirmed since even the small changes in negative directions can jeopardize what was being sheltered for, now, 75 years. Above all, it is the result of different paths and capabilities which states pursued or were faced with, in the period following the Cold War.

Namely, the much needed peace brought by the post-Cold War period came with the price of anxiety of "uneasy armistice" (Kissinger, 1969, 1), that permeated the new landscape of international order. The excess of power brought by the nuclear age once combined with post-Cold War anxiety enabled a vicious circle of constant modernization of weapons and actual reluctance to use them. In such set of circumstances the spotlight was reserved for one of the most dominant practices in international politics and a newly found role for nuclear weapons - the deterrence. Or in the words of Bernard Brodie written right after Hiroshima: "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose" (Brodie, Dunn, Wolfers, Corbett, & Fox, 1946, 76).

This was the basis of new international security environment in which the attainment of peace highly depended on the human ability not to use its most powerful weapons and it is the core of today's security environment. In addition, post-Cold War period reshaped the division of international order into blocs, not by making them redundant but by providing them with new character and purpose. When put together with the nuclear context it resulted into two blocs of the nuclear

age - the states that have nuclear weapons and those who don't. More formal encoding of this division came with the establishment of nuclear non-proliferation regime and particularly 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) which, broadly speaking, resulted from the voices raised by those who realized that nuclear weapons could have a much larger and more destructive consequences than just by being the 'anxiety pill' for the uncertainties of the new world order. The nuclear non-proliferation regime was founded against the backdrop of possible "nuclear anarchy" (Allison, Cote Jr, Falkenrath, Miller, et al., 1996) and to this day it remains one of the most relevant (maybe even only) safeguards of international peace and stability, for without its non-proliferation norms, frameworks and watchdogs it would arguably be very hard to keep humankind safe(r) from the devastating threats of nuclear weapons. But, and this brings us back to the lack of optimism for the celebratory spirit in light of nuclear non-use anniversary, the historical record of nuclear non-proliferation regime, despite all treaties, noble goals and ambitious world leaders, gives a lot of credibility to the insecurities of the present and grim prospects for the future of this regime. Constant changes in the international environment, along with the trust issues and threat of continuous stockpiling of nuclear weapons represented, and still do, major challenges for the non-proliferation regime.

With such developments the earlier established discrepancy between states who do and those who do not have nuclear weapons seems to be expanding and creating even more turbulence within the non-proliferation efforts. On one hand, the states who possess nuclear weapons still hold on to old values and doctrines which coat the usefulness and role of nuclear weapons and deterrence into a veil of ambiguity that is assumed to serve best the security of those states. On the other hand, states who do not possess nuclear weapons find it extremely hard to uphold their security under the constant nuclear threat, so they needed some sort of assurance in these circumstances. The regime itself was founded on the distinct categories of these two groups of states, but also on the aim to bring them closer in order to reduce risks of unwanted behavior. But bringing them closer often meant bringing them out of their comfort zones which was not an easy undertaking. Therefore, the palette of non-proliferation tools had to offer some alternative options for assurance. On one hand, among the first formal types of such assurances were positive and negative security assurances that came out of the NPT process and that have since then remained on the agenda of non-proliferation efforts, albeit with debatable success. As noted, they were attempts to secure the non-possessors from nuclear threat, either by assisting in case of need (positive security assurances) or by refraining from action (negative security assurances). Moreover, they were attempts to circumvent the stalemate of nuclear disarmament and were envisioned as trust-building tools that will strengthen the non-proliferation regime. On the other hand, and with similar purpose as security assurances, the policies of no first use of nuclear weapons were seen as another possible way to overcome the divisions within the regime and to provide some form of clarity in the ambiguity that surrounded the use of these weapons. Nevertheless, neither of these instruments managed to occupy enough interest, both among state actors or scholars, so the record and understanding of their possibilities and range remained quite limited. It is important to note that even from the beginnings of non-proliferation efforts and disarmament aspirations, it was clear that in order to overcome or reduce the gap between two nuclear age blocs, it would be necessary to think outside the box and possibly take a swipe at the established practices and beliefs. That meant acknowledging the limitations of deterrence approach and addressing the (in)security issues of a modern age in the nuclear context with other tools.

Finally, looking at the current state of non-proliferation regime and an ongoing stalemate of disarmament efforts, it seems appropriate to expand pockets of interest to include broader understanding of alternatives, like security assurances and no first use policies, in order to slow down its further deterioration. It goes without saying that neither of these instruments come without issues and challenges of their own, but more effort in analyzing them and adapting them to the needs of both nuclear and non-nuclear weapons states could be a step in the right direction. Adequate NFU policies or NSAs could represent a necessary bridge between Nuclear weapon states (NWS) and NNWS, since these instruments would be much clearer and credible form of doing by the NWS in the non-proliferation regime. In that sense, by making nuclear possessors go the extra mile, both NSAs and NFU, albeit to different extents, could contribute to the overcoming of the current non-proliferation impasse and prevent further nuclear proliferation.

1.2 Research Question(s) and Research Aim

This thesis will explore in more depth the mentioned alternative approaches related to nuclear non-proliferation regime for bringing closer the nuclear and non-nuclear weapon states, namely negative security assurances (NSAs) and no first use (NFU) policies. Both of these concepts have throughout the years, with more or less success, occupied the stage of non-proliferation and nuclear doctrines debates. Their record of effectiveness varies from case to case and depends highly from the framework to which they're being attached. Moreover, despite their possible potential and

value, the use and understanding of these concepts, both among scholars and among states, have remained secondary to the overwhelming dominance of more established strategies such as deterrence, the use of military force, coercive diplomacy etc. As it will be shown, in constantly changing international security landscape lack of progress, or actual deterioration in non-proliferation efforts place a significant burden on both scholars and statesmen and call for serious re-thinking of what is established and dominant. In such set of circumstances, overlooked or underlooked non-proliferation tools deserve (more) space under the spotlight.

Therefore, reaching out from the theory of deterrence for necessary theoretical underpinnings, it is the aim of this thesis to fill that gap and expand academic pockets of interest by providing a comprehensive overview and analysis of both NSAs and NFU. Such aim will be more precisely positioned within two leading research questions:

- How the concepts of NSAs and NFU relate to each other in the pursuit of goals underpinning the nuclear non-proliferation regime?
- How do these two concepts relate to and coexist with the theory of deterrence?

In other words, the goal is to place these two concepts within the non-proliferation regime to which they're supposed to serve, to explore, analyze and compare their histories and core features which made them fail or succeed in fulfilling their purpose. Moreover, it will be necessary to highlight the reasoning behind leading nuclear powers' security strategies and doctrines since that is what determines the use and (in)effectiveness of any 'tool' in nuclear non-proliferation regime. In addition, as deterrence is still the most dominant purpose of nuclear weapons, an attempt will be made to highlight and clarify the points of connection or departure in the workings of NFU, NSAs and deterrence within the non-proliferation efforts.

1.3 Current State of the Research

The review of the literature and provided bibliography represent the valuable starting point into the topic and exploration of its outstanding problems. To the knowledge of the author, the comparative study of two concepts - NSAs and NFU, hasn't been conducted so far. The vast literature on deterrence and nuclear non-proliferation regime with all its traits hasn't been as kind to their less famous 'relatives'. As noted, policy instruments such as NSAs or NFU occupied a rather secondary place and, more often than not, played the role of 'honourable mention' in the major non-proliferation

frameworks. Similar applies to the scientific realm, which leaves an open space for research that could add some momentum to these 'back burners'.

Despite the impression that not all concepts surrounding the non-proliferation realm get to be on the main stage, some scholars have attempted to tackle the issues and provide valuable insights into the matter. Individually, these two concepts received mixed and limited praise, and, due to their lack of appeal among the 'big nuclear players', they have also received a significant critique. On one hand, the NSAs are part of a larger family of assurances which in international realm reveals a significant discrepancy in use of terminology and the continuity of meaning. An attempt to enable some clarity within assurances menu and to highlight their effectiveness through case study approach could be found in the works of Jeffrey W. Knopff (2012a; 2012b). He also argued that "a strategy of seeking to assure other states about their security could be much more widely applicable in international politics" (Knopf, 2012a, 7). Others have also pointed out the importance of NSAs and security assurances in general, but emphasized that a changing international security environment could exert a significant influence on their effectiveness (e.g. Pilat, 2005). A rare example of a study that focused exclusively on security assurances related to non-proliferation regime, both positive and negative, was Bruno Tertrais. He provided empirical research on the effectiveness of different types of security assurances and he concluded that the positive ones have greater chances to be effective while the NSAs "have become more important as a raison d'être of the diplomatic service of some countries, notably the Non-Aligned Movement, than as a real nonproliferation tool" (Tertrais, 2012, 257). Earlier, the research on NSAs revolved around explanations and arguments of their legality (e.g. Bunn, 1997; see also Kassoti, 2015), with some authors perceiving them as legally binding within the international law (e.g. Eckart, 2012), while others saw them as mere political statements with no capacity to produce any legal effects (e.g. Nikitin, 2009; Fihn, 2011). This debate is still relevant, especially since even the International Court of Justice left the NSAs without specific legal clarity, at least in the matter of their consequences (International Court of Justice, 1996). The dots between positions of nuclear weapons states on the issue of NSA and their nuclear doctrines have been connected rather early (e.g. Rosas, 1982) but more worrisome is the inherent flaw of the non-proliferation regime revealed through the issue of NSAs. In other words, one of the characteristics of this regime is that "it discriminates, it is argued, against nonnuclear nations, for by renouncing nuclear weapons the latter make a choice of basic significance for their security policy but in exchange receive from the nuclear powers security assurances of illusory worth" (Prystrom, 1994, 55).

Although the issue of NSAs still remains heavily understudied, some recent works show a more positive momentum in this research (e.g. Ingram, 2017, 2018; Gärtner, 2018). For example, Gärtner discussed the issues around the treaty from 2017, supported by the majority of NNWS, which would prohibit the use of nuclear weapons and the well pronounced opposition of nuclear weapons states to any general renunciation of nuclear weapons. He argues that one of the alternative ways out of this severe discrepancy between NNWS and NWS would be through the NSAs, precisely "NSAs would have to be extended to states that are in military alliances with other, nuclear-armed states" while "extended deterrence should be amended by extended NSAs" (Gärtner, 2018, 108).

The academic record of no first use is quite similar, both in the sense of limited interest as well as with regard to a rather mixed score. An over encompassing study on the NFU is still absent from the scholarly works, although there are some prominent examples which dedicated more thought to this particular concept. Long before the 'four horsemen' - Henry Kissinger, Sam Nunn, William Perry, and George Shultz raised their voices for the abolition of nuclear weapons (see Shultz, Perry, Kissinger, Nunn, et al., 2008), the 'gang of four'- Bundy, Kennan, McNamara and Smith stood behind the advocacy of NFU and criticized the North Atlantic Treaty Organization (NATO) policy of flexible response which allowed for the first use of nuclear weapons (see Bundy, Kennan, McNamara, & Smith, 1982). In addition, Scott Sagan for example argued that, in the US, a no-first use policy could be very helpful in preventing nuclear proliferation, by correcting the mistakes of deterrence approach and "it would put the United States in a more tenable position in the ongoing effort to create a broader global consensus against the use of any weapon of mass destruction against non-combatants" (Sagan, 2009, 172). Others argue that the benefits of no first use policy are much overrated and that, in times of need, no state would actually feel bound by it (Halperin et al., 2009). Recent works on NFU follow similar vein, ranging between advocates who see no insurmountable obstacles to the adoption of such a policy (e.g. Tannenwald, 2019; Holdren, 2020) and those who see NFU as a change whose time still hasn't come (e.g Miller, 2020). In addition, the general attitude of the West, when it comes to NFU, is a view of undermined credibility that stems from the renunciation of the first strike (e.g. US DoD, 2019). In addition to such, mostly theoretical debates, others have contributed with case study examples, with the case of China dominating the research interest since it is the only state so fully committed to this concept (e.g. Pan, 2018; Haynes, 2018), although Indian NFU example also provoked relevant scholarly interest (e.g. Tkacik, 2017). Albeit even more limited in quantity, the literature on NFU reveals a significant issues and connections this particular non-proliferation tool triggers. Some argue that NFU policies could contribute significantly to the general idea behind nuclear disarmament and reduction of nuclear risks since NFU and its measures are "an important means of "decoupling" nuclear weapons from the broad, day-to-day calculus of national security by demonstrating that NWS can learn to live without nuclear weapons on high alert, or even operationally deployed on a permanent basis, as a precursor to learning to live without nuclear weapons at all" (Ritchie, 2014, 614).

The conclusion arising from a rather scarce scientific sources for both NSAs and NFU is that a lack of research on such concepts falls well in line with the lack of interest the big nuclear players show for such policy shifts. Both NSAs and NFU have been recognized as significant components in the non-proliferation efforts, but their absence from research as from policy choices signifies that both haven't gone much further from that recognition. Such circumstances open up platforms for new thinking on old tools, especially in light with ever-changing international security landscape and deadlocked non-proliferation efforts.

1.4 Research contribution and limitations

As it was mentioned above, the very limited research on such integral elements in the non-proliferation regime justifies the contribution and signals the appropriateness of this particular research. The NSAs and NFU are not the magical solutions that will secure the universal nuclear disarmament, but could represent a serious and valuable steps and conditions towards such goal. In addition, analyzing and understanding these instruments in time significantly different from when they've first appeared could be a way of adapting and expanding our knowledge to fit the present challenges. Moreover, looking at the state of research as well as the state of nuclear non-proliferation regime itself, it becomes equally relevant to point out their ever-present limitations and bias towards alternative approaches. That raises the questions, not only what NSAs or NFU can do for non-proliferation regime, but what this regime and its scholarly representatives can do to make these concepts more visible, relevant and effective. This thesis, therefore, aims to serve as at least one step ahead in that direction.

Nevertheless, there are clear limitations of this research. On one hand, even though these two concepts will be explored in as much detail as possible, including their most important features and

actors, there is a space open to look into particular cases with much more specifics. For example, case by case study of countries who possess nuclear weapons could go much deeper to include their overall historical developments with regard to security policy and nuclear strategies. In addition, particular regional approaches where these instruments played a role, such as Nuclear Weapons Free Zones (NWFZ) could fill a thesis in itself, and therefore deserve much more effort and analysis than it will be provided here. To that end, specific examples, like Middle East NWFZ or possible contribution NSAs or NFU could have in assisting the Ban Treaty deserve more research interest. Same goes for the more theoretical analysis of the relationship and comparison between existing non-proliferation tools, as could be the case of NSAs and extended deterrence, for example, which will be only briefly tackled in this thesis but could represent a research objective in itself.

1.5 Research Method

To provide the most comprehensive overview of both NSAs and NFU and to compare and analyze them this thesis will rely on the deductive research approach. The theoretical background will be provided by the theory of deterrence and its theoretical assumptions will serve as a base for assessment of these two concepts, both individually and in relation to each other. This research is driven by the qualitative approach, *ergo* qualitative data analysis will be conducted in order to answer the thesis' leading questions. More precisely, since the primary data for this research consists of official documents in international and national realm regarding the topic of the thesis, the document analysis constitutes a crucial research method. Analytical value of this method is that it "requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge" (Bowen, 2009:27). Since the history and main developments of research objects of this thesis have been encoded in official documents of international non-proliferation bodies and of relevant states' departments, it appears the most appropriate method to gain knowledge and understanding of these two concepts.

The collection of primary data used within this research will be categorised into main topic/framework areas in order to provide a proper context to the variety of information and to facilitate the effort of answering the research questions. These areas include the NPT context, its preparatory and review conferences and documents they've produced, the Conference on Disarmament as well as UN General Assembly Conferences on Disarmament and other relevant meetings or proceedings related to the research topic. In addition, the thesis will rely on the official documents regarding the

policy directions and instruments, such as Nuclear Posture Reviews or similar strategies dealing with states' nuclear policies and doctrines. Moreover, a significant part of getting a comprehensive understanding of both NSAs and NFU demanded an extension of data sources to include a secondary literature. This helped supplement the primary data, provided additional insight into the topic and enriched the overall knowledge of the core issues and features of the researched items.

1.6 Structure of the Thesis

The thesis will be structured as follows. Upon introducing the topic and reasoning behind such choice, the second chapter will offer theoretical underpinnings for further analysis, found in the deterrence theory and related concepts whose relevance for this thesis will also be highlighted in this chapter. Third and fourth chapter will offer broad and separate analysis of negative security assurances and no first use policies, respectively. Following the isolated outlook of these two instruments, the fifth chapter will offer more intertwined, comparative analysis where the two will be confronted and assessed in light of the stated research questions. The final chapter will offer concluding remarks as well as recommendations for further research.

2

Theoretical framework

"The Emperor Deterrence may have no clothes, but he is still emperor"

- Freedman & Michaels, 1989, 430

"As long as nuclear weapons are around, even in small numbers, deterrence is the safest doctrine to deal with them"

- Delpech, 2012, 1

To address the research questions of this thesis it is necessary to develop an overall theoretical framework to serve as a foundation for further analysis. Primarily, the thesis will rely on deterrence theory as the central theoretical concept. The selection of this theoretical approach has several benefits. First of all, the body of research on deterrence is quite vast. Second, the placement and design of this theory is oriented towards explanations and predictions of decision-making processes in a world where conflicts involve nuclear weapons. And finally, since the main objects of this research are two instruments of nuclear non-proliferation regime whose basic purpose is to deter further escalation of insecurity and deterioration of disarmament efforts, deterrence theory stands out as an appropriate choice. In addition, the second part of this chapter will be dedicated to the presentation and elaboration of several related concepts which could further complement the theoretical base and guidance for this thesis.

2.1 Deterrence - 'Tale as old as time'

"Deterrence as an idea is probably as ancient as human society" (Gray, 2003, 1). It has been a part of human behaviour and social relations way before it became the golden child of the Cold War era. Still, once coupled with post-War order, unstable bilateralism and new, nuclear warfare, it became

one of the theoretical and strategic giants in International Relations. Deterrence is a product of a particular set of circumstances and players which, although not new in international system, matured throughout the 1950s and early 1960s and raised to prominence as nuclear deterrence during the Cold War. Mighty contributors like Herman Kahn, or Thomas Schelling, Albert Wohlstetter, Oskar Morgenstern, William Kaufmann, and Glenn Snyder are just some of the founding fathers who provided valuable inputs into the development and refinement of deterrence theory. Since these pioniers, many scholars and statesmen grappled with deterrence, thereby making it one of the most studied and contested concepts in International Relations. Nevertheless, its historical and practical record reveal that this concept went through 'thick and thin', significantly outliving its prime-time and is now struggling to find its place and purpose in the 21st century.

The bipolar order of the international system after the Second World War was a signature mark of the Cold War era and a birthplace of classical (rational) deterrence theory. War scars underpinned the need to address the international system after 1945 by taking into account the costs and benefits of the new warfare. Moreover, during the Cold War, both East and West subscribed to a mutual understanding that the nuclear weapons carry the potential of, as Kahn (1961) put it, Doomsday Machine, and that nuclear war would rise to an unthinkable disaster. It was necessary to grasp the changes in armaments and the need to re-purpose the weapon to serve, not just wartime but peacetime as well. Such set of circumstances were distinguishable characteristics that facilitated the rise of deterrence to prominence and to a large extent predetermined its reach and purpose. It originated from what could be regarded as the golden age of strategic thinking, particularly in the US, and served to maintain and explain the absence of nuclear war up until today. Moreover, as one of the most debated theories in international relations and although enshrined in the Cold War episode, it does not lack the ambition to be used for avoiding or even eliminating future conflicts between states. However, for a long time, "deadly nuclear weapons and a carefully maintained strategic balance were the "twin pillars" upon which this global nirvana rested" (Zagare, Kilgour, et al., 2000, 4), so such ambition may be hard to achieve in the changed international landscape of the 21st century. Nevertheless, while these deadly nuclear weapons exist there will be purpose in deterrence, this time maybe of a new, re-invented kind.

Having in mind that the re-creation or re-adjustment of deterrence is yet to be seen, it is now necessary to introduce some core features and historical developments of this concept, aiming to highlight both the theory of deterrence and the practical difficulties of its implementation in the

modern age. The goal is to "consider deterrence in the twin contexts of the full theory of strategy and the moving historical landscape" (Gray, 2000, 259) and, thereby achieve some comprehensible overview of the past and of the present of deterrence theory. Moreover, outlining the concept of deterrence in such way paves the road to its operationalization and makes it easier to confront it with alternative (and much less popular) non-proliferation tools, like negative security assurance or no first use doctrines.

Despite being the 'whiz kid' of the Cold War era, as a theory and as a strategy deterrence was often challenged with different approaches, interpretations and criticism and even today it lacks unanimity both in theory and in practice. Still, what was standing out as rather accordant was its context dependency. The nature of deterrence hasn't particularly changed, but every other feature seems to be deeply affected by the time, place and actors. The basic questions about deterrence elaborated during the Cold War by Herman Kahn and Raymond Aron hold to this date: who deters whom, what kind of action is deterred, with what kind of threatened response, in what set of circumstances, followed by what kind of counter threats (see Kahn, 1985; Aron, 1965). That is why, research and other relevant work on deterrence reveal that it does matter a lot whether we talk about the deterrence before the Cold War, the one during the Cold War or the one reserved for the aftermath, for the modern age.

One of the rather simplistic definitions of deterrence is credited to Glenn Snyder who called it "the power to dissuade." (Snyder, 1960, 163). Patrick M. Morgan narrowed that down to "the essence of deterrence is that one party prevents another from doing something the first party does not want by threatening to harm the other party seriously if it does" (Morgan, 2003, 1). Thomas Schelling called deterrence "a threat ... intended to keep an adversary from doing something." (Schelling, 2008, 69). Alexander George and Richard Smoke define it as, "simply the persuasion of one's opponent that the costs and/or risks of a given course of action ... outweigh its benefits." (George, Smoke, et al., 1974, 11).

In its core, deterrence is a perception game. It is a skill of a fine, yet precise and effective, persuasion, where one has to convince its adversaires (and allies) that the payoff of an undesirable behaviour is way lower than its cost. Additionally, it is a product of a particular relationship, where the value of someone's deterrent capabilities is decided by those who are targeted by these exact capabilities. In other words, "deterrence is the condition that obtains when someone decides that

he is deterred." (Gray, 2010, 278). On the other hand, what deterrence is not could be understood better when compared with compellence. Namely, compellence is "the use of threats to manipulate the behavior of others so they stop doing something unwanted or do something they were not previously doing" (Morgan, 2003, 2). These two concepts often go hand in hand with their actual differences being much more abstract, since both have to do with using military actions to stop the unwanted behaviour. However, compellence seems to be perceived as much harder to achieve since it aims to persuade an adversary to take certain action, unlike deterrence which is more about *not resorting to certain activity*. In other words, "the distinction is in the timing and in the initiative, in who has to make the first move, in whose initiative is put to the test" (Schelling, 2008, 69). That puts a time limit on compellence, while deterrence could go on much more unconstrained.

One of the founding fathers of the Cold War deterrence, the mentioned Thomas Schelling argued that the military strategy has gone through some profound changes and "can no longer be thought of, as it could for some countries in some eras, as the science of military victory. It is now equally, if not more, the art of coercion, of intimidation and deterrence. The instruments of war are more punitive than acquisitive. Military strategy, whether we like it or not, has become the diplomacy of violence." (Schelling, 2008, 34). In that sense, he understood deterrence as being about "enemy intentions" (Schelling, 1963, 531). Here it would be relevant to note that in discussing deterrence it has been and still is difficult to separate theory from practice, or more precisely, theory from strategy. Deterrence is both and such interdependency influenced its conceptualization and implementation. As said by Morgan, deterrence as "a strategy that refers to the specific military posture, threats, and ways of communicating them that a state adopts to deter, while the theory concerns the underlying principles on which any strategy is to rest" (Morgan, 2003, 8). In other words, there are distinguishable differences between deterrence as a theory and deterrence as a strategy, and there are even notable disagreements whether there is one deterrence theory and more slightly different approaches (e.g. Morgan, 2003) or more theories (e.g. Zagare et al., 2000; Quackenbush, 2011). On one hand, some scholars accept the lack of unified theory of deterrence and acknowledge different schools of thought including, next to classical (rational) model, also strategic culture approach and decision-making approach (Knopf, 2012a). In addition, some divided classical deterrence theory into sub-groups, like structural deterrence and decisiontheoretic deterrence (Zagare et al., 2000). For example, structural deterrence is more aligned with realism, credits balance of power as guarantor of peace and argues for inherent stability of nuclear deterrence provided with second-strike capabilities (Zagare et al., 2000). Decision-theoretic deterrence relies on game theory and utility models under the assumption that nuclear war is always the worst outcome (Zagare et al., 2000). On the other hand, what can be said with a certain level of confidence, is that the classical deterrence theory, although severely challenged, ununified as it is, still holds a rather dominant position in understanding how states behave and strategize their postures, especially those with nuclear prefix and therefore deserves a closer examination.

2.2 Classical deterrence theory - When Dr. Strangelove met the Doomsday Machine

In order to understand the fundamentals of classical deterrence it is necessary to rely on the works of many scholars and practitioners who gave valuable contribution to the developments of this concept in each historical moment. Reviewing the voluminous research could help in distinguishing particular trends or waves of deterrence theory literature. Back in 1979, Robert Jervis argued that there are three waves through which deterrence theory was developed (Jervis, 1979), while more recently some scholars recognized the rise of additional and different research agendas (Lupovici, 2010).

As noted several times so far, Cold War is still regarded as the critical point in the development of deterrence, but not the only point. The before and after the Cold War are two distinct contexts which shaped the discourse of international security and defence strategies to serve the needs of those particular moments in time. The context before the Cold War, as one wave or trend in deterrence literature, was profoundly shaped by the experiences of the two world wars which left many thinking that with the new and upgraded warfare any vision of a future 'total war' would be unbearable. Such unacceptable destruction coupled with the need to understand and define the new strategic advantages and implications of nuclear weapons created a foundation of deterrence in the immediate aftermath of World War II. In the Cold War period, technological advancements and the nuclear parity between the US and Soviet Union provided conditions for deterrence thinking to escalate and establish itself as a way to go if the world stability and balance between superpowers is to be maintained. In the 1950s and 1960s when deterrence achieved its peak, theorists, strategists and policymakers assumed that the war is a constant possibility, the enemy will attack as soon as the chances for success arise. This wave of deterrence development and refinement relied on the game theory and focused mostly on understanding and predicting the actors' tactics and behaviour. This

particular line of research had been acknowledged as sort of conventional wisdom or at the time something like "Rosetta Stone of the nuclear age" (Zagare et al., 2000, 4) and, despite numerous criticisms and challenges which emerged with more recent research agendas, it is to this day one of the most influential approaches to deterrence.

2.2.1 Main assumptions and concepts of classical deterrence theory

There is a wide consensus among deterrence scholars regarding the basic concepts and contours of this theory. There is a general consent that the roots of the theory lie within the traditions of realism (*Realpolitik*) or power politics (*Machtpolitik*). This is of course an approach which revolves around the state whose nature, which is assumed to be rational and egoistic, emphasizes and drives them to power maximization (see Morgenthau, 1948). In addition, their environment of similar state units enhances the need to maximize security (see Waltz, 2010). In this paradigm, the international system lacks a particular, overarching sovereign (or authority), and therefore the state needs to "rely on [its] own strength and art for caution against all other" (Hobbes, 2018, 157). Accordingly, in such a system, the maintenance of order seems to be highly dependent on the balance of power (Claude, 1962; Kissinger, 1994; Morgenthau, 1948; Waltz, 1993). With such balance, it is assumed, there will be less incentives to disturb the status quo. Such theoretical base, served as a building block to the classical (rational) deterrence theory which added considerations of nuclear war consequences into these calculations.

The result of such 'upbringing' created special conditions whose fulfillment is necessary in order for deterrence to actually succeed. Essentially, the deterrer has to be able to convince the possible attacker that in case the later wants to challenge the established status quo there is on the side of deterrer 1) enough military capability 2) to impose unbearable costs on the attacker 3) and credibility that such a threat will be carried out in case of an attack (Kaufmann, 1956). The key elements which were used to explain deterrence include: "the assumption of a very severe conflict, the assumption of rationality, the concept of a retaliatory threat, the concept of unacceptable damage, the notion of credibility, and the notion of deterrence stability." (Morgan, 2003, 8). Brief explanation of these concepts is necessary in order to understand the essence of the theory as such, but also in order to be able to assess possible changes to the main deterrence concepts and the theory as a whole. The *severity of the possible conflict* played a very valuable role even before the Cold War gained momentum and it was only intensified during its peak years. It resembled what was already mentioned as a very alert state between superpowers, amplified with

nuclear warfare that eventually created a situation where deterrence theory worked almost exclusively with 'worst-case scenarios'. This is particularly relevant because the intensity of assumed conflict as the sole focus of deterrence both as a theory and as a strategy deprived the theory of more comprehensive understanding and utilization of other approaches for war prevention. As Morgan argued, "this was why the theory paid little attention to other ways of preventing war, such as by seeking to reconcile differences or offering reassurances and incentives" (Morgan, 2003, 10).

The rationality assumption is one of the elements of deterrence theory and strategy that has been extensively discussed and criticized. The purpose of rationality in deterrence theory has to do with how deterrence is practiced. Deterrence theory was envisioned to prescribe the most effective line of action by a rational actor in order for deterrence to be successful. In other words, the idea was to provide decision makers with an understanding of rational actor's behaviour in or handling of deterrent situations. In addition, the fact that deterrence held on rationality was part of its appeal, since in the nuclear age the opposite term, irrationality, carried a rather worrisome sentiment. Rationality is defined as a "cool and clearheaded ends-means calculation" (Verba, 1961, 95) and considers all possible options and weighs the pros and cons of each of them before actually making a decision. This and similar definitions are often labeled procedural, thereby accounting for the distinction between this and instrumental rationality (Quackenbush, 2011). Unlike procedural, instrumental rationality assumes that an actor faced with "two alternatives which give rise to outcomes ... will choose the one which yields the more preferred outcome." (Raiffa & Luce, 1957, 50). Clearly, the procedural rationality seems more difficult to achieve in real world situations, since a lot of factors can complicate the decision-making process, like lack of time or information, other influences. So it appears that whichever rationality actor possesses, deterrence has chances of both failure and success because there are clear limits of rational behaviour. Therefore, "rationality is inconsistent guide to how deterrence turns out" (Morgan, 2003, 64). Some scholars argue that there is still value in rationality assumption, at least that of the instrumental type (Quackenbush, 2011; Quackenbush & Zagare, 2016). This type of rationality enables a connection between preferences and choices and even though preferences are in nature subjective and are often shaped by emotions, that does not make them necessarily irrational (Wagner, 1992).

The *concept of retaliatory threat* was significantly complemented once nuclear weapons were part of the equation. "Nuclear weapons made pure retaliation plausible" (Morgan, 2003, 14). Here it is important to note that with the process of achieving nuclear parity between then-superpowers,

US and Soviet Union, came a logic of MAD or Mutual Assured Destruction, which basically is " the capacity to inflict maximum damage on an adversary." (Gärtner, 2013, 5). The logic was that in order to establish balance, ability of the first strike was not enough. Deterrence through retaliation meant the ability of the second strike, in other words, the ability to retaliate even when attacked with nuclear weapons. Of course, the main condition of such retaliatory capability of each side has to be made effective, meaning that second strike (for both sides) has to be impenetrable. This logic was very appealing to many of the classical deterrence theorists who saw deterrence stability of the Cold War enshrined in nuclear policy often regarded as "the delicate balance of terror" (Wohlstetter, 1959). In other words, "there is a difference between a balance of terror in which either side has the capacity to obliterate the other, and one in which both sides have the capacity no matter who strikes first. It is not the 'balance' – the sheer equality or symmetry in the situation - that constitutes 'mutual deterrence'; it is the stability of the balance." (Schelling, 1959, 414). In addition, it was important to understand how much destruction is enough to deter an adversary which is embedded in the concept of unacceptable damage. Although with the nuclear weapons the costs of an attack have raised and intensified accordingly it is still quite hard to operationalize this concept, especially when levels of response are lower.

Finally, concepts of *credibility* and stability in deterrence theory (and in strategy) became two central issues which provoked many debates since both played an important role in deterrence success. In simple terms, to be credible means being believable, trustworthy. It's a necessary quality for deterrence, as already noted, the capacity to do harm doesn't go very far if our adversary does not have the belief in those same capacities. As Morgan put it, "what deterred was not the threat but that it was believed" (Morgan, 2003, 15). The problem that arose here, emphasized especially in practice of extended deterrence aimed at allies, was that the sole military capability did not necessarily guaranteed the credibility of their threat. Moreover, the perception of the adversary and his/hers ability to perceive the threat and assess it as such could also be a part of the problem, which was often visible in US-Soviet relationship. Therefore, the discrepancy arose when important deterrence assumptions had to be achieved. Conveying the military capabilities was not as hard as conveying the will and resolve to actually use them. For instance, military capabilities were very much in place during the Cold War as was the capability of second strike. On the other hand, credibility of threat to use those same capabilities was a much harder message to deliver. Deterrer had to be sure that its message was clear, not just for the enemies but for the allies as well. Therefore, effective communication was the key mechanism to corroborate credibility of an intent. In addition, the link was often established between credibility of the threat and its rationality. That seems particularly relevant for the nuclear age, since as noted, nuclear war due to its scope and intensity, even when threatened carries a significant inherent irrationality. For that reason, granting credibility to a threat of that sort can be difficult to achieve, so "it appeared that the best way to convey intent and will, assuming rationality, was to demonstrate that a forceful response or retaliation was rational." (Morgan, 2003, 18) Accordingly, one of the options to incorporate credibility in a threat was seen in combination of dominance in military capabilities and flexibility in response, since it was (rationally) assumed to be better to have various options to respond at various levels of war fighting. Still, that did not necessarily resolve the problem and left this concept with a lot of limitations even to this day. Many scholars pointed out the deficiencies and tried to respond with solutions that will include effects of reputation (Sartori, 2005) or current calculus model where credibility is enshrined in balance of power and interests (Press, 2005a, 2005b).

Another concept in the center of deterrence theory was stability. It was to a certain extent the 'holy grail' passed from generation to generation in order to preserve the strategic balance and avoid further nuclear proliferation that may destabilize the established norms of rational behaviour. It was assumed that nuclear deterrence between superpowers as such could facilitate stability and avoid conflict. Such quest was naturally very hard to achieve and was influenced by a variety of tangible and intangible factors, while conditions that would make deterrence stability realistic are not always easy to meet and could even contradict each other. For instance, the immense preparation for worst-case scenarios of deterrence, which has been an ongoing process between superpowers from the very beginnings of the Cold War, raise some questions of how that can be coupled with stability and avoid causing the exact opposite - instability. If deterrence is meant to curb proliferation, contain crisis and arms race, constant refinement and upgrade of military forces could damage the deterrence purpose. In addition, in the nuclear age, especially in the modern era, starting a war by accident or control loss does not seem like fear detached from reality. The number of actors or aspirants in the nuclear field only corroborate these concerns. Moreover, reinforcement of deterrence capabilities could be perceived as 'disturbance in the force' and could address it as a hostile sign. Therefore, although the classical deterrence theory prescribed stability as one of the core values and left it as a quest for generations to come, practice shows that significant security concerns or just a general preoccupation with reinforcement of deterrence capabilities does not necessarily facilitate stability (see Krepon, 2018). Once strengthening deterrence becomes a nuclear arms race, stability may well be out of reach.

2.2.2 Extended (nuclear) deterrence

Upon providing the basics of deterrence theory and before setting those basics in the stage of the 21st century, it is important for the topic of this thesis to introduce another deterrence related concept into the discussion. As it was noted, deterrence is a complex and multilayered concept and decades of research and operationalization provided us with various categories or subgroups through which deterrence could be more narrowly understood and analyzed. In that sense, for example, distinctions were made between several 'pairs' of deterrence including general vs. immediate, unilateral vs. mutual and conventional vs. nuclear deterrence. All these categories instigated a lot of relevant scholarly work, but this thesis will highlight the final pair, conventional vs. nuclear deterrence, in order to enable clear analytical path.

This pair is distinguished primarily according to type of weapons the state possesses. Even though there is a significant strand of literature taking interest in conventional deterrence, many believe that "nuclear weapons dissuade states from going to war much more surely than conventional weapons do" (Waltz, 1988, 625). In other words, "nuclear deterrence is using the threat of nuclear attack to dissuade." (Wilson, 2008, 422). Moreover, the logic of classical deterrence assumes that nuclear war is in itself a worst-case scenario and every rationally driven state/actor would want to avoid such high costs. The distinction between conventional and nuclear deterrence is not so hard to explain, but in practice it is often blurred by the fact that nuclear weapons as a deterrent cover much more than nuclear attacks. Most superpowers' nuclear postures cover conventional, biological and/or chemical attacks with nuclear weapons deterrent, expanding thereby the use of nuclear weapons for targets who pose no nuclear threat whatsoever. Such broad target list along with practical record of nuclear deterrence led many scholars to argue that once a certain threshold is passed, imposition of any additional costs do not have significant effect on deterrence stability (Zagare et al., 2000). Moreover, particularly these NWS positions are often the main hurdle for adoption and implementation of policy measures such as NFU or NSAs. Although this thesis will focus strictly on matters of nuclear deterrence, it is nevertheless important to have this distinction in mind, since one of the main implications of both NSAs and NFU is to clearly delineate these two deterrence categories and, while downplaying and limiting the role of nuclear weapons, these two instruments will put a clear emphasis on conventional deterrence.

On a similar note, additional distinction needs to be emphasized between what is understood as direct deterrence, which is in the essence of classical deterrence theory and it "deals with an attempt by one state to deter another from attacking the deterrer directly" (Quackenbush, 2006, 562) and extended deterrence. "Extended deterrence occurs when one country, commonly referred to as the patron or defender, attempts to dissuade an attack on an ally—the protégé—by threatening to deny benefits or impose costs on a third party" (Fuhrmann, 2018, 52). It involves, although not exclusively, some form of military assistance, depends on mutually relevant security interests and coordination between the defender and protégé. Moreover, it rests on the political will to enable and maintain this alliance but it also depends on the credibility of such commitment which, especially when nuclear weapons are at stake, is not easy to achieve. In other words, "the guarantor state must be able to convince its allies that the capabilities are sufficient to deter potential threats (general extended deterrence) and that it will act to protect them in case of crisis (immediate extended deterrence)" (Von Hlatky & Wenger, 2015, 4). In this sense, the inclusion of nuclear forces uplifts the extended deterrence to a highest possible form of protection. From the historical perspective, extended deterrence is not a new concept. Even during the Cold War, the US played the deterrence game with Soviet Union in a way that would include other regions and actors as well. The US relied on its extended deterrence commitments in order to hold the Soviets back from Europe and American allies in Asia. Today US nuclear umbrella follows the same logic, often expressed through NATO, but unburdened with existential threats it adopted "a more balanced portfolio of capabilities" (Von Hlatky & Wenger, 2015, 4). However, as was the case during the Cold War, today extended deterrence faces similar challenges of credibility and operationalization. Such challenges could seemingly be increased with the doctrinal shifts such as NFU or even NSAs. Although, those issues will be elaborated in more details while analyzing NFU and NSAs, it is important to note here that extended deterrence represents a valuable but more complicated aspect of deterrence in general. Lessons from the Cold War engraved in it the dependence on the highest possible form of protection, which is nuclear protection, and more often than not, the questions arise of whether the US will be able to discourage its allies from seeking their own nuclear deterrent in case the US decides to make any doctrinal changes in its military posture. Such questions are especially important for the US allies in the Middle East and Asia, where nuclear states are combined with highly unstable environment. Addressing such questions will be inevitable if either NFU or NSAs are to be discussed and taken seriously.

2.3 Deterrence theory in the 21st century - yesterday's solution?

It would be hard to grapple deterrence theory in its complexity without taking a closer look into the state in which 21st century found it. In other words, long after the Cold War deterrence is under severe pressure to adapt to the contemporary challenges in order to stay relevant. Keeping deterrence strategy and theory on the Cold War level serves as a brake to any innovation and risks permanent unfitness for the issues of such importance and magnitude like avoiding the future nuclear conflicts.

Times have significantly changed and dominant problems of today call for ideas and solutions tailored for such circumstances. The Cold War deterrence is not one size that fits all international security contexts because deterring an adversary today is much different, complex and uncertain process than it was in the past. The essence of deterrence and its core questions may have stayed the same but the answers have changed so the policies and actions should be adjusted to suit the situation at hand. Today we are very far from the bipolar world, multiplicity and variety of actors and threats have changed and expanded the nuclear field and the rules of the game. Maintaining stability in a world of two nuclear superpowers was a difficult quest in itself, but doing the same when the number of nuclear players has increased significantly puts an even more pressure on those who still believe that stability is achievable through nuclear weapons. Non-state actors and terrorist groups have shown less concern with nuclear weapons and cyber-attacks seem to be even more resistant to nuclear deterrence. Cyberwarfare is the thing of the 21st century and many countries have increasingly strengthened their cyber capabilities, especially Russia, China, Iran and North Korea as well. Rationality is being harder to assume and credibility harder to uphold. Serious threats of nuclear weapons use in order to secure its own citizens risk annihilation of another population which makes it inherently inhumane. It has often been argued that "the positive values to which humanity aspires and the theory of nuclear deterrence are mutually exclusive. An attempt to endorse them both creates a trap for the human soul. One cannot simultaneously embrace universal human rights and accept a government's right to threaten global nuclear destruction in the name of national security" (Doyle, 2019, 89). Moreover there is a real risk self-destruction whenever the nuclear option is contemplated. In addition, deterrence has played a major role in proliferation of nuclear weapons since it demands constant modernization of military forces in order to maintain the envisioned deterrence stability. It can also be the cause of insecurity and can endanger the regional stability, which was evident from India and Pakistan conflict and today even more with the Middle East situation. The potential for miscalculations, miscommunication and accidental wars has grown substantially. Dealing with one adversary and assessing his capabilities certainly had its difficulties and mistakes are well known, but today it is much harder to identify the enemy itself, not to mention his doctrines or strategies which remain quite ambiguous or even completely unknown. So do the consequences of serious cases. In addition, many factors that were previously taken for granted in designing deterrence capabilities and policies now call for some re-thinking. Religion, especially the extremism and fundamentalism that motivate certain actors serve as good example. Then, technology is not slowing its pace and emerging domestic debates in many countries make decision-making process of deterrence much harder. Moreover, global efforts to curb proliferation, devalue nuclear weapons and enable disarmament seem to be constantly clashing with nuclear powers' strong grip on nuclear deterrence. It appears as though the current security challenges and circumstances have outgrown old deterrence practices, but nuclear states haven't. Despite the fact that there are significant positive movements towards reduction of nuclear stockpiles and clear lack of global conflicts that could profoundly endanger international peace, political efforts still need to catch up with disarmament visions.

"Humanity does not learn much from events that do not happen" (Delpech, 2012, 9), so maybe less reliance on deterrence or efforts toward its minimization could enable alternative approaches to actually work. It won't happen over night and deterrence theory and strategy will have its purpose in understanding and explaining state behaviour. But in a world where challenges constantly change and multiply, maybe it is time to loosen the Cold-War-deterrence-brakes and let some innovations in. For instance, embracing a no first use (NFU) doctrine could establish more limited role of nuclear weapons and negative security assurances could refine the nuclear target lists to exclude non-nuclear weapon states and thereby lift a bit the deterrence 'fog' and make some small steps towards trust-building and clarity.

2.4 Concept definitions - Nuclear arms control, Non-proliferation and Disarmament

As it was mentioned in the introduction of this chapter, this part will focus on the theoretical concepts that could complement deterrence theory in providing broader understanding and guidance for the analysis of the topic at hand. Concepts of nuclear arms control, disarmament and non-

proliferation, have been at the center of global efforts to deal with the nuclear age and its wanted and unwanted consequences. They provided some sort of normative clarity, discussion and negotiation platforms and serve as a constant, although fragile, bridge between opposing sides in restless international security environment. Both NSAs and NFU, along with deterrence, represent important elements of the overall non-proliferation regime and play their respective parts (with more or less success) in achieving the goals of the world free of nuclear conflicts and eventually of nuclear weapons.

These three concepts, both in theory and in practice came a long way from a Cold War arena and were enormously valuable for the shape of the international security landscape in the decades after the Cold War. Today these concepts represent pillars of international security and consist of a variety of treaties, agreements and institutions paving the road to constraining possibilities of a new and much more lethal war. Still, since they are often used together, it could be easy to neglect their individual differences in meaning, limitations and goals. They do reflect associated areas in international security realm but they are rather different concepts. In this thesis the adopted definitions will be borrowed from Nuclear Threat Initiative where, for instance, arms control is defined as "measures, typically bilateral or multilateral, taken to control or reduce weapon systems or armed forces. Such limitations or reductions are typically taken to increase stability between countries, reducing the likelihood or intensity of an arms race. They might affect the size, type, configuration, production, or performance characteristics of a weapon system, or the size, organization, equipment, deployment, or employment of armed forces. Arms control measures typically include monitoring and verification provisions, and may also include provisions to increase transparency between the parties." (Nuclear Threat Initiative, n.d.-b). The definition of disarmament may lack some clarity because "there is no agreed-upon legal definition of what disarmament entails within the context of international agreements" but, "a general definition is the process of reducing the quantity and/or capabilities of military weapons and/or military forces." (Nuclear Threat Initiative, n.d.-c). Non-proliferations is defined through "measures to prevent the spread of biological, chemical, and/or nuclear weapons and their delivery systems" (Nuclear Threat Initiative, n.d.-d). Disarmament and non-proliferation are first two pillars of one of the monumental treaties, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and there these concepts are highlighted as necessary to "safeguard the security of peoples" (UNODA, n.d.).

Important achievements under these concepts have been tremendous and to a great extent in-

fluenced the changed nuclear logic after the end of the Cold War. It was profoundly clear that the usefulness and value that nuclear weapons provided to some will inevitably lead others to want them, and maybe eventually, acquire them. Fears of proliferation and loss of control in nuclear arms race fueled the global efforts to uphold and sustain the non-proliferation regime. That is another justification as to why such concepts deserve a closer focus and a broad discussion on anything affecting the insecurity of their future, as it seems to be the case in the 21st century. Moreover, a detailed discussion on these concepts demands much more than the scope of this thesis can satisfy, but it is important to note that developments around these concepts have not been neither easy nor necessarily successful. And certainly not quick. In addition, often scholars confront the theoretical visions behind these concepts with their practical records. For example, it is being argued that, despite the talks and speeches on disarmament, nuclear arms control and non-proliferation efforts are significantly more in line with some way to manage arms race and therefore are strongly differentiated and detached from disarmament (e.g. Gärtner, 2013). Moreover, the already explained logic of deterrence can often be the main cause for going further from the global zero since declaratory policies followed by significant ambiguities along with the scarce achievements in devaluation of nuclear weapons and their modernization seem to be mutually exclusive when paired with disarmament or non-proliferation.

Additionally, the whole agenda of arms control and disarmament could be a bit too complex for negotiation (Ingram, 2013) and naturally it would be unrealistic to expect a perfect legally binding treaty covering all issues or that even legally binding assurances or no first use policy shifts could have outstanding influence on the future of the whole non-proliferation regime. However, in light of both importance and challenges that this regime is being faced with it definitely seems relevant to take a closer look at even the 'smallest' steps that could give at least a bit brighter prospects for the future.

Finally, it is important to note that, despite all the possible challenges brought by constantly evolving international security environment, non-proliferation regime still stands strong on the expressed goals and commitments. The international community responds to any changes and possible threats to what was being built for decades now within the non-proliferation regime. Moreover, as it was mentioned, the calls for marginalization and eventual elimination of nuclear weapons are a constant in today's world. As a testament to that are efforts to create another formal obligation for banning nuclear weapons, in the form of what is called The Ban Treaty which was opened for sig-

nature in 2017. Namely, despite the resistance and even boycotts of the NWS and NATO members, the text of legally binding international treaty which would "forbid the development, production, testing, acquisition, stockpiling, transfer, possession and stationing – as well as the use and threat of use – of nuclear weapons" (Meyer & Sauer, 2018, 62) was adopted thereby attempting to mark the beginning of an end for the nuclear age. It was a result of impatience of those waiting for NWS to do more on their already assumed commitments to negotiate disarmament and steps towards final elimination of nuclear weapons, and it was also the result of the need to strengthen the non use norm which may be under severe pressure in today's circumstances. As noted, NWS rejected this effort since it would not only require the destruction of their nuclear forces but in extent also the disavowal of the long lasting nuclear deterrence doctrine. Of course, it is highly unlikely that NWS positions will change in the near future, but concepts like NFU or NSAs could play another important role in facilitating that change, at least in the sense of delaying the ban commitment. Moreover, even the commitments assumed under the NPT, which haven't been fully respected or implemented, especially the obligation under Article VI in which NWS agreed to negotiate the end of the arms race and the beginning of nuclear disarmament, could be revitalized via NFU or NSAs. In other words, to a different extent, both of these instruments would be in line with Article VI commitments and would further support non-proliferation and disarmament efforts.

Negative Security Assurances

3.1 Defining the Negative Security Assurances (NSAs) - Disentangling the assurances bundle

Upon highlighting and explaining the core of the deterrence theory, along with interrelated concepts and platforms which served as discussion points for both NSAs and NFU, it is now necessary to investigate each of these instruments more closely. That will, hopefully, serve as a good basis for answering the first research question and a necessary starting point towards operationalization of deterrence theory and thereby, answering the second research question. Therefore, throughout this chapter an attempt will be made to employ qualitative content analysis to collect and analyze all the relevant records of negative security assurances, starting from its conceptual placement among the general concept of assurance(s), going through its history and relevant practical achievements as well as failures.

Any attempt to conceptualize negative security assurances and reach a comprehensive understanding of this 'tool' demands a clarity both in its definition and in differentiation from all other similar or related concepts. The international security realm seems to be replete with a variety of 'assurances' which carry different meanings, fit in different contexts and are often shaped by a myriad of conditions and particularities. The terms such as assurances, reassurance and guarantees are more often than not used interchangeably in the security realm, although sometimes with different connotations. Therefore, it is relevant to distinguish where one term stops and the other starts and to provide some sort of definition standardization before conducting any further analysis on any particular type of assurances.

In general, assurance signifies a promise. In security realm assurances are a particular type of strategy, a commitment to respect and/or ensure security, and a possible alternative to more established threat-emphasizing strategies. In other words, "assurance is a type of strategy that states can employ in the pursuit of national security objectives" (Knopf, 2012b, 375). So, in simple terms, it comes down to a choice - to do or not to do in matters of security.

The research on this subject reveals that the assurances 'menu', although understudied, is actually filled with terms demanding a careful and detailed conceptualization in order to ease both the theoretical and empirical maneuverability and assessment. Additionally, it reveals significant discrepancies in, primarily, the quantity of the research on each of these concepts as well as their different statuses and empirical achievements. This also shows that although, for example, security assurances could represent a strategy that generates a greater sense of security, as opposed to those which are more focused to hold the security of others at risk, that did not elevate its attractiveness in the eyes of scholars and policymakers. Still, some attempts have been made to categorise and clarify the varieties of what appears to be an overarching and multi-layered concept of assurance. Such attempts produced "four primary variants of assurance", whereby assurance can take the role of being a deterrence component, it can be a strategy directed at allies or adversaries, or it can represent a nuclear non-proliferation tool (Knopf, 2012b, 376). Moreover, as already mentioned, throughout these categories terms like assurance, reassurance and guarantee have all been used without much consistency, therefore further blurring the lines between these concepts. In such context it seems useful, while relying on the literature and official documents, to compile and clarify different notions of assurance within international security domain, thereby making a clear path towards the definition and conceptual placement of negative security assurances.

3.1.1 Assurance as part of deterrence

The first category to be discussed here seems characterized by a sort of one-sided companion-ship and has its origins and purpose in deterrence, one of the most popular and well-established influence strategies of the post-Cold War era. The introduction of assurance as a component of deterrence has its origins in the work of Thomas Schelling and his famous writings on influence strategies. According to Schelling, "any coercive threat requires corresponding assurances", maintaining that "the critical role of assurances in completing the structure of a threat, in making the threatened consequences persuasively conditional on behaviour so that the victim is offered a

choice" (Schelling, 2008, 74), for without such assurances clearly no actor will have the incentive to comply with deterrence. So assurance here serves the deterrence in a way to preserve the costs of certain behaviour while offering the possibility to avoid those costs as long as there is abstention from unwanted behaviour. It is also worth noting that assurance here does not represent a separate strategy by itself, only a 'follow-up' of deterrence strategy.

3.1.2 Assurance as part of an alliance

This type of assurance has been widely present in the international relations and in comparison to the one attached to deterrence, assurance assuming the role of strategy towards allies have much more pronounced stand-alone capacity. When aimed at allies, this type of assurance signals the promise of protection to friends in case of need. In practice, assurance as an alliance commitment and part of defense strategy was introduced in the U.S. policy during George W. Bush administration. Namely, the administration's Quadrennial Defense Review as well as National Security Strategy identified as a goal to assure allies and friends of U.S. commitment to them (Bush, 2002; US Dept of Defense, 2001). As depicted here, assurance does not target adversaries but rather bolsters the confidence of friends and allies that they will not be abandoned in the time of need. That also means that it is not necessarily rooted in a larger deterrence strategy, although assuring the allies of defense commitments can be quite instrumental in deterring those allies from deviating from their security postures. Moreover, this could be linked to what Snyder called "security dilemma dynamics of the alliance game" (Snyder, 1984, 461). He argues that in alliance game dilemma stems from both fear of being entrapped and fear of being abandoned by an ally (Snyder, 1984). So this type of assurance aims at minimizing the fear of abandonment, although not bothering too much with the second part of that dilemma. In addition, assurance as a promise to allies relates to, although not equals with, the concept of extended deterrence. As it was noted, extended deterrence "deals with a state's attempt to deter another from attacking a third state (Quackenbush, 2006, 562-563). In other words, extended deterrence is concerned with discouraging adversaries from attacking state's ally and by affecting the "calculations of adversaries" (Knopf, 2012a, 14) it aims to deter an attack that might have happened otherwise. Hence, it could be argued that the promise to intervene on behalf of an ally in case of need, signifies an intention not only to dissuade the adversary but also to assure the ally. Still, whether an ally really feels assured or not does not seem to be as easily answered or implied by the mere existence of extended deterrence and even within relevant scholarly research the general success of extended deterrence to affect (deter) the behaviour of adversaries makes up for much greater deal of research. In the end result, this makes the relation between "alliance-related assurance" (Knopf, 2012a, 14) and extended deterrence seemingly one-sided. Understanding what makes an ally feel confident and assured, or what makes this type of assurance more effective seems to be much harder to achieve or measure. And that applies to pretty much any type of assurance. But some researchers have tried to tackle this issue, thereby finding that, for example, with regard to the US and its extended deterrence record, US allies do not put all the weight on the US forces deployment and that the possibility of involvement in planning and participating in decision-making process can also play a significant role in providing the credibility for this type of assurances, thereby contributing to the effectiveness of the strategy of extended deterrence (e.g. Yost, 2009). It is also worth noting that this type of assurance was earlier labeled as reassurance (see for e.g. Howard, 1982), and even during the Obama administration the goal and the substance of such assurance was maintained at a similar level as in previous administrations, but the term usage was shifting between assurance and reassurance (Gates, 2010).

3.1.3 Reassurance

However, reassurance has a place of its own and has been one of the widely debated strategies in international relations. It is a "strategy of seeking to persuade another state that one harbors no aggressive intentions toward it" (Knopf, 2012a, 15). The literature on reassurance reveals that in discussing reassurance scholars have often taken either psychological (see e.g. Etzioni, 1962; Osgood, 1962) or structural (see e.g. Glaser, 2010; Jervis, 1978) approach. One sees reassurance through modest or larger gestures more appropriate to overcome psychological factors which fuel the perception of constant hostility, while the later links reassurance to stronger military conditions and the need to strengthen defensive military capacities. In other words, the differences in research paths of scholarly work on reassurance reveals that it is mostly a matter of emphasis and perspective choice - either its a case of military conditions and restructuring, or it is a tool to fight psychological and behavioural constraints on rationality experienced by the states.

Although not even remotely as dominant as some hard-line approaches like deterrence or use of military power, the failings of these strategies made scholars think of alternative ways to achieve the common goal which is to avoid the war or similar unintended conflicts. Reassurance was born from the critique of deterrence strategy as a more appropriate method, as presumably better equipped to address and reduce the flaws of deterrence. Similarly to deterrence, starting point for the strategies of reassurance is also to assume the hostility from an adversary. But unlike de-

terrence, reassurance presuppose that the root of that hostility lies in "adversary's sense of acute vulnerability" (Lebow & Stein, 1987, 6). Stein, for example, argued that reassurance strategies include not only verbal assurances to prevent undesired behaviour from an adversary, but also a set of different strategies, like reducing the pressure on an adversary, developing norms that regulate any future conflict and prevents miscalculations, the reliance on the irrevocable commitments or building security regimes which serve the trust building (Stein, 1991). However, reassurance as a strategy is neither easy to implement nor is its success guaranteed. Just like with any type of assurance, success stories do not come easily to mind, presumably because they have not been pursued as often as it may be expected. Another issue is in the fact that the actual measurement of reaches and shortcomings of reassurance, and other types of assurance strategies, is not an easy endeavour. The arguments made by Richard Lebow seem to still have some merit: "It is extremely difficult to recognize the success as opposed to the failure of such a policy. Failure is manifest in crisis or war, events that readily impinge upon historical consciousness. Success, which results in greater tranquility than would otherwise be the case, can easily go unnoticed as it may produce no observable change in the level of tension. Even if relations improve, it is impossible to determine just how much this could be attributed to reassurance as distinct from other causes." (Lebow, 1983, 345).

Still, putting the effectiveness and empirical achievement of reassurance aside, there are some clear lines that need to be drawn between reassurance and other types of assurance. It is by no means necessary for reassurance to be embedded in the strategy of deterrence - it has a stand-alone capacity, although it can be used to complement such strategy. Also, despite the fact that some studies tend to use reassurance as a synonym of alliance related assurances (e.g. Roth, 2009), it represents a negative kind of assurance since it includes a promise not to do something, which means it is different from alliance type of assurance which, as noted, have positive inclination since they serve to assure ally of commitment to help in need. Moreover, in comparison to security assurances its stand-alone capacity does not itself suffice to provide for any form of full theory of assurance strategies. But, it is also broader than security assurances associated with NPT for example, because reassurance can be pertinent to not just nuclear domain, but conventional and non-military as well.

3.1.4 Security assurances

That brings us to the final category to be discussed here, which is the security assurances. Broadly speaking, "security assurances can be defined as attempts by one state or set of states to convince another state or set of states that the senders either will not cause or will not allow the recipients' security to be harmed." (Knopf, 2012a, 3). Previous types of assurance originate mostly from the academic writings, while security assurances are policy products.

In the international politics these assurances have found most use in the policy goals towards prevention of the spread of nuclear weapons. For that reason, the most common and certainly the most prominent usage of this type of assurance belongs to nuclear non-proliferation regime. There, the purpose and meaning of security assurances has, more or less, stayed the same, although with the addition of nuclear weapons the context became more specific and notably more fragile. Since the nuclear non-proliferation regime owes to a great extent its foundation to the mentioned 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT), that has allowed for security assurances to be quite intertwined with the NPT regime and debates on security assurances followed the NPT since its outset. Historical background on the security assurances within non-proliferation regime will be provided later in this chapter, but for now it is important to note that NPT regime created not just a milestone in post-Cold War history, but also a new classes of states: nuclear weapon states (NWS) and non-nuclear weapons (NNWS) states. Those who have them and are not ecstatic to renounce them, and those who don't have them but cannot be expected to completely forswear them. In such set of circumstances, with only a few of the 'big players' and much more 'small players', it was inevitable that some way of compensation will be necessary to fill the gap between them. The countries who did not possess nuclear weapons were concerned with the implications the renouncement of nuclear arsenal could have for their security and the same concern existed among those who already had them. Therefore, the way to compensate was the way to assure. To give up the acquisition of their own nuclear weapons, those states requested two types of assurances to counterbalance their security fears. On one hand, negative security assurances (NSAs) are security assurances designed as "promises by nuclear weapon states not to use or threaten the use of nuclear weapons against non-nuclear countries" (Knopf, 2012b, 388). On the other hand, in cases where the use or threat of use occurs, positive security assurances (Positive Security Assurances (PSAs)) represent a "promise to provide victims of nuclear aggression with assistance" (Pilat, 2005, 159). Here it may be useful to note that a distinction can be made between security assurances and security guarantees, even though these two terms are, both inside and outside the academic world, used quite interchangeably. Namely, some states (U.S. especially) use the option to provide positive security assurances bilaterally in the form of mutual defense treaties and security guarantees are used to indicate that commitment. When put in the nuclear non-proliferation context, security guarantees connote the possible use of nuclear weapons or in other words, "extending a nuclear deterrent umbrella over an ally with the goal of convincing the ally that it does not need a nuclear deterrent of its own" (Knopf, 2012a, 17). Although a guarantee in the ordinary language means a bit stronger commitment that assurance, in non-proliferation practice it could be seen as a form, or a particular variant of positive security assurances.

As already noted, there are significant differences in the emphasis and the effectiveness that have been attributed to either of these security assurances both in scholarly work and in states' policies and security postures. Still among nuclear weapon states and within academia, the provision of positive security assurances often outweigh the negative assurances in the process of curbing nuclear proliferation. Positive security assurances clearly follow the logic of extended nuclear deterrence and fit in the general notion of nuclear umbrella. Yet, that does not come without issues of its own. The need to keep up with proclaimed defense commitments is followed by constant nuclear arsenal improvements while preserving the reputation of defender who is in fact willing and ready to act using those weapons in case of need. Such standpoint might be at crosspurpose with the one behind negative security assurances. The need to maintain and constantly modernize nuclear stockpiles severely affect the credibility of the state behind certain NSAs. In that regard, the relation between PSAs and NSAs is not necessarily straightforward and, although they belong to the same category of security assurances, they seem to, more often than not, work against each other. Therefore, their ability to stem proliferation might not be so easily measured once costs and benefits analysis of each of them is taken into account. Nevertheless, it is important to explore the options that will highlight their potential and salience for non-proliferation regime while avoiding, or at least minimizing, the trade-offs between them.

Even though the current state of non-proliferation literature does not leave much to optimism, overcoming the current empirical research limitations, especially with regard to negative security assurances, could be an important step forward in understanding what these concepts can achieve once treated with increased interest and noteworthiness.

3.2 The History of Negative Security Assurances (NSAs)

One of the first impressions coming out of the initial analysis of documents related to NSAs is that this appears to be an instrument that compensated in history what it couldn't in actual achievements. It is by no means a rarely mentioned concept or suggested solution, instead it plays a recurring role in the non-proliferation efforts. Nevertheless, it's long-term spot on the non-proliferation and disarmament agenda didn't account for much on the practical success level.

As it was noted, discussions and pledges for NSAs occupied a very limited space in the international realm and their historical record remained mostly focused on those bodies from which they first emerged. Therefore, formal documents and official statements produced throughout these forums account for the majority of what is considered to be the history of security assurances in general, and NSAs in particular. In addition, it is worth noting that another important aspect of history of such instruments are policy measures and nuclear and strategic postures which are products of national interest and security concerns of any particular state. These two forms of history writing depend and result from each other and that applies to the history of NSAs as well. Therefore, analysis of the mentioned documents will be the basis for a comprehensive overview of the historical path of NSAs. Moreover, bearing in mind that the concept of security assurances owes its rise to salience and most formal encoding to non-proliferation regime itself, it is important to analyze the history of negative security assurances through the shape and space it absorbed within this regime.

The main aspects of that shape include platforms for discussion, actors who took on the initiative for and implementation of NSAs and variety of forms which were at their disposal.

3.2.1 Forums, forms and actors

Firstly, as noted, the history of NSAs just like the history of security assurances in general, is a combination of forums, forms and actors. Since their inclusion in the non-proliferation regime this combination depended significantly on the development and direction taken by the regime itself. Under forums it is meant the international bodies that provided environmental setting and a platform for discussions and formalization of NSAs. As already mentioned, the main forum is the NPT process, it preparatory and review conferences. Additional forums are Conference on Disarmament in Geneva (previously Eighteen Nations Disarmament Committee (Eighteen Nation

Committee on Disarmament (ENDC))) and the United Nations General Assembly (UNGA) (previously UN Security Council was in charge). Each of these bodies contributed to a certain extent to maintenance of interest around NSAs, but also throughout the years they have encountered deadlocks and in the end result neither of these forums made enough progress to stand out in successful handling of NSAs.

Along with where they have been addressed, an important aspect in analyzing NSAs is the form, or how they have been addressed and implemented. In that regard, several options have been available. In general, security assurances in the non-proliferation regime have been known to take on four different forms. First, security guarantees as part of extended deterrence agreements either through bilateral or multilateral defense agreements. Throughout the NPT process, positive and negative security assurances to non-nuclear weapons states (NNWS) have been provided mostly in unilateral form. In case they are provided through legally binding international treaty, convention or agreement, there can be common negative and positive security assurances. Finally, there are security assurances as part of regional agreements, such as Nuclear Weapons Free Zones (NWFZ) agreements since some of them included negative security assurances from the NWS. Knopf (2012a, 21) for example, offers a bit different categorization arguing that five formats could be recognized: "bilateral, generalized individual, focused multilateral and global (or universal) assurances", and NWFZ agreements as the fifth form.

In addition, a significant aspect to be taken into account is who is providing the security assurances and who is receiving them, particularly NSAs. That is why the history of the use and application of this tool is also highly dependent on the states themselves, their national and international objectives, security strategies and doctrines. Therefore, it goes without saying that the nuclear weapons states have so far been the only ones responsible to provide NSAs in non-proliferation efforts, although NSAs as such could be used between any group of states as a form of promise and commitment not to put or threaten to put the security of other state(s) at risk. On the other side of that coin, those who are to benefit from NSAs could include primarily states parties to the NPT and NWFZ, but some argue that the beneficiaries could also be states who accept the integration of International Atomic Energy Agency (International Atomic Energy Agency (IAEA))'s safeguards, states without nuclear weapons stationed on their territory and states that don't have any alliance agreements with nuclear weapon states (Simpson, 2012). The conditionality with which NSAs have been faces will be discussed later in the thesis, but for now it is important to note that there

are vocal disagreements on the matter of to whom these assurances should be granted.

3.2.2 Prehistory - The Road to NPT

During the Cold War tensions, both opposing blocs abandoned any ideas of international control of atomic weapons and instead turned to creating and strengthening military alliances with all options on the table. The birth of NATO and Warsaw Pact gave rise to some of the early forms of security assurances as new allies wanted to take advantage of the nuclear umbrella and use the extension of deterrent capacities for their own security. In such circumstances, states that haven't aligned themselves with either of the blocs were somewhat 'left out in the cold', forced to either acquire deterrent capabilities of their own or seek some sort of "a binding commitment from the weapons states that they would never use nuclear weapons against a country that did not have them" (Pringle & Spigelman, 1981, 300).

They pursued the logic of nuclear disarmament as well as the abandonment of the nuclear deterrence in order to secure themselves from the possible nuclear war between the two Cold War blocs. These goals were initially pursued within the Eighteen Nations Disarmament Committee (ENDC) and there the non-aligned states eagerly supported the UNGA Resolution 2153, which invited this committee "to consider urgently the proposal that the nuclear-weapon Powers should give an assurance that they will not use, or threaten to use, nuclear weapons against non-nuclear weapon States without nuclear weapons on their territories" (UN Secretariat, 2000, 8). The first to respond on the proposal were the Soviets who in 1966, with West Germany and American weapons stationed there in mind, made a proposition of "clause on the prohibition of the use of nuclear weapons against non-nuclear states parties to the treaty, which have no nuclear weapons in their territory." (Bunn & Timerbaev, 1993, 12), but that was rejected by the United States. Similar linguistic battles continued in the following year and the lack of consensus on the way NSA language could be incorporated in the final text of the NPT meant that the quest for security assurances will be moved "in the context of action relating to the United Nations, outside the non-proliferation Treaty itself but in close conjunction with it" (UN Secretariat, 2000, 3). Such developments resulted in the language of NSAs not being written into the NPT, leaving the non-aligned states to hold on to generally proclaimed NPT pledges to all NWS to abandon the nuclear arms race and find ways to negotiate a total disarmament of nuclear arsenals.

Nevertheless, the need to provide some security assurances with stand-alone capacity outside

the NPT to the states signatories was acknowledged and eventually done through the UN Security Council Resolution 255 on June 19, 1968. This resolution included a positive form of security assurance since in case of nuclear attack it "recognizes that aggression with nuclear weapons or the threat of such aggression against a non-nuclear weapon State would create a situation in which the Security Council, and above all its nuclear-weapon State permanent members, would have to act immediately in accordance with their obligations under the United Nations Charter" (Council, 1968). These PSAs, although generalized, didn't manage to satisfy the non-nuclear weapons states and the discussions on security assurances continued well into 1975 and 1980 NPT Review Conferences, in both cases without much substantive achievements.

3.2.3 Unilateral declarations and the UNGA Special Session on Disarmament (UNSSOD)

At the initiative of the non-aligned states, presumably led by their dissatisfaction with what was thus far done with assuring their security, precisely with regard to their requests for negative security assurances, the United Nations General Assembly held a Special Session on Disarmament in 1978. Even though the Final Declaration of this session for the large part reiterates procedures, goals and recommendations which have been heard many times before, it also contains some new elements which were regarded as significant shift in standpoints of certain states. In other words, this session raised again the question of negative security assurances and led nuclear weapon states to provide certain declarations regarding the non use and these statements affected significantly any future discussion and initiative on the NSAs.

To begin with, the United States issued its NSA pledge declaring that it "will not use nuclear weapons against any non-nuclear-weapon State Party to the NPT or any comparable internationally binding commitment not to acquire nuclear explosive devices, except in the case of an attack on the United States, its territories or armed forces, or its allies, by such a state allied to a nuclear weapon state, or associated with a nuclear-weapon state in carrying out or sustaining the attack" (Vance, 1978, 52). In similar formulation, United Kingdom avowed that it "undertakes not to use nuclear weapons against ... [non-nuclear-weapon States which are parties to the Treaty on the Non- Proliferation of Nuclear Weapons and to other internationally binding commitments not to manufacture or acquire nuclear weapons] ... except in the case of an attack on the United Kingdom, its dependent territories, its armed forces or its allies by such a state in association or

alliance with a nuclear-weapon state" (UN General Assembly, 1978a, 463). The Soviet Union for its part declared that it "will never use nuclear weapons against those states which renounce the production and acquisition of such weapons and do not have them on their territories" (UN General Assembly, 1978d, 4). This was in relation to their proposals for nuclear weapons states not to station their nuclear weapons on the territories of states who do not possess nuclear weapons of their own (UN General Assembly, 1978d). France wasn't so interested to offer negative security assurances in the similar vein as other countries, but said it was "prepared to give ... [assurances of the non-use of nuclear weapons against non-nuclear States] ... , in accordance with arrangements to be negotiated, to States which constitute non-nuclear zones" (UN General Assembly, 1978c, 479). The only country which declared an unconditional no-use assurance was China and it stated that "at no time and in no circumstances will it be the first to use nuclear weapons" (UN General Assembly, 1978e, 2).

Given that this session included a significant shift in a way negative security assurances have been addressed, it would be logical to expect that the Final Document devotes some of its final provisions to NSAs. Still, upon highlighting the general need to engage in real effort to disarmament and non-proliferation in order to avoid nuclear war, when it came to NSAs the tone of the paragraph 59 became more cautious: "In the same context, the nuclear-weapon States are called upon to take steps to assure the non-nuclear-weapon States against the use or threat of use of nuclear weapons. The General Assembly notes the declarations made by the nuclear-weapon States and urges them to pursue efforts to conclude, as appropriate, effective arrangements to assure nonnuclear-weapon States against the use or threat of use of nuclear weapons." (UN General Assembly, 1978b, 8). This may suggest that, despite the fact that this session brought some further action on the issue of negative security assurances, the final result may not be entirely satisfactory for the beneficiaries in this case.

In the same year as Special Session on Disarmament, the 33rd session of the UN General Assembly also took place. The relevance of this session for the NSAs is in the proposals initiated by two states, Soviet Union and Pakistan, both regarding the negative security assurances. Soviet Union initiated a proposal for an inclusion of an international convention concerning the strengthening of the security of non-nuclear weapons states (UN General Assembly, 1978g). The reasoning for such proposal, as noted, was found in the general understanding of the need of NNWS to have their security guaranteed and the impact such assurances could have on the universal peace and

security (UN General Assembly, 1978g). The first article of this convention contained precise NSA language and it provides that "the nuclear-weapon States Parties to this Convention pledge themselves not to use or threaten to use nuclear weapons against non-nuclear States Parties to this Convention which renounce the production and acquisition of nuclear weapons and which have no nuclear weapons in their territory or anywhere under their jurisdiction or control, on land, on the sea, in the air or in outer space." (UN General Assembly, 1978f, 3). This proposal is of course different from the earlier unilateral Soviet proposal since it now specifies the actors as parties to this convention and it provides for a spatial scope to which the obligation not to station nuclear weapons refers. On the other hand, Pakistan came with draft resolution on negative security assurances of their own, albeit referring to Soviet proposal as well. The Pakistan delegation emphasized the threat posed by nuclear weapons and singled out negative security assurances as a valuable option to keep non-nuclear states assured of their security until the complete disarmament is achieved (UN General Assembly, 1978g).

In 1982, the United Nations General Assembly held the second session of it's Special Session on Disarmament forum and it doesn't stand out in particular resolve and cohesiveness for the issues on the agenda. What it did bring is the change of tone in some of the unilateral declarations on negative security assurances. On one hand, France made a step closer to declarations made by US and UK, proclaiming that it will abstain from using nuclear weapons 'against a State that does not have them and has pledged not to seek them, except in the case of an act of aggression carried out in association or alliance with a nuclear weapon state against France or against a state with which France had a security commitment" (UN General Assembly, 1982b, 133). China once again stood behind its declared policy, this time with inclusion of states parts of the nuclear weapon free zones stating that "at no time and under no circumstances will China be the first to use nuclear weapons, and that it undertakes unconditionally not to use or threaten to use nuclear weapons against non-nuclear countries and nuclear-free-zones" (UN General Assembly, 1982c, 3). For its part, Soviet Union followed similar suit as China while also claiming that it "is prepared to conclude bilateral agreements on guarantees with States which do not possess nuclear weapons and do not have them on their territory" (UN General Assembly, 1982a, 202).

This slightly changed unilateral declarations, primarily due to its legally 'loose' nature and vague language, continued to be regarded as unsatisfactory by the NPT non-nuclear weapons states. For those reasons, these states persisted in calls for more efforts to be invested by NWS

to lower their security concerns. The platform for such pleas remained predominantly attached to the NPT process, primarily preparatory and review conferences, but also a new forum emerged and negotiation on NSAs started to develop significantly within the framework of newly founded Conference on Disarmament.

3.2.4 The NSAs and NPT review process from 1975-1990

As it was noted, NPT carries, from its beginnings, most of the responsibility to address issues around security assurances, among other things. One of the important features built in the NPT during its creation was the 5 year review process envisioned "in order to review the operation of this Treaty with a view to assuring that the purposes of the Preamble and the provisions of the Treaty are being realised" (UNODA, n.d., Article VIII, par. 3). In other words, the non-proliferation efforts of all states parties to the Treaty are subjected to a form of 'self-check' within these review conferences. First of those conferences was held in 1975 and was welcomed with rather high expectations for further strengthening of the non-proliferation regime, especially a year after Pokhran I, India's first nuclear test. NPT was and still is regarded as one of the strongholds of nuclear weapons spread prevention, especially in a world where, even in 1974, technical or economic barriers to acquisition of those weapons wasn't particularly strong. Still, despite such high expectations, the first Review Conference did not deliver the anticipated success. One one hand, from the outset a lot of different views were expressed regarding progress (or lack of it) NPT has made so far and the possible means to strengthen. Non-aligned states were especially vocal in criticism directed to NWS for lack of actual efforts to fulfil disarmament obligations which they taken upon themselves by signing the NPT and instead increasing their nuclear arsenals ((SIPRI), 1976). The NSAs were also on the agenda and during this conference several non-aligned countries made a proposal that NWS should commit "never and under no circumstances to use or threaten to use nuclear weapons against non-nuclear-weapon States Parties to the Treaty Whose territories are completely free from nuclear weapons" and in addition "to refrain from first use of nuclear weapons against any other non-nuclear-weapon States Parties to the Treaty" (UNODA, 1975, 11). Such proposals were faced with serious opposition among nuclear weapons states and, as mirrored in the Final Declaration of the Conference, they did not gather enough support to be finalized in anything more than another reiteration of the general appeals not to use or threaten to use nuclear weapons against those who do not possess them.

The second NPT Review Conference was held in Geneva in 1980 with NPT membership in-

creased for 21 newcomers but with no substantive statement at the end of the conference. The question of NSAs was on the table, especially in light of the 1978 unilateral declarations, but without much added value. The non-aligned states continued to be vocal in their dissatisfaction with offered declarations and despite the intense debate, with regard to disarmament progress and deficiencies also, Final Declaration came down to merely recording main proceedings and repeating previous recommendations. The third Review Conference took place in Geneva in 1985 and after rather underwhelming first two it wouldn't have been surprising that low expectations and expected heated debates and face-offs between parties to the Treaty were following this conference as well. Still, face-off between nuclear giants US and USSR did not take place, instead they stated their well-known positions, although US was receiving some stronger punches of criticism for its lack of effort to negotiate on termination of nuclear weapon tests ((SIPRI), 1986). Moreover, this conference was able to work out and adopt a more substantive Final Declaration. In addition, this conference recognized the ongoing negotiations on NSAs within Conference on Disarmament and called for their continuation in order to reach a binding international instrument that will be acceptable to all (UNODA, 1985, 17).

In year 1990 fourth in line of the NPT Review Conferences was held and it was the final one before 1995 Extension Conference which will be faced with the decision to extend the NPT indefinitely or for a certain period of time. At this point, the number of parties to the NPT was increased to 140 and this conference included both France and China, nuclear weapons states non-parties to the NPT, as observers which could be understood as a proof of an increased interest in the non-proliferation of nuclear weapons.

Much like the Review Conference in 1980, this one came to its finish without Final Document, this time predominantly due to discrepancies with regard to the salience of negotiations on the Comprehensive Test Ban Treaty (Comprehensive Nuclear-Test-Ban Treaty (CTBT)). Other important topics included peaceful use of nuclear energy, International Atomic Energy Agency (IAEA) safeguards and questions of security assurances to NNWS. Even though the similar acknowledgement of the NSAs negotiations switch to Conference on Disarmament, it is important to note that NSAs received much more prominent position during this conference. The great majority of NNWS have called for revision of existing security assurances and were willing to support initiatives and proposals on such matter. For example, at this conference Egypt submitted a working paper combining both negative and positive security assurances and it regarded security assurances

as "an indispensable measure" in the pursuit of the disarmament goals ("Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: final document. Part 2, Documents issued at the Conference", 1990, 85). Egypt had several recommendations: It called upon the Security Council to adopt a new resolution on security assurances that will go beyond earlier attempts and include more credibility; It saw responsibility in United Nations Security Council (UNSC) and NWS to act in case NNWS is under nuclear attack, to assist and provide compensation to the victim; and in light of NWS commitments, not to use or threaten to use nuclear weapons against states who do not possess nuclear weapons on their territories, to support sanctions for state(s), regardless of whether party to NPT or not, which used nuclear weapons against non-nuclear party to the NPT and to provide assistance to the attacked state, if requested ("Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: final document. Part 2, Documents issued at the Conference", 1990, 86). Nigeria also had a proposition of its own, concerning negative security assurances and, upon highlighting the core of the historical development on the NSAs, Nigeria stated its recommendations and views on the matter. To begin with, Nigeria noted that the main forum to discuss NSAs should be the one where the NWS already committed themselves to pursue the renunciation of nuclear weapons, which is the NPT process ("Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: final document. Part 2, Documents issued at the Conference", 1990, 5). In addition, NSA language in proposal by Nigeria included an obligation assumed by NWS not to use or threaten to use nuclear weapons against NNWS parties to NPT who are not part of a military alliance or have other defence arrangements with NWS and non-use or threatening to use nuclear weapons applies also in the case of NNWS being part of military alliance or other defence arrangements, but without nuclear weapons stationed on its territory ("Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: final document. Part 2, Documents issued at the Conference", 1990, 6).

3.2.5 Budapest Memorandums on Security Assurances

On the road to 1995 NPT Extension Conference, several important events took place and marked an important moment in non-proliferation developments in general, and for NSAs history in particular. One of the major events of that period was 1991 final disintegration of the Soviet Union, leaving in place Russian Federation and several now independent former Soviet countries. Among the newly emerged independent states, Belarus, Kazakhstan and Ukraine were the cause for some concern due to the Soviet nuclear weapons which remained on their territories. In order to resolve

the situation, it was necessary to change the nuclear prefix which these states got at birth. In practical terms that meant consecrating their sovereignty and providing them with security assurances in exchange for their renunciation of nuclear weapons and the memorandums signed between these countries and the US, UK and Russian Federation were an outcome of such efforts. These Memorandums are also regarded as Budapest Memorandums since all three were formalized during the Conference on Security and Cooperation in Europe summit in Budapest in 1994. The substance wasn't much different from the unilateral efforts by NWS in light of NSAs back in 1978, meaning that in case of former Soviet Republics nuclear states promised not to use or threaten to use nuclear weapons, except in the case of an attack on them or their allies ("Letter dated 94/12/07 from the Permanent Representative of the Russian Federation, Ukraine, the United Kingdom of Great Britain and Northern Ireland and the United States of America to the United Nations addressed to the Secretary-General.", 1994). Even though, these NSAs did not bring anything substantial and remained on a similar unsatisfactory level as those provided in 1978 and afterwards, they still managed to bring these former Soviet Republics under the NPT umbrella.

3.2.6 NSAs and 1995 NPT Extension Conference

As already noted, the Review Conference planned for 1995 carried a significant burden of expectations, since it was supposed to be decided (and evaluated) whether the Treaty will be extended indefinitely. Moreover, the conference came after some major shifts and restructuring within the international environment. The mentioned dissolution of Soviet Union silenced a bit the nuclear confrontation between West and East, brought new countries to the non-proliferation regime, particularly NPT and contributed to reduction of nuclear deployments number. Moreover, increased membership in this conference was particularly unique due to the presence of all five recognized nuclear weapons states, since both France and China acceded to the NPT in 1992. The tone which welcomed the Conference was generally optimistic and saw great value in the Treaty and its significance for promoting peace and security and universality in adherence to it was regarded as the best tool for preventing the spread of nuclear weapons. The importance embedded in NPT at that point also meant a significantly stronger bargaining positions by the non-nuclear weapons states, and despite the overwhelming support for the extension of the Treaty, it was clear that more could (and should) be done to address both unresolved issues of the past and concerns of that period. Security assurances, among other relevant objectives of the Treaty and Conference, demanded some revision and update, primarily due to rather vocal dissatisfaction by NNWS in all previous conferences. For that reason, in the run-up to the 1995 Review Conference nuclear weapons states tried to produce new security assurances which eventually resulted in United Nations Security Council Resolution 984. This Resolution addressed both negative and positive security assurances, questions of assistance and compensation to the victims as well as measures for dispute settlement ((SIPRI), 1996). The resolution noted assurances offered in form of unilateral statements by the nuclear weapons states and submitted to the Conference on Disarmament prior to the NPT Review Conference. These assurances contained both positive and negative elements, albeit not in a uniform fashion. For example, China included three commitments in a statement that covered all NNWS, not only those parties to the NPT: no first use policy, no use or threatening to use nuclear weapons under any circumstances against NNWS or states parties to the NWFZ and provision of assistance within the UNSC to the NNWS victim of nuclear attack (Simpson, Nielsen, & Swinerd, 2010). China also called for closing in on international convention on no first use of nuclear weapons and international legal instrument for NSAs provision. France reaffirmed the NSAs given in 1982 and provided positive security assurances for the first time, although without precise actions to be taken for their implementation (Simpson et al., 2010). Russian Federation offered a one sentence pledge that it will not use nuclear weapons against NNWS parties to the NPT, "except in the case of an invasion or any other attack on the Russian Federation, its territory, its armed forces or other troops, its allies or on a State towards which it has a security commitment, carried out or sustained by such a non-nuclear-weapon State in association or alliance with a nuclear weapon State" (Simpson et al., 2010, L-2). This Russian declaration clearly reversed the 1982 no first use pledge. For its part, the United States made similar statement only with inclusion of qualifier in form of compliance with NPT obligations in order for a state to benefit from US security assurances (Simpson et al., 2010). It also noted it readiness to assist in accordance with UNSC considerations to any NNWS attacked with nuclear weapons. Finally, the UK also made a statement on security assurance, but with no substantive difference from those made by US. These declarative efforts were regarded as an available option on the table for NPT NNWS if they agree to an extension of the Treaty and in the end result they have managed to suffice for the positive outcome for NPT duration. Still, the Conference did not manage to work out Final Declaration but it did approve three separate decisions, one of which concerned the NSAs. That one was "Principles and Objectives for nuclear non-proliferation and disarmament" which stated that "further steps should be considered to assure non-nuclear weapon States party to the Treaty against the use or threat of use of nuclear weapons. These steps could take the form of internationally legally binding instrument" ("Principles and objectives for nuclear non-proliferation and disarmament.", n.d., 10). It is also important to note that several countries came to 1995 Review Conference with proposals regarding the NSAs, Egypt for its part continued the trend of proposals on security assurances, albeit with an emphasis on the positive ones, Nigeria remained the promoter of the important role of the negative security assurances although that was to a certain extent taken over by new South African regime.

3.2.7 NSAs and the developments after NPT Extension

The years following the NPT Extension Conference proved to be rather frustrating for those who expected more substantive and expeditious progress towards NSAs that will satisfy both depositors and beneficiaries. Meetings were held in 1997 in preparation for the next Review Conference and they produced what could be regarded as thematic map of issues around which future discussions should revolve. These issues were categorized into three main clusters and it was agreed that in the next meeting there will be focused sessions and discussions on each of the specific topics within each cluster, one of which is dedicated to security assurances ("Report of the Preparatory Committee on its 1st session.", 1997). In addition, before the beginning of the Review Conference, work on provision of NSAs was by some states taken seriously. South Africa, for example, circulated a document in 1999 representing a "Draft Protocol on the Prohibition of the Use or Threat of Use of Nuclear Weapons Against Non-Nuclear-Weapon States Parties to the Treaty on the Non-Proliferation of Nuclear Weapons" where it managed to include both negative and positive security assurances as those given within UN resolution 984, precisely categorized who provides them and who are beneficiaries and qualified them in similar vein as US, by connecting it to the compliance with the NPT (Simpson, 2012, 69-70). Although this could serve as a model for legally binding NSAs the Final Document of the 2000 Conference didn't take measures for its realization by only putting forth that these assurances to NNWS help strengthen the NPT regime and called for "the Preparatory Committee to make recommendations to the 2005 Review Conference on this issue" ("Final document :2000 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. Volume 1", 2000, 15).

Moreover, the context in which the 2000 Review Conference found itself were also very significant for the path the conference itself will take. To begin with, the NPT context, although agreed guidelines for strengthening of the NPT regime form 1995 Conference were the *leitmotif* of the preparation efforts, was not able to provide substantive step forward in implementation of these guidelines and much was dependent on the positive outcome from the 2000 Conference. The non-proliferation regime context was burdened with the issues of non-compliance, especially with

regard to North Korea and Iraq and India and Pakistan's nuclear explosions from 1998. The wider disarmament and international security context had a mixed record, with Comprehensive Test Ban Treaty (CTBT) opened for signatures in 1996 on the positive side, and deteriorated relations between NWS on the other side. NATO enlargement, its bombing of Yugoslavia (along with the Chinese Embassy in Belgrade), Weapons of Mass Destruction (WMD) capabilities of Iraq all contributed to the 2000 Review Conference being opened with fears over disagreements and distrust that has characterized NWS relationship at the time.

Nevertheless, the Conference ended on a positive note, producing a Final Document with the action plan for disarmament signaling not necessarily a significant change in national policies of states as their mutual interest in sustaining the Treaty and ability to set aside the negative aspects for a moment, and focus on areas were some agreements are in fact possible.

Despite the formal calls during the 2000 Review Conference, no such efforts could be recognized during the Preparatory Committee meeting in 2002. The Chairman emphasized that NSAs were "key basis for 1995 extension decision" and that they "should be pursued as a matter of priority", and noted that a "view was held that the issue of security assurances was linked with the fulfillment of the Treaty obligations" ("Report of the Preparatory Committee on its 1st session: Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, New York, 8-19 April 2002", 2002, 15). The issue of NSAs attracted a bit more attention in 2003 when New Agenda Coalition states produced a working paper which included a draft on security assurances protocol, which mirrored the one South Africa submitted in 1999. The paper emphasized the need to negotiate these assurances within the NPT since that will both strengthen the Treaty and serve as an incentive to those who are still outside it and it highlighted some key elements that the legally binding NSAs should include. Iran also submitted a working paper on NSAs and called for reaffirmation of 1995 commitments by NWS, new UNSC Resolution and special ad hoc committee within Conference on Disarmament (CD) to discuss NSAs that could be unconditional and legally binding (C. P. Blair & du preez, 2005). The 2004 Preparatory Committee so considerable debate on NSAs with calls to separate them and disarmament into two subsidiary bodies for discussion at the upcoming Conference. Substantial number of countries put forward calls for strengthening NSAs including Nigeria, Iran, Indonesia, China, Cuba, Mexico, some calling for unconditional document with legally binding nature and some emphasized the need to dedicate a separate body to discussions of NSAs at the Review Conference (Simpson, 2012). Many countries submitted working papers on this matter, like China, Association of Southeast Asian Nations (ASEAN) countries and Belgium, Norway and The Netherlands jointly.

The 2005 Conference opened in the atmosphere of strong differences between NWS and NNWS, both on procedural agreements and some core issues and finished without substantial and agreed action plan to deal with disarmament and proliferation. With regard to the NSAs, the Conference brought mainly disappointment. Some states made strong stands on NSAs, one example being Iran who bearing in mind US 2001 Nuclear posture argued that unilateral declarations on security assurances and United Nations Security Council Resolution (UNSCR) 984 "inseparable parts of the deal over the indefinite extension of the treaty" and that "efforts for the conclusion of a universal, unconditional and legally binding instrument on security assurances to non-nuclear weapon states should be pursued as a matter of priority by the international community" ("Report of the Preparatory Committee on its 1st session: Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, New York, 8-19 April 2002", 2002, 1-2). China, for its part, argued again in favor of its no first use policy and tried to connect it to NSAs commitments and called for reestablishing of the ad hoc committee on security assurances within CD framework ("Security assurances: working paper", 2005). Sharp discrepancies especially with regard to NSAs have been highlighted during this Conference and certainly have played a part in its inability to work out a Final Document, but the end result also revealed a significant lack of interest from some states to engage in this issue and lack of comprehensive strategy on how to implement and advance the proposals made by states who considered NSAs as a priority item on the agenda.

In 2007 the Preparatory Committee moved to Vienna and for most of its working time it was deadlocked due to procedural issues and disagreements. Iran raised a lot of them, but it also submitted a working paper on security assurances, stating its previous standpoints. Similar applies to the working paper submitted by New Agenda Coalition (NAC). Additionally, other states had a say of their own on the matter, primarily China, Canada, Italy and the Republic of Korea. No action plans stand out from this meeting, although there were proposals to submit a draft of the legal instrument concerning security assurances to the Review Conference in 2010.

Nevertheless, neither this nor the meeting in 2008 discussed the procedure necessary for this

proposal. During the 2009 meeting, Iran again put forward efforts to raise the salience of security assurances in similar vein as in its previous working papers. It also called for a decision that proclaims prohibition of use or threat of use of nuclear weapons (Simpson, 2012). These efforts did not yield much success and the conclusion of this meeting revealed that the importance of NSAs was significantly reduced, in this particular case, to only two sentences of recommended action: "Affirm the importance of effective assurances that nuclear weapon States will not use or threaten to use nuclear weapons against non-nuclear weapon State parties. Examine ways and means to achieve additional assurances that are legally binding." ("Draft recommendations to the Review Conference: Preparatory Committee for the 2010 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, 3rd session, New York, 4-15 May 2009", 2009, 3). As mentioned in the Introduction of this thesis, 2009 was also a year of greater optimism with regard to non-proliferation regime in general and 2010 Review Conference and security assurances prospects, in particular. This was due to, at this point, historical speech made by then-President of the US, Barack Obama made in Prague and his redirecting of the US policy back to the disarmament goals. This brought significant freshness to issue of security assurances and meant that US "is now prepared to strengthen its long-standing "negative security assurance" by declaring that the United States will not use or threaten to use nuclear weapons against non-nuclear weapons states that are party to the NPT and in compliance with their nuclear non-proliferation obligations" (Gates, 2010, viii). In addition, this new policy tone provided additional clarity stating that "any state eligible for the assurance that uses chemical or biological weapons against the United States or its allies and partners would face the prospect of a conventional military response" without ruling out the option of "any adjustment in the assurance that may be warranted by the evolution and proliferation of the biological weapons threat" (Gates, 2010, viii). Moreover, the exclusion qualifier for such assurances was clearly noted and linked to compliance with the NPT, disregarding previous conditioning on the alliance or association with NWS.

All this helped to facilitate a successful 2010 Review Conference with three actions specified for security assurances. One called for CD in Geneva to assume all discussions on security assurances, the second called NWS to respect their existing commitments and declarations, and those without such commitments to extend security assurances to non-nuclear parties to the NPT, and the third action encouraged concerned states to ratify NFWZ and "to constructively consult and cooperate to bring about the entry into force of the relevant legally binding protocols of all such nuclear-weapon free zones treaties, which include negative security assurances" ("2010 Re-

view Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons: final document., Volume 1", 2010, 22). Additionally, during this conference UK embarked on its own process of reviewing the declaratory policy on security assurances. The result was a statement that "the UK will not use or threaten to use nuclear weapons against non-nuclear weapon states parties to the NPT. ... This assurance would not apply to any state in material breach of [its NPT] non-proliferation obligations" (Cabinet Office and Great Britain Parliament, 2010, 37-38). Altogether the 2010 Review Conference did produce some greater effort for issues of security assurances but they were still not the main concern of the Conference. Disarmament and its progress (or lack of it) as well as NWFZ in the Middle East took on the center stage when it comes to salience of the issues for the NNWS during this Conference.

To this date, the final Review Conference of the NPT state and progress was held from 27 April - 22 May 2015 in New York. The three Preparatory Committees (Preparatory Committee (PrepCom)) from 2012, 2013 and 2014 have not provided any substantial indication of consistent advancement of the goals and commitments which were built in the Treaty from its start and throughout the years of its existence. It stands out that the efforts and obligations with regard to non-proliferation and peaceful uses of nuclear energy seem to have a much better record than those related to nuclear disarmament. With regard to NSAs, not much significant change was brought by the meetings of the PrepCom, with several state submitting working papers with calls and reiterations similar to those made during previous PrepCom meetings or Review Conferences. That meant repeated calls for more effort on providing and implementing existing NSAs, upgrading them to suit the needs of NNWS, create a separate body within the Review Conference to deal with security assurances issues and reinstall the negotiations within CD framework to deal with these issues as well. The Conference itself ended on a relatively sour note, without agreement on Final Document or its recommendations and could generally be regarded as rather disappointing. Additionally, as the first meeting of the Preparatory Committee for the 2020 Review Conference was beginning its work in 2017, in Vienna, it became clear that a renewed support for the Treaty was necessary, as well as adjustment to new developments and initiatives with regard to nuclear disarmament.

The next cycle of the preparations for 2020 Review Conference started, as noted, with 2017 PrepCom in Vienna which didn't bring much novelty to the security assurances talks. Similar results could be observed during the meetings in 2018 in Geneva and 2019 in New York. The

salience and action plans or efforts for NSAs were not frontrunners of the preparatory agenda although certain states did try to keep them on the radar. Non-aligned states, Iran and China remained the main advocates for the NSAs as could be seen in their working papers delivered to all three of the Preparatory Committee meetings. All of these papers have mutual interest in emphasizing the role NSAs could play pending the complete nuclear disarmament and in general provisions of security for the states who do not have nuclear weapons. Moreover, many of the calls for immediate discussions on new NSA instrument of more unconditional and legally binding nature base their logic not only on the fears and expected destruction of the possible use of nuclear weapons, but also on the proclaimed international illegality of the use of nuclear weapons, recalling that "the threat or use of nuclear weapons would generally be contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law" ("Security assurances against the use or threat of use of nuclear weapons: working paper /", 2018, 1). At this point it remains to be seen what will be done on this issue during the Conference in 2020 and whether the NPT process itself could still do some service to the security assurances or a changed framework, like the often mentioned Conference on Disarmament, may offer better prospects for the future of NSA.

3.2.8 The Conference on Disarmament

During the 1980s the discontent of non-aligned states with unilateral assurances was still very much present and they continued to seek revision of conditionality of those assurances as well as their non-legally binding status. The newly founded platform for much of this discussion was the Conference on Disarmament (CD).

It was formed in 1979 after deliberations and agreement during the United Nations General Assembly's First Special Session on Disarmament (1978) as "the single multilateral disarmament negotiating forum of the international community" (United Nations Office of Geneva, n.d.). It was a successor of several other bodies stationed in Geneva, such as Ten-Nation Committee on Disarmament (Ten-Nation Committee on Disarmament (TNDC)), Geneva, the Eighteen-Nation Committee on Disarmament (ENDC), Geneva, and the Conference of the Committee on Disarmament (Conference of the Committee on Disarmament (CCD)), Geneva. (Nuclear Threat Initiative, n.d.-a). The Conference continued the work of its predecessors by hosting the negotiations on the variety of multilateral arms control, non-proliferation and disarmament agreements, as well as confidence-building tools such as NSAs. In particular, this Conference was in charge of NSAs

talks from 1980 onwards. For those discussion CD established a special Ad Hoc committee in 1998 to work on "effective international arrangements to assure non-nuclear weapon States against the use, or threat of use of nuclear weapons" (meetings coverage & press releases, 1998), but the circumstances surrounding the new platform for discussions have proven to be more difficult than expected. The beginnings of this Conference have taken an extremely slow and indecisive path since the main actors couldn't agree on much of the agenda setting, salience of the issues, as well as connectedness and evaluation of progress in different areas. That created a lot of gaps in the working of the Conference in general, but particularly with regard to the work of the Ad Hoc Committee dedicated to NSAs. With some exceptions, for the most part of its existence the Conference was deadlocked in its work without much substantive progress on the agenda issues.

Nevertheless, it wasn't completely abandoned platform and it was, more often than not, brought up during the NPT Preparatory and Review process as a body that needs to get more attention and work done on specific issues, like security assurances. The history of this Conference for the period before 1998 does not indicate any substantial developments on the NSAs happening within this framework. What stood out in this period were the mentioned unilateral declarations by the nuclear weapon states but other than that the early period of Conference work was inconsistent and unsubstantial. After 1998 and the establishing of the Ad Hoc committee any progress on negotiating a legally binding instrument to assure NNWS was lacking. Moreover, after 1999 and despite the calls of number of nations and no opposition by any delegation, no Ad Hoc committee was held to discuss the issue of NSAs. In 2009 appeared the renewed effort to establish a working group to discuss an ongoing need for NSAs and issues surrounding them "with a view to elaborating recommendations dealing with all aspects of this agenda item, not excluding those related to an internationally legally binding instrument." (Nuclear Threat Initiative, n.d.-e). From then on, CD remained interlocked between the actual desire to work on this issue and the inability to move forward due to strong discrepancies on the perspectives regarding the NSAs. Calls for overcoming such impasse have not stopped but there is still no indication of any significant advancements towards goals on NSAs.

3.2.9 The Nuclear Weapon Free Zones (NWFZ)

Another important part of NSAs history, as well as history of entire non-proliferation regime, resides with the treaties and efforts to establish regional zones that would be nuclear weapon-free. Shifting from unilateral declarations and global platforms, NWFZ represent narrower but equally

significant attempt to address non-proliferation and security issues of NNWS while waiting for the complete disarmament and devaluation of nuclear weapons. What such effort demands and what makes each NWFZ a success or failure story are questions going well beyond the scope of this thesis. Nevertheless, each NWFZ marks a significant part of non-proliferation history and even more, of the NSAs history since the treaties establishing NWFZ include, inter alia, certain additional protocols which provide negative security assurances by NWS to the states within that zone.

The NWFZ were defined in the General Assembly Resolution 3472 B from 1975 as "...any zone recognized as such by the General Assembly of the United Nations, which any group of States, in the free exercises of their sovereignty, has established by virtue of a treaty or convention whereby: (a) The statute of total absence of nuclear weapons to which the zone shall be subject, including the procedure for the delimitation of the zone, is defined; (b) An international system of verification and control is established to guarantee compliance with the obligations deriving from that statute" (UN General Assembly, 1975, 24). Additionally, this same Resolution declares that in cases where NWFZ was recognized as such by the GA "all nuclear weapon States shall undertake or reaffirm, in a solemn international instrument having full legally binding force, such as a treaty, a convention or a protocol, the following obligations: (a) To respect in all its parts the statute of total absence of nuclear weapons defined in the treaty or convention which serves as the constitutive instrument of the zone; (b) To refrain from contributing in any way to the performance in the territories forming part of the zone of acts which involve a violation of the aforesaid treaty or convention; (c) To refrain from using or threatening to use nuclear weapons against the States included in the zone" (UN General Assembly, 1975, 24). The NWFZ Treaties established so far include the 1967 Treaty of Tlatelolco referring to Latin America and the Caribbean, the 1985 Treaty of Rarotonga on the South Pacific Nuclear Free Zone, the 1995 Bangkok Treaty with regard to South-East Asia, the 1996 Pelindaba Treaty in relation to Africa and the 2006 Semipalatinsk Treaty on Central Asia. In addition, there are other treaties which deal with denuclearization of certain areas such as the Treaty of Antarctica from 1959 refers to the nuclear free Antarctic area, as well as Outer Space Treaty, Moon Agreement and Seabed Treaty. Moreover, unique case is the country of Mongolia which is the first country to proclaim nuclear free zone in its territory in 1992. All these Treaties are now in force. The proposals for new treaties on regional nuclear free zones are a continuous occurrence, primarily those calling for establishment of NWFZ in the Middle East. This proposal was an integral part of the decision to extend the NPT in 1995 and its Action Plan was included in the 2010 NPT Review Conference but since then not much was done to overcome obstacles preventing the establishment of this NWFZ. That may change by the end of this year, since the First Committee of the UNGA has adopted a decision in 2018 to hold a regional conference on the subject in New York in November this year (Vienna Center for Disarmament and Non-Proliferation, 2019).

With regard to the NSAs, they are provided in Additional Protocols of mentioned treaties of Tlatelolco, Rarotonga, Pelindaba, Bangkok and Semipalatinsk. The beneficiaries of these NSAs are states that through the process of ratification of relevant regional treaty became part of NWFZ. Still, some treaties, like Rarotonga and Pelindaba explicitly regard as beneficiaries the territories within the zone, for which the responsibility lies within an external state. On the other hand territories covered by the Treaties of Bangkok and Semipalatinsk are not controlled by an external state so in their protocols no extension of assurances is explicitly made. The substance of these NSAs varies to a certain extent within each treaty and each of these treaties was submitted to interpretations and conditionalities by every NWS. For Additional Protocol II of the Tlatelolco Treaty provides for assurances by NWS not to use or threaten to use nuclear weapons against parties of this Treaty yet this commitments were dependent on and affected by military doctrines of NWS who in most cases maintained their right to reconsider the non-use in cases of attack in alliance by any of the states in NWFZ (Goldblat, 1997, 21). Similar logic followed the Rarotonga Treaty, where the language of the NSAs provided in Protocol II resembled the one from Tlatelolco Treaty and the NWS responded with similar reservations. Moreover, for assurances following the Pelindaba Treaty, for example, the UK, France and US responding to Protocol "declared that they would not be bound by it in case of an invasion or any other attack upon them, carried out or sustained by a party to the treaty in association or alliance with a nuclear weapon state" (Goldblat, 1997, 26). For the Bangkok Treaty and its NSAs related Protocol there is a particularly "in that it prohibits the threat and use of nuclear weapons by the nuclear weapon states not only against the states parties to the treaty, but also 'within the Southeast Asia Nuclear Weapon-Free Zone" (Roscini, 2011, 132). So regardless of ratification of the treaty, that gives a regional state which territory is within the zone a beneficiary status (Roscini, 2011, 132). Among other things, it is also questionable how far these NSAs go with regard to possession of chemical or biological weapons although some states have been vocal in reserving the option to retaliate against such attacks using nuclear weapons (Yost, 2006, 702). Another open question is signing and ratification of some of these treaties by several nuclear states. The US didn't ratify Pelindaba and Rarotonga Protocols and none of the nuclear weapon states signed or ratified the Semipalatinsk or Bangkok Protocols.

Understanding and analyzing the positions of NWS on NSAs attached to NWFZ will be provided later in the thesis, but here it seems relevant to note that in general these regional forms for ensuring non-proliferation of nuclear weapons are an important asset for the whole regime. The negative security assurances attached to these NWFZ have accomplished what previously mentioned unilateral assurances (by very much the same nuclear weapons states) and that is to be legally binding. That doesn't take anything away from the possible supreme interest that when in danger, could lead to a withdrawal from these treaties. Despite their legally binding nature a lot of problems still emerge from treaties on NWFZ and effective implementation and enforcement of the NSAs embedded in them. Nevertheless, within the global nuclear non-proliferation regime the place of NWFZ has for a reason had a successful tone and to this date there are ongoing calls to expand these regional nuclear-weapon-free areas. Or in the words of Nobel Laureate Alfonso García Robles "we should attempt to achieve a gradual broadening of the zones of the world from which nuclear weapons are prohibited to a point where the territories of Powers which possess those terrible tools of mass destruction will become 'something like contaminated islets subjected to quarantine' "("General Assembly official records, 29th session: 1st Committee, 2018th meeting, Wednesday, 13 November 1974, New York", 1974, 32).

3.3 The other side of the coin - Problems and Conditions behind NSAs

Upon placing the NSAs within a broader concept of assurance in an international realm and extracting its historical record within a long and complex history of the nuclear non-proliferation regime, it seems appropriate to take a more thorough look into the problems and conditional nature which so far presented NSAs revealed throughout its history. More specific categorization of the variety of qualifiers that followed these assurances could contribute to overarching understanding of NSAs as a non-proliferation asset. In other words, confronting what they've (NNWS) got with what they've wanted could help enravel the limits and obstacles for NSAs in general. Additionally, it could shed some light into the core interests and security issues behind relevant actors, primarily between NWS and NNWS, along with some discrepancies between them.

As noted several times so far, history of NSAs, regardless through which form or forum it was

addressed, revealed that a heavy conditionality was the core feature of these assurances. Standpoints and security concerns between NWS and NNWS were significantly different even though there appeared to be a mutual goal of nuclear non-proliferation and disarmament. In addition, if we go back to the logic that was embedded in the NNWS's adherence to the NPT and non-proliferation efforts in general, we can clearly see that the outcome from their perspective could easily be regarded as unsatisfactory. For that reason, complaints and frustration with the lack of progress on NASs were certainly not absent from NSAs history. To understand what core issues need to be accounted for when analyzing NSAs, it is necessary to look into some arguments by both sides of this coin - NWS and NNWS. For example, the UNSCR 255 conveyed forms of positive security assurances, but remained limited to them without saying much on NSAs. The problems were on both of these instruments. On one hand, US opposed the NSAs claiming that they "undertaken on a global scale, would not serve the objective of non-proliferation and universal adherence to the NPT; they could encourage those states which are now protected by nuclear-weapon-powers against a threat of a conventional attack, to acquire their own nuclear weapons for defence" ((SIPRI), 1976, 384). In addition, as was already noted, PSA have not been regarded as satisfactory either since they seem to only reiterate the existing obligations of NWS by UN Charter and could be affected by the veto option of France, which at the time was not part of the NPT. At the same time, the first formal instrument to include NAS was introduced with the Tlatelolco Treaty, on the Latin American NWFZ which, despite its legally binding nature, was also heavily conditioned. The logic is best observable in US statement arguing that "each nuclear-free zone proposal must be judged on its own merits to determine whether the provision of specific security assurances would be likely to have a favourable effect". ((SIPRI), 1976, 385). Soviets, for their part, conditioned adherence to security assurances with the qualifier of genuine NWFZ which do not leave any option or loophole open for violating the nuclear-free state of particular area ((SIPRI), 1976, 386). Such conditionality was preserved in all subsequent NWFZ, some of which have yet to be signed and/or ratified.

The first unilateral NSAs from 1978 showed the increased salience of the NSAs but were also regarded as unsatisfactory by the NNWS in several points. Firstly, they lacked the form of legally binding international treaty, which would clearly corroborate their strength and credibility. Second, they seem to have lacked the uniformity which would enable their inclusion into international, legally binding treaty. That is particularly visible in the language disparities that could lead to divergent interpretations. For example, some states referred to the NPT as qualifier, some, like France, did not, so these assurances could apply to countries who are outside of the NPT as

well. In addition, the use of words and phrases without precision and clarity could leave some room for subjective and possibly wrong interpretations. It can be problematic to disentangle what is meant by alliance or association between NNWS and NWS, or which definition of aggression applies. In case NWS is attacked by NNWS, which has some sort of association or alliance with some other NWS it seems that the NSAs would cease to have effect irrespective of the actual role of that associated NWS or even irrespective of whether the nuclear weapons were used in that particular attack or not. Moreover, the case of UNSCR 984 in 1995 and the revised NSAs show that even with strengthened bargaining position it was still very difficult for NNWS to gain any significant improvement on the NSAs agenda. The unilateral declarations were still not considered to be legally binding by the NNWS nor did they adequately address the security concerns of NNWS, even though US for example acknowledged that "it is hard for some states to accept the proposition that our word is our bond, but we have tried to wrap these commitments in a context and a framework and a set of statements, with the Security Council resolution as an over-arching umbrella, ...in a way that makes it very clear that we are [guaranteeing]...negative security assurances..." (Welsh, 1995, 16). The years which followed could be regarded as dark times for NSAs, not only for the lack of progress on their substance and implementation, but for their more than evident loss in importance in comparison with the security-disturbing events which happened during the beginning of the 2000s. Primarily, the terrorist attacks in 2001 overshadowed any effort or need for flexibility and trust-building. In other words, these attacks "were the impulse for a reassessment and redefinition of the security policies by practically all states and major international security institutions. The attacks helped precipitate the shaping of a new global security system." (Rotfeld, 2002, 1). That is particularly visible in 2001 US Nuclear Posture Review which saw the expanding of cases where the use of nuclear weapons could be justified and even then-Undersecretary of State for Arms Control and Nonproliferation John Bolton claimed that "the idea of fine theories of deterrence work against everybody, which is implicit in the negative security assurances, has just been disproven by Sept 11" and that administration at the time "is just not into theoretical assertions that other administrations have made (the 1978 and 1995 pledges)" (C. P. Blair & du preez, 2005, 54). As far as NNWS are concerned, their work was written into a variety of working papers and draft protocols which in the period after NPT Extension served to call, remind and suggest new (or old) steps to be taken in order to achieve some progress on the NSAs agenda. Such suggestions mainly revolved around calls for creation of legally binding instrument, with core features such as the clear definition of the providers of NSAs and their beneficiaries, scope and substance of these NSAs, their format, qualifications as well as regulations of the required actions to be taken by the UN Security Council (Simpson, 2012, 71).

Additionally, the NNWS, depending on which forum they focused, often called for separate body within the particular forum to discuss NSAs, but not much was done for that matter. In sum, as history seems to show, NSAs have been followed by rather constant set of problems. From the point of view of NWS the logic of NSAs depends on the broader international security environment, particular security doctrines and issues of interest of each NWS that lead the way in deciding how everything else will fall into place. For such logic the issue of NSAs is of secondary priority. On the other hand, states without nuclear weapons security is much more dependent on such declaratory instruments, especially when nuclear disarmament doesn't seem to be achievable in the near future. In such circumstances uniformity and clarity enshrined in an instrument that has legally binding nature seems like the best 'meantime' solution for NNWS. Still, as we've seen throughout history such solution is not easily achievable in constantly changing international security environment and unwavering security doctrines.

4

NO FIRST USE (NFU)

4.1 Conceptual placement - definition and differentiation

To understand the concept that has rarely been employed but quite often debated and challenged it seems necessary to borrow both from theory and from practice - as limited as it may be. On one hand, borrowing from the theory would mean creating a comprehensive NFU map which would include the core of its character - its definition, features, purpose, benefits and obstacles. Such mapping would require reliance on the palette of arguments accumulated through scholarly debates as well as by political and military practitioners. On the other hand, practice, albeit modest and vague, offers an overview of the implementation and evolution of actual examples of no first use policy. Both theoretical and practical approaches are necessary for an overarching sagacity of this concept. To begin with, the conceptualization of no first use policy, as with negative security assurances, first signals the need to distinguish it from its other 'relatives'. Not using nuclear weapons has been part of the rhetoric and debates since the onset of the nuclear age. It has also been one of the vaguest aspects of military strategy for almost every country which has them. Nevertheless, the conditions that precede the use of nuclear weapons have been part of the scholarly debate for decades now and have heavily influenced the character of the nuclear doctrines and strategies. But 'no use' and no first use of nuclear weapons are two distinct concepts, with significant differences in their practical implications and their possible conditionalities and psychological consequences.

Any attempt to understand the no first use policies must take into account the comprehensive overview of the (pre)conditions behind the presumed use, as well as non use, of nuclear weapons. The tradition of non use is, at this point, a long and seemingly established one. It is one of the most cherished human achievements. Even in a weakened state of nuclear non-proliferation and

overall stability of the regime, the actual use of nuclear weapons - first, remains one of the hardest scenarios to imagine. The concept itself is as old as nuclear weapons, although it took time and devastating consequences of the first two bombs to make this tradition long-term and uninterrupted. Still, the fact that a weapon of utmost usefulness has never been used again is, at least in conventional terms, not an often occurrence. The abstention of use along with continued existence of such weapons contributed to the controversy and continued debate. Various ways to limit the use of nuclear weapons have indeed been discussed for decades now and significant steps have been made both on national and international levels. Yet, the non use of nuclear weapons have been surprisingly resistant on actual legal formalization or embeddedness in military postures and doctrines. In that sense, the non use and no first use are intertwined concepts in their meaning, history and purpose. From the very onset of the nuclear age, the world witnessed the transformation of doctrine after doctrine in a way that would re-value and re-purpose nuclear weapons to match current needs, fears and technological pace. What started as a way of restraining the conventional superiority of Soviet Union in Europe, went on to influence the American position on (first) use of nuclear weapons and the military and political significance which will be attached to these weapons in the future. Massive retaliation, mutual assured destruction and eventually flexible response strategies were results of changed perceptions and threats and have shaped military postures, primarily in the US (and NATO) and Soviet Union (and Russia afterwards). Once nuclear parity was on the way and the US and Soviet Union at the time acknowledged the possibility of absorbing a nuclear attack and responding to it in a devastating manner as well, the main focus was on maintaining the nuclear truce. Or in other words - deterrence. As noted many times so far, nuclear deterrence was, and still is, praised as the main reason behind the long-lasting non use of nuclear weapons. The language of deterrence communicated to the allies and adversaries the value of nuclear weapons. What it couldn't achieve is the formalization of the non use norm, primarily in legal manner, both internationally and within the military policies of almost every NWS. Therefore, post-Cold War deterrence, although deeply connected to the non use tradition, at least in the way it was materialized in practice, at first look seems to be incompatible with formal no first use policies of nuclear weapons.

In simplistic terms, *no first use* (NFU) policy "is a commitment by a state not to be the first to employ nuclear weapons against an enemy" (Lanoszka & Scherer, 2017, 345). In other words, "nuclear weapons are seen exclusively as a means to deter nuclear attacks or explicit threats, and would only be released in a second strike" (Vadillo, 2016, 9). Such a commitment would clearly

have to be followed by appropriate recalibration of military strategies, exercises and deployments. That means, nuclear posture, plans and procurement along with clarification and/or limitation of particular physical qualities of nuclear weapons need to be shifted in a way that will signal their appropriateness exclusively for purposes of nuclear deterrence (e.g. Sagan, 2009). In comparison, the concept of *non use* signals broader and more extensive demands. It is both the norm and tradition and it implies "that the mere possession of nuclear weapons is wrong and that existing stockpiles should be destroyed" while no first use "contains no built-in presumption toward the phasing out of nuclear stockpiles" (Ullman, 1972, 672). Moreover, under no first use the efficacy of nuclear deterrence will not be diminished assuming that the attacked has the ability to absorb and respond to the attack. In other words, committing not to initiate the use of nuclear weapons will not take anything away from the ability to retaliate in case of nuclear attack. This is a rather simplistic representation of 'subtle' difference between non use and no first use, but it is relevant for the uniqueness in character of each concept. Along those lines, it is also necessary to note several other terms to which NFU was linked and to delineate their meaning and purpose.

One such concept is the policy of the 'sole purpose' of nuclear weapons. 'Sole purpose' was brought in, in the context of no first use debates, as some sort of supplement to, or even a first step towards an actual NFU policy. In most basic terms, "sole purpose refers to a commitment only to use nuclear weapons to deter nuclear attacks.....Declaring sole purpose would clarify what nuclear weapons are for." (Center for Arms Control and Non-proliferation, n.d.). At first the difference between these two concepts is almost invisible which is why they have often been mentioned together, sometimes even without making any significant distinction between them. For example, Gerson, 2010 discussed the nuclear policy of the US and future steps it should take, and he made an argument for adoption of no first use policy, as a declaratory policy that could contribute to the US security and overall strategic stability. More specifically, he argued that "a credible NFU policy would entail a presidential declaration that the United States will not be the first to use nuclear weapons in conflict, and that the sole purpose of U.S. nuclear weapons is to deter - and, if necessary, respond - to the use of nuclear weapons against the United States and its allies and partners." (Gerson, 2010, 9). On the other hand, the report submitted in 2009 by The International Commission on Nuclear Non-proliferation and Disarmament (ICNND), co-chaired by Gareth Evans and Yoriko Kawaguchi, provided a bit more clarity between these concepts. To begin with, the report established an action agenda, ranging from short term, medium term and long term goals, for policy makers dealing with nuclear threats. The no first use policy was an important part of the debate and of the recommendations which stated that "pending the ultimate elimination of nuclear weapons, every nuclear-armed state should make as soon as possible, and no later than 2025, an unequivocal "no first use" (NFU) declaration." (International Commission on Nuclear Non-proliferation and Disarmament, 2009, xx). In addition, aware of the NWS reluctance towards such declarations, the report included a 'sole purpose' policy as a sort of short term goal on the road to NFU - "If not prepared to go so far now, each such state - and in particular the U.S. in its Nuclear Posture Review – should at the very least accept the principle that the "sole purpose" of possessing nuclear weapons is to deter others from using such weapons against that state or its allies" (International Commission on Nuclear Non-proliferation and Disarmament, 2009, xx). Elaborating on this point, one of the co-chairs, Yoriko Kawaguchi, argues that what distinguishes these two concepts are both their meaning and the time of their adoption and implementation. In other words, the 'sole purpose' should precede NFU while fully implemented NFU would demand actions that go beyond declarative nature (Kawaguchi, n.d.). In addition, Morton H. Halperin also contributes to the separation of these terms, by arguing that NFU could be circumvented by "a less controversial approach" and according to him that approach would be a statement on the purpose for maintaining nuclear weapons, (which is in essence understood as 'sole purpose'), without any further elaboration on the meaning of such a statement (Halperin et al., 2009, 20). He clarifies the distinction more precisely, stating that "by not explicitly foreswearing the use of nuclear weapons against unexpected threats, such a declaration preserves 'existential deterrence' that is the inescapable consequence of having any nuclear weapons and avoids much, if not all, of the political fallout that would result from a no-first-use pledge" (Halperin et al., 2009, 21). In that sense, it seems that a line could be drawn where one concept - the 'sole purpose' remains exclusively on the deterrence level, with less ambiguity and less practical follow-up for the purpose of nuclear weapons within the particular NWS strategy. The NFU would then assume the stage of 'use', meaning that it would go slightly beyond deterrence by actually adjusting the nuclear forces, planning, deployments, launch and alertness levels to match the NFU policy.

In addition to non use and the 'sole purpose' of nuclear weapons, the debate on NFU introduced relatively early a sort of refinement of the no first use pledge called 'no early first use'. Namely, when the four eminent Americans raised their voices against the NATO doctrine of 'flexible response' and they also discussed the difficulty of finding the alternative approach in case of pending conventional defeat (Bundy, Kennan, Mcnamara, & Smith, 1982). Considering this issue, they suggested Some the policy of 'no early first use' as a possibility which could "leave open

the option of some limited nuclear action to fend off a final large-scale conventional defeat, and by renunciation of any immediate first use and increased emphasis on conventional capabilities it might be thought to help somewhat in reducing current fears" (Bundy, Kennan, Mcnamara, & Smith, 1982, 762). Although at first subtle and 'reasonable' refinement of the NFU policy, added time factor driven by the perception of conventional disaster seem to go further away from any clear-cut limitations on the use of nuclear options. In other words, 'no early first use' option is not concerned with avoiding to actually use nuclear weapons first, but with the specific (or perceived) time when such a use would be appropriate. It's not a refinement on not using nuclear weapons first, it's a refinement on when exactly to use them.

Although the important opposites of the NFU policy will be discussed later, there is another 'relative' of NFU that deserves to be mentioned here. '*No first strike*' (No first strike (NFS)) policy stems from the differences between various 'use' options, more specifically between first use and first strike option. It is more limited than the NFU since it would prevent a NWS to use nuclear weapons preventively, with usual goal of destroying the adversary's nuclear arsenal (Haynes, 2018, 32).

4.2 The NFU skeleton: what is the NFU made of and other character-building questions

4.2.1 First use first

Before we examine practical viability and desirability of NFU, particularly through scarce examples, what appears necessary is to highlight the 'purposes' which NFU is up against. In other words, since any get-to-know starts off with questions, any no first use questions indicate a need to ask about the 'use' first. Moreover, understanding the terminology and logic behind the (first) use is the necessary introduction into the reasons and ways which could lead to the abandonment or at least circumvention of that same logic.

Why use nuclear weapons first or why use them ever are questions which have neither easy nor clear answer. Since the very beginning of the non-proliferation regime and disarmament efforts, among other things, it has been crucial to establish a 'rulebook' for the acceptable and appropriate purpose of nuclear weapons. In other words, once it was clear what they would be used for, mech-

anisms could be worked out that will address (and deal with) those reasons in an appropriate way. But, one of the issues was the fact that national interests and perceived security threats were not the same for every NWS and therefore neither was the resulting strategy regarding nuclear weapons. For some states, like the US for example, assessing the threats is a broad activity as it includes not only national security but security of its allies as well. Moreover, the security landscape is a constantly changing variable, thereby making it harder to set up and maintain long-term structures and norms that could 'control' the constant challenges and reconcile various security needs. The other problem was the undiminished need for ambiguity of use enshrined in declaratory policies of NWS which supposedly serves the security interests best. In other words, unpredictability of reaction is regarded as one of the best ways to steer (or influence) the action in the first place. All these issues have motivated the strategic thinking throughout the decades and are inherent in the value behind the nuclear weapons.

To begin with, there are several 'situations' that have been envisioned to represent a possible grounds for the use of nuclear weapons. It should be pointed out that the actual legality of the use of nuclear weapons have been subjected to severe questioning since the onset of the nuclear age. Therefore, although it won't be pursued in this thesis, it is worth noting that both the questions of no first use and NSAs policy could be (and are) extensively examined in the realm of international law. In this regard, the variety and terminology often depend on the perspective from which these situations have been examined, which is why there are differences in what scholars and practitioners see as possible reason to resort to nuclear weapons. For example, the simplest way to structure the use catalogue would be in a way to distinguish between first strike, first use and second strike (e.g. Blackaby, Goldblat and Lodgaard, 1984). The first strike covers a situation in which nuclear weapons may be used "in a surprise pre-emptive attack aimed at disarming the adversary by eliminating his strategic nuclear potential", while *first use* would mean using nuclear weapons "in the course of escalating hostilities started with conventional weapons" (Blackaby, Goldblat, & Lodgaard, 1984, 321). After being attacked by nuclear weapons, response that would amount to nuclear retaliation is what second strike would represent. On a similar note, over time the discussion and theorizing on the hypotheticals expanded the 'use catalogue' to include deterrence and/or retaliation against biological or chemical attacks, preventive war, as well as "destroying hard and deeply buried targets" (Gerson, 2010, 17). First use could also result as an extended deterrence 'product', or even for a signaling and/or bargaining during a crisis/war (Miller, 2002).

Handling *conventional inferiority* with nuclear threats is the remnant of the Cold War. As noted several times so far, in that period the perceived conventional imbalance between NATO and the Warsaw pact in Europe served as a strong argument in favour of using the threat of nuclear escalation to reinforce deterrence. Since the end of the Cold War such arguments are significantly harder to uphold, primarily because the conventional dominance has been a successful pursuit of the US (and NATO along the same lines). US conventional capabilities far exceed those of any other world power which makes the threat of nuclear first use rather obsolete. Moreover, using nuclear threats as an antidote to conventional inferiority has proven to be useful tactic by inferior (in terms of conventional power) or rogue states to disincentivize conventional attacks. In this context, weaker state might use the threat of nuclear escalation as a way of raising the stakes and costs to any war that may be contemplated by the superior state. That way, conventional weakness would project strong advantage as it will serve to boost the credibility of nuclear threats. Besides NATO and the Warsaw Pact, there are also other examples that could corroborate this particular tactic, such as weakened Russia in the post-Cold War period, or Pakistan in relation to India's conventional superiority. Addressing *chemical and biological attacks* with threats of nuclear retaliation has received significant attention ever since biological and chemical conventions outlawed those weapons. Without proportionate response to such attacks, nuclear weapons assumed the 'responsibility' of deterring the use of chemical/biological weapons (Chemical and biological weapons (CBW)). In other words, first use of nuclear weapons for many NWS, especially the US, is an 'easy' and 'efficient' way to fill the deterrence gap created by the outlawing of CBW, thereby clearly making NFU pledge a less appealing option. Whether such logic is in fact necessary to deter CBW attacks, is still a very debatable issue.

Another mentioned rationale for the first use is the *preemption*. In other words, if push comes to shove, better to struck first. In this context, the envisioned scenario would include an adversary, possibly in a crisis, preparing to launch a nuclear attack. First use of nuclear weapons would then serve to preempt such an attack by attacking and destroying enemy forces first. Preemption option charges NWS with significant requirements in order to be able to strike first on a short notice. Not just that the level of certainty in the upcoming attack by an adversary must be the highest possible, the nuclear military forces of the potential target must also be adjusted to enable fast and precise preemptive strike. On a similar note, *preventive strike* is following similar logic as preemptive ones, but their actual employment is under less immediate pressure. In other words, both "are alternatives to waiting for an expected enemy blow to fall, but preventive attack is motivated not

by the desire to strike first rather than second, but by the desire to fight sooner rather than later." (Mueller, Castillo, Morgan, Pegahi, & Rosen, 2006, 8). In addition, preventive strike does not need to be a nuclear one, but that option is not ruled out, thereby making this rationale for first use another obstacle for NFU policy. Both of these options have been part of considerations by military strategists, throughout the Cold War and after. The US deliberated on the preventive war against Soviet Union in the 1950s, while in the 1960s preemptive first strike considerations targeted China's emerging nuclear program (Gerson, 2010).

It is not so hard to imagine that some potential adversaries may use underground facilities or specially made bunkers to hide leaders, weapons or other military activities. Such facilities incorporate various forms of protection, under and above the surface which make them especially hard to discover or destroy. Therefore, using nuclear weapons to destroy so called, hard and deeply buried targets (HDBT), particularly popular in the US, during G.W. Bush administration, could be a necessary solution that would bring down such hardened and concealed facilities. It was argued that the "nuclear capabilities capable of holding hard and deeply buried targets at risk and minimizing the threat to civilians may be critical to maintaining a credible, effective deterrent" (Payne, 2005, 143). Although it doesn't have an example in reality, using nuclear weapons during a crisis as a bargaining method or to signal an intent would not be an unimaginable scenario. Bargaining is a significant element of any crisis or conflict and could be especially useful in an attempt to change or manipulate the existing dynamic between two or more adversaries. As Schelling wrote, "once nuclear weapons are introduced, it is not the same war any longer....It is now a war of nuclear bargaining and demonstration" (Schelling, 2008, 110). Crucial for such bargaining is the possibility of first use of nuclear weapons and states that may feel the need to resort to such option, even only to manipulate the risks or to threaten escalation, will have more reason to resist NFU policy.

Finally, there is a very close relationship between extended deterrence and first use of nuclear weapons. Major part and challenge for the US during the Cold War was its commitment to extend protection, both conventional and nuclear, to its allies. The so called 'nuclear umbrella' meant that Americans, even when not directly attacked, may have to use nuclear weapons first on behalf of an ally. Along these lines debates within NATO focused on making first use more credible thereby discussing coupling of strategic and theatre weapons, battlefield nuclear weapons. Such security arrangements have been very hard to reconcile with NFU pledge although NATO has been facing significant pressures to change its first use doctrine.

Some of these situations may be more controversial than others, but all together represent a bundle of purposes which almost every NWS finds exceptionally hard to abandon. Moreover, the list of possible first use scenarios could be expanded or adapted depending on the changed needs, security concerns or technological advancements, while the lack of will to re-purpose these weapons in a way to limit their role stays somewhat of a constant. That becomes particularly vivid when NFU ideas and demands are brought into the discussion. In other words, many (maybe even all) of these purposes may have to be altered or entirely abandoned in order for NFU to actually 'work'. Moreover, as the literature and the practice (to a certain extent) have shown, the perceived needs to maintain the first use option have increasingly being challenged and even debunked, thereby making a case for the abandonment of such overarching dependency on nuclear weapons.

4.2.2 Making NFU real: various aspects of practical policy proposition

Once the main purposes which NFU must overcome or at least downsize in order to elevate its attractiveness for NWS, another important step down the NFU road is clarifying what actually means for a state to adopt NFU policy. In other words, aside from being primarily a declarative policy of a state, it needs to be substantiated with certain practical steps for it to be credible and realistic. In this regard, one of the first steps would be to alleviate or overcome some of the pressure created by the reliance on the first use. That means, making a case for NFU which will demystify and discredit the presumptions behind overarching role of nuclear weapons.

Arguing against the rationale for the first use has been one of the core issues in the NFU debate. The creators of defence policies and military strategies, especially in the US, haven't approached the process of limiting the role of nuclear weapons with the same creativity awarded to the various use options and scenarios. But, if NFU is to be meaningful and therefore credible, then it must be reflected in the doctrines and military plans of the nuclear states. It goes without saying that such task is extremely hard to accomplish, since with the mere existence of nuclear weapons, their use, intentional or accidental, is a constant risk. Any declarative policy runs a risk of being highly doubtful and lightweight and it is always in need of serious and unequivocal practical steps to corroborate the declared commitment. What that means in practice is concerned to a great extent with the uniqueness of nuclear weapons themselves. As their use have entirely different implications than the use of any other types of weapons, in a similar sense, on the technical level, they also

require special command and control procedures and arrangements. They require communication and security precautions to be on the highest possible levels of preparedness. Taking all that into consideration it seems that the adoption of NFU policy and its practical implementation would have to re-configure an entire military doctrine, plans and preparations of NWS.

To begin with, NFU policy would have to be mirrored in operational war planning activities. When developing war plans and strategies, among leading assumptions should be the complete exclusion of nuclear first use in a crisis or conflict. Any war scenarios relying or including the recourse to nuclear first use would have to be decoupled from it and would need to assume an entirely non-nuclear character. The consequences of such an undertaking would be enormous. Both politicians and military commanders would need to change their expectations and their rhetoric. Although military planning is not a public activity, its outcroppings do have a profound effect on public opinion and support for defense policy. The way those outcroppings are expressed and explained to the public would need to be in harmony with the NFU and constraints it prescribes. Along with practical steps of making NFU real and credible, this changed rhetoric could help convey a message that NFU policy was being seriously and genuinely addressed. In addition, there would need to be significant changes in the budgetary allocation for conventional defence, which would most likely require a stronger 'investment boost' as more conventional forces may be necessary. Many find this to be a rather controversial consequence of NFU policy, since the increased conventional capabilities may have to come at much larger costs than is their actual utility, at least when compared to nuclear weapons (e.g. Kober, Jones, Ravenal, Anderson, & Hafner, 1982). Furthermore, NFU policy would have significant implications on force posture. NFU policy requires a relatively small and simple nuclear arsenals, in line with retaliatory second strike strategy. In addition, modernization and expansion of nuclear arsenal could be significantly minimized, there should be no need to keep warheads and missiles together or to rely on early launch, forward deployed weapons, like those in Europe, would be unnecessary, as would be the nonstrategic nuclear forces (e.g. B. G. Blair, Foley, & Sleight, 2018). Moreover, even military exercises and training must be in accordance with the NFU constraints thereby nurturing the behaviour and expectations of military organizations that would first use practices.

Last but not least, declaratory policy of any NWS, regardless in which form it is conveyed to the corresponding audience, plays an important role towards more realistic and credible NFU pledge. Although the least 'practical' among the previously mentioned steps, it nevertheless car-

ries significant weight as it directly informs and guides resulting operational defense and war plans. For example, Scott Sagan, while writing about possibility of NFU in the US, argued that "nuclear declaratory policy is meant to enhance deterrence of potential adversaries by providing a signal of the intentions, options and proclivities of the US government in different crisis and war-time scenarios" (Sagan, 2009, 165). In addition, declaratory policy fulfills various roles and it is aimed at domestic public, adversaries and allies as well. In other words, it represents a specific rulebook according to which particular NWS will play its nuclear weapons cards. So far, most NWS preferred the 'all-options-are-on-the-table' strategy and have made nuclear weapons an integral part of their defense structures whose use is as unclear as it is remote. However, NFU policy has serious difficulties with the concepts such as 'calculated ambiguity' and the over-reliance on vague declaratory policies regarding the use of nuclear weapons. Such policies find merit in uncertainties and blurred lines and if NFU is to be taken seriously such logic would need to change. NFU conveys a clear message and relies on a narrow role of nuclear weapons thereby placing more value in removing ambiguity of nuclear use from the calculus of military planners. Therefore, what could be called the 'nuclear deterrence umbrella' - using nuclear weapons to deter both Weapons of Mass Destruction (WMD) and non-WMD threats, which characterizes the post-Cold War period, would seem to be unsustainable under NFU policy.

In other words, making the NFU policy real would need to 'downsize' what is understood under the doctrine of deterrence today and its practical implications in a way to make it less 'catchall' concept for all the threats, and more focused and unambiguous. That would open the doors to declaring a policy that would put nuclear weapons in service of only nuclear deterrence and strictly for defensive (retaliatory) purposes. Such declaratory policy and re-configured doctrine would be much more compatible with NFU pledge and would award all three with increased credibility.

4.2.3 'Technicalities' of NFU - how could it look like?

As with negative security assurances, there are important questions of form, context and scope which could characterize the NFU pledge. Although all real-world examples of NFU follow similar unilateral vein, the scholarly literature did offer various possibilities for the formalization of this concept. To begin with, a commitment to NFU can be made in agreement with one or more states, or it can be done unilaterally. On a similar note, the scope of the NFU pledge refers to the question of actors who would benefit from it. Such commitment would depend on the particular form, meaning that it could, for example, apply to all states, both NWS and NNWS, which is the

case of unilateral NFU pledge. Moreover, in case of bilateral agreement, it would apply to the state with whom the agreement is being made or it could apply to more states as would be in the case of multilateral NFU agreement. In addition, it is also argued the NFU pledge could be "general or specific (i.e. confined to a specified geographic region) in its application" (Ullman, 1972, 679) which overlaps to a certain extent with non-use pledges given to countries under Nuclear Weapon Free Zones. Of course, it goes without saying that NFU has been part of non-proliferation and disarmament efforts from their onset, so various frameworks like NPT or Conference on Disarmament could serve as a platform to advocate and work on best mechanisms for NFU adoption and application. In addition there is also a question of context, which would refer to particular implementation process that could see NFU pledge in isolation from other realms of forces, be they conventional, biological, chemical or any other. This is a particular controversy for NFU since it goes directly against relying on nuclear first use to combat threats of any type of military forces.

It would be hard to evaluate any of the NFU forms as good or bad, since all have positive and negative aspects. In light of the overall non-proliferation and disarmament efforts, making an international, multilateral NFU pledge clearly has huge benefits. Not just that it would be immensely valuable follow-up of previous commitments and would help reinforce them, it would also contribute to the general revitalization of non-proliferation regime as the leading force in nuclear weapons matters. In other words, although it would be much harder to negotiate than bilateral for example, "it would be useful as a means of preserving the momentum that is an important psychological concomitant of arms control, and therefore as a stepping stone to eventual arms reductions" (Ullman, 1972, 679-680). Despite its idealistic appropriateness, it also has serious limitations. First of all, the resistance and or reservation which would be attached to any multilateral NFU formulation is significantly larger than those that may be awarded to unilateral or even bilateral declarations. Similarly, international agreements often call for and envision various mechanisms for verification and implementation of assumed obligation. Such mechanisms often imply legally binding obligations which state must assume in order to achieve international agreement on certain issues. As was visible on the issue of NSAs, calls for legally binding declaration of non use or no first use are often constant and important matter, especially for states which do not possess nuclear weapons. And, as it was also seen in the NSAs cases, it is hard to imagine that NWS will be more open for any sort of legal obligation to be attached to NFU pledge. In addition, it has been argued that in itself, NFU does not need depend so much on international agreement in order to be functional since even if only one NWS declares NFU commitment, other states, especially other NWS, will also be affected (Ullman, 1972). On the other side, there are some arguments that see multilateral agreements on nuclear arms control and disarmament matters as hypotheticals that may be both hard to achieve and would be very costly for the nuclear frontrunners - the US and Russia (Arbatov, 2019). That could be applied on the multilateral NFU agreement as well, which ultimately discourage nuclear powers of making that leap of faith.

Although bilateral nuclear agreements seem to be under severe pressure, there are clear advantages to one that would refer to NFU commitment. First of all, there was and still is a huge asymmetry in the possession of nuclear arsenals among nuclear powers. Two of them, Russia and the US, hold on to more than 90% of the world's nuclear forces (Arbatov, 2019), which makes bilateral agreements on limitation or elimination of certain weapons and policies a very important part of the overall non-proliferation and disarmament process. For example, a mutual NFU pledge between these two states, although only hypothetically possible at this point, would be an enormous boost to the devaluation and marginalization of nuclear weapons and would serve as an encouragement to other states to do the same. Again, the probability and even the credibility of such bilateral agreement stand under significant doubt, but theoretically it would be possible.

Finally, the unilateral declarations have the highest practical score by being the only NFU form to materialize in practice. In simple terms, unilateral NFU declaration made by NWS would deprive that state from any option to initiate nuclear first use. Depending on the state regulations, such declaration may need to be pre-approved by certain state bodies, like Congress in the US, but in the end the state would assume an obligation not to be the first to use nuclear weapons against any other state or actors in any situation. It is important to note that, although the states that have so far tried and/or maintained the NFU policy have done so unilaterally, there are clear disadvantages of this option as well. Lack of enforcement measures and overall credibility are some of them. It is argued that NFU commitment "...is self-enforcing: once a nation violates its pledge of 'no first use', others are thereby released from their pledges, subjecting the violator to the prospects of nuclear retaliation - a prospect which would be a powerful deterrent against violation" (Ullman, 1972, 680).

Albeit scarce in its quantity, the real-world unilateral NFU declarations offer valuable insights into how this policy found its way from theory to practice and reveals the extent to which such policy is even possible and durable. Therefore, along with the comprehensive overview of all the

theoretical possibilities, regardless how remote they may seem, it is also important to take a closer look at what the practice has/had to offer.

4.3 The NFU in practice - historical record and examples

When established norms and strategic thinking are irrefutable constant, going from how it could be to how it actually is in practical terms, appears as an extremely hard task both for scholars and practitioners. NFU policy could serve as a good example how difficult it may be to go from possible to probable and viable. Years of debates and scholarly work constantly add to the possibilities, but the reality seems to be resistant to change. Nevertheless, a proper and detailed examination of practice could reveal the issues and limitations enshrined in various possibilities provided by theory. Therefore, as noted, upon highlighting the basic conceptual characteristics of NFU policy, the attention must be turned to its actual materialization in practice. In other words - to 'how it actually is' of the NFU policy. That means gaining insight and understanding of the various forms and contexts through which NFU 'made it' in the real world.

So far, only three countries made an NFU pledge, one of them abandoned it a long time ago and it is questionable whether it was ever actually meant. That leaves a rather small sample of states who accepted the doctrine which does not rely on the first strike. It goes without saying that any of these examples could fill much more chapters than it will be provided here, but it is nevertheless important to examine some basic notions of the form and reasoning behind the realized NFU commitments. As it has been mentioned, throughout the history of NSAs and their path in the non-proliferation regime, the first country to make an NFU pledge and to uphold it unconditionally is China. Ever since China conducted its first nuclear test in 1964, it made and maintained the NFU declaration accepting that its nuclear weapons will serve only for purposes of deterring nuclear attacks (Pan, 2018). China's rapid growth and accession to the 'nuclear club' opened up the space to discuss and analyze the way to include China in various nuclear agreements in order to constrain its nuclear expansion and behaviour. It also revealed that when compared to the mentioned nuclear frontrunners, China stands somewhat isolated and unique in a way it perceives nuclear weapons and nuclear arms control, non-proliferation and disarmament efforts and even nuclear deterrence. Relatively early in the research on Chinese attitudes and reasoning regarding nuclear policy, it was argued that they "can be best understood as dependent upon certain major constraints affecting Chinese foreign policy behaviour." (Pollack, 1972, 245). Among those

constraints are particular considerations of the nuclear dominance of the two superpowers - the US and Russia as well as perceptions of China's neighbours regarding China's nuclear developments (Pollack, 1972). It appears that this reasoning still influences the Chinese decision makers when deliberating on nuclear policy, non-proliferation and disarmament but it is also combined with the unique Chinese perception of the value of nuclear weapons. That perception goes way back to philosophical wisdom on warfare and security embodied in the Mao Zedong and his view of the nuclear bomb as both real and paper tiger (Pan, 2018). That was integrated as a theoretical background into the China's no first use policy and general perception of the purpose of nuclear weapons. Aside from being a powerful protection against bullying, for China nuclear weapons serve exclusively for nuclear deterrence of purely defensive nature. Some also argue that, in comparison to the US and Russia, China does not participate nor bothers with arms race and anxiety in its nuclear policies (Pan, 2018) and even seems to pursue much narrower definition of nuclear deterrence than its more powerful counterparts (Bin & Zhao, 2016). Namely, and among Cinese decision makers and military planners, nuclear deterrence as it is understood in the West is really hard to separate and distinguish from compellence, at least in practice (Bin & Zhao, 2016). On those grounds, Chinese understanding of nuclear deterrence as practiced in the US for example, with its overwhelming reliance on the first use of nuclear weapons, falls in line with compellence and blurs the true meaning and purpose of nuclear deterrence and even nuclear weapons, which is often a critical point in any mutual cooperation on nuclear matters between the US and China. On the practical side, China keeps modest nuclear forces (at least in comparison to the US for example) with missiles and warheads separated from each other (Pan, 2018), In addition, "it has not developed precision-strike nuclear war-fighting capabilities, such as tactical nuclear weapons, and it does not keep its forces on "launch-on-warning" alert" (Tannenwald, 2019, 136) and it doesn't engage in deployment of its nuclear forces on the territory of other countries. Moreover, China's NFU signals a clear distinction between conventional and nuclear forces as it doesn't compensate with nuclear arsenal for any real or perceived conventional inferiority. Although, not so much in comparison to the US for example, in its neighbourhood China does exercise enough conventional superiority and confidence which further strengthens its NFU pledge and the defensive nature of its nuclear arsenal.

Second real-world example is India, a country with a long tradition in the non-proliferation and disarmament regime and placed in a neighbourhood characterized with historical and political tensions, amplified with the development of nuclear programs and policies. Somewhere between

its efforts invested in nuclear disarmament and security considerations stemming from disputes it has with its nuclear neighbours, China and Pakistan, India adopted a policy of nuclear no first use. Despite being conventionally inferior to China, India' conventional superiority over Pakistan, with whom it has had a rather turbulent history and hostile and tense relationship, made it comfortable enough to declare NFU. In other words, "India's policy, therefore, was constructed on seeking nuclear disarmament as a solution to its security, political and moral challenges. In the meantime, it sought to keep its options open and this offered the optimum choice." (Rotblat, 2001, 171). India became a nuclear weapon state in 1998 and a year after it published a draft for its envisioned nuclear doctrine which would be based on a no first use doctrine and would assign to the nuclear weapons the role of deterring only nuclear attacks/threats. Otherwise stated, "the doctrine requires that the nuclear policy should seek to deter rather than fight a war with nuclear weapons" (Rotblat, 2001, 173). Moreover, it provided both NFU as an overall doctrinal background of Indian nuclear policy while also specifying NSAs which are targeted particularly at states who do not possess nuclear weapons nor are aligned with some other NWS (EMBASSY, 1999). This document was formalized with some changes in 2003 and included the threat of ""massive" retaliation against a first strike from nuclear, chemical or biological weapons" (Fitzpatrick, Nikitin, & Oznobishchev, n.d., 131). Its doctrine emphasizes what could be understood as minimum deterrence approach, mirrored not just in the doctrinal underpinnings, but practical implementation as well. Similarly as China's, India's actual nuclear arsenal size is uncertain, although significantly smaller than the US or Russia's. It is also argued that in line with its NFU pledge, India keeps missiles and warheads separated (Tannenwald, 2019) although there are reports that at least some of India's arsenal is both mated and in a state of high readiness and that their quantity is progressively growing (Tkacik, 2017). More precisely, it is claimed that "...India is transitioning away from NFU and toward flexible use, which could include: early use, LNOs, first use, or possibly some sort of launch on warning or launch under attack." (Tkacik, 2017, 102). As it was already noted, any declaratory policy could be under significant pressure to reach a certain level of credibility and transparency. Both China and India carry that burden, although the 'incredibility' of Indian NFU, due to its practical deviations from this policy, seems to be more strongly expressed.

Final NFU example goes back to 1982 when Soviet Union made a short recourse to NFU by accepting "an obligation not to be the first to use nuclear weapons because it has faith in the power of good sense and believes in mankind's ability to avoid self-annihilation and to ensure peace and progress for the present and future generations" (UN General Assembly, 1982a, 196). The his-

tory of the relationship between Soviet Union/Russia and nuclear weapons looks somewhat like a rollercoaster. During the Cold War, the Soviet Union enjoyed the confidence of its conventional superiority as opposed to the West, while after the war and with the dissolution of the Warsaw Pact and the Soviet Union itself, its successor Russia wasn't as confident in renouncing the first use option. Moreover, during that NFU period, Soviet Union did not necessarily followed its declaratory policy with practical steps and some argue that its actual military plans were incompatible with NFU policy since "Soviet strategic thought placed considerable emphasis on preemption; if the Soviet Union was sure that the enemy was about to attack, it should strike first in order to break up his forces" (Holloway, 1984, 57). Moreover, not just during the Cold War but in the post-war period as well, Soviet Union/Russia developed it nuclear policies in close relation with its main opponent - the US. Relations between the two, primarily the conventional power relations, determined how each of these states will perceive the value of nuclear weapons and how confident they will be in limiting the role of those weapons. That could be more true for Russia than the US, since in the US NFU deliberations never even reached practical formalization. Although Soviet example was clearly flawed attempt at NFU, it still shows a similar pattern of relying on the conventional factor to determine the need and role for nuclear weapons, as was the case both for China and India. Moreover, both China and India are far from having ideal approach or implementation of its NFU policy and there are reasonable fears that with the change of security situation that policy may as well change. Nevertheless, their NFU pledges reveal several important features adding both to the positive and the negative side of this policy. Firstly, both countries clearly see nuclear deterrence as only sustainable purpose of nuclear weapons and both countries seem to understand that overreliance on first use practices are incompatible with such understanding of deterrence. Although India diluted that with inclusion of nuclear retaliation to chemical or biological attacks, it is still clear that at least on the doctrinal level, nuclear deterrence is understood as defensive in its nature. In addition, although China is part of the NPT regime and India is not, both countries seem to regard their reputation as a responsible nuclear weapon states very seriously. India has been a traditional advocate of nuclear disarmament and prohibition of nuclear weapons, while China clearly excludes both NNWS and NWFZ from its nuclear target list, unconditionally. Despite the possible alterations to their arsenals, both countries clearly attempt at holding their nuclear policies, security concerns meaning of deterrence and disarmament processes in the same line. Both India and China recognized NFU as, although imperfect and limited, a good way to reconcile their fears without aggressively provoking the fears of others. The difference that seems to stand out between these examples and NWS who adhere to the first use policy could be that, for both China and India NFU pledge with all its possible caveats is closer to the notion of survivability in the world (and neighbourhood) with nuclear weapons. Both countries regard and implement their policy by balancing between overall importance attached to nuclear weapons and their goal to maintain the moral high ground by downgrading the value and scope of those weapons in their nuclear policies. On the other hand, Soviet example was more connected to the notion of winning the war, conventional first, but also nuclear, which could be found in the US military thinking as well. Soviets and now Russians, since being at the center of the Cold War, are much more attached to doctrinal and practical military thinking of that period. The notion of deterrence, ambiguity, reliance on the first use and overall arms race which characterized the Cold War and its immediate aftermath still shape the military and strategic thinking of both Russia and the US. With the changed security threats and security environments, these two NWS still rely on nuclear weapons to win against old and new threats and to maximize deterrence by counting on every option possible. That is one of the reasons why Soviet Union never took NFU pledge as a serious commitment and why both Russia and the US are still so condescending and doubtful towards it. This is also why NFU reveals strong discrepancies not just between NWS and NNWS but among NWS as well.

4.4 NFU policy - between attractiveness and vulnerabilities

The NFU as a general norm, much like the NSAs, was envisioned as an intermediary step towards general devaluation and marginalization of nuclear weapons that would eventually create the conditions for their complete abandonment and elimination. In the sense of non-proliferation and disarmament regime, NFU is regarded as an important step which would not only bring NWS and NNWS closer, but would also pay due respect to the commitments that were engraved in the NPT regime, especially article VI. As it was clear through various first use scenarios, making NFU an attractive option is much easier said than done. Although there may be clear benefits of such policy, especially in light of the non-proliferation and disarmament regime, it seems necessary to evaluate those benefits also through the lenses of its obstacles.

First of all, recalling the first use scenarios as well as theoretical support of the common understanding of deterrence, it would be relatively easy to point out the main obstacles to NFU policy in major NWS. Conventional inferiority, preemption and prevention of nuclear attacks, deterrence of chemical and biological threats/attacks as well as fear of nuclear terrorism are still at the top of military thinking and have direct influence at nuclear policies and strategies. For the sake of

analytical simplicity, assessing these and some other obstacles will be done from the perspective of the strongest player in the nuclear club which is the US. Aside from having the largest arsenal it is also the world's strongest superpower and leader not just in military activities and planning but also in arms control, non-proliferation and disarmament efforts. On top of that it has always been strongly opposed and doubtful to any NFU declaration. Notwithstanding that the benefits and obstacles for NFU may to a certain extent differ among NWS, the US example will serve here as a 'tester' for assessing some of the main points for and against the NFU.

To begin with, fear of conventional attack that would amount to an existential issue for NWS such as the US, holds almost no ground in today's circumstances. What was maybe reasonable fear of Soviet's conventional and nuclear destructive capabilities during the Cold War, today has no justification in reality. As it was noted, the conventional forces of the US are so overwhelmingly superior to any adversary that it would be hard to imagine a scenario where conventional attack on US would even be contemplated, not to mention actually won. For some other NWS that calculation may not be as easy, which ultimately puts conventional factor in a sort of ambivalent position as it can be both an obstacle to NFU and an actual boost to it. However, conventional factor has another important aspect to it when combined with NFU requirements. Namely, one of the outcomes (or prerequisites) of the NFU is a clear-cut distinction between conventional and nuclear forces. Adopting the NFU policy would mean acknowledging the already factual difference between these weapons and would have to exclude the creation of any gray zones between them. There are, of course, different assessments of this point. Some argue that putting a hard line between conventional and nuclear capabilities and threats would open up the space for more conventional attacks (and attacks with other types of weapons) or would at least embolden adversaries to wage stronger threats (e.g. Tertrais, 2019). Others believe that clear distinction between these arsenals would add to the credibility of each more than blurring the lines between them (e.g. Halperin et al., 2009; Sagan, 2009). The problem is that, by actually placing non-nuclear threats under the same roof as nuclear or other WMD threats, takes away from the very own non-nuclear capabilities in which a country like the US has invested many of its resources. In other words, there are clear differences between conventional and nuclear forces and it seems both dangerous and irresponsible to treat them with the same 'medicine'.

Tertrais (2019) argued that the part that makes nuclear weapons special is that they scare more than conventional weapons do, which although is a clear fact, doesn't mean that nuclear weapons

should be used to scare indiscriminately. Therefore, fear that NFU would take something away from nuclear deterrence or conventional deterrence by clearly distinguishing between the two, apparently doesn't take into account the costs that the lack of such distinction places upon both types of deterrence. Using nuclear response to deter any type of threats without proper delineation between them makes credibility of (any) deterrence much harder to achieve. Once again, conventional capability differs among states, and discussing whether it is beneficial or not that NFU requires separation of conventional and nuclear forces often depends on a particular case in point. Nevertheless, by relying on natural distinction between strength and consequences of these weapons it is both reasonable and appropriate to advocate decoupling of threats which could call for nuclear response. In that way, NFU would contribute to the credibility of both conventional and nuclear deterrence as it would assign proper response to each threat and would avoid risking escalating conventional conflicts to nuclear ones.

In a similar way NFU would be beneficial for removing the uncertainties and risks that could come out both of the preemptive and preventive first strike. As noted, preemptive strike is considered to contribute to deterrence in a way to prevent or limit the possible damage of a perceived imminent attack by an adversary. Such perception seems grounded on a rather expanded understanding of the workings of deterrence. This view assumes "that deterrence can be achieved by threatening to strike before the opponent attacks" (Gerson, 2010, 26). On the contrary, a traditional understanding of deterrence rests on the threat of imposing unbearable costs if adversary acts in an unwanted way. So in a sense, preemption deterrs in way to act before opponent gets to act. Such strategy has serious implications and dangers and it is absolutely incompatible with NFU. Aside from demanding such a high level of readiness and qualitative characteristics of nuclear weapons, it also demands an almost perfect assessment of opponents readiness to launch and location of its nuclear weapons. The level of intelligence and precision placed upon a preemptive attack should be on the highest level. As it is the level of risk. Making a wrong assessment of the readiness or location of enemies nuclear arsenals or even not completely destroying the enemy's forces could result in an unimaginable catastrophe with enormous human casualties. Notwithstanding the constant modernization of technological capabilities to locate and destroy these targets, no state should ever be so confident in disarmament capabilities of its preemptive first strike. Adopting NFU policy would remove or at least downsize the risks of firing first nuclear strike on the wrong or incomplete intelligence.

Similar can be said for any preventive action to fight threats from rogue states or even terrorists. It goes without saying that dealing with such actors assumes dealing with irrationality and extremity that may be excluded from relations with other actors. These actros do not fight with the same tools nor they respect the same (or any) diplomatic channels. The evidence from various US administrations shows that the US, especially after 9/11, understood unconstrained preventive military action as a way to go in dealing with such regimes or actors. It is argued that after the terrorist attacks during the Bush administration, the US "crafted policies that not only viewed the threat of nuclear weapons as effective deterrents to the use of CBRN, but also now foresees actual battlefield uses for nuclear weapons against NNWS as a component of the War on Terror and policies emphasizing counterproliferation and "regime change" "(C. P. Blair & du preez, 2005, 56). The problem with such an approach it that pursuit and deterrence of terrorists is not the same as with states. Even if terrorists can be tracked, which is in itself a very complicated task, using nuclear weapons against such actors and risking the death of numerous innocent civilians can hardly be justifiable and even credible. Rogue state may possess higher visibility but again these states, since prone to use or threaten to use WMD against another state and its population, clearly don't hold its own population in high regard. Therefore, threatening the use of nuclear weapons towards them would inevitably lead to mass murder of innocent people and could hardly be an efficient deterrence measure.

Biological and chemical threats and attacks represent a particular handicap for NFU. The opponents of this policy often resort to justification of first use on the grounds of deterrence gap created by the abolition of chemical and biological weapons. No administration in the US so far has excluded biological and chemical threats/attacks from its nuclear weapons purpose list. Moreover, it was argued that during the Gulf War, the US implication that it may use nuclear weapons as a response to the use of CW or BW by Saddam Hussein's regime (Gerson, 2010). The problem is that there can be no clear evidence that it was nuclear threat that stopped the use of CW or BW, since the implication of regime change that was part of the explicit rhetoric by the US administration may have also played an important role (Gerson, 2010). Still, even beyond this case, many claim that only conventional deterrence won't be enough for CBW and that nuclear threat is necessary to make deterrence credible (Gompert, 2000; Halperin et al., 2009). The problem with this conviction is that responding to CBW attack with nuclear means will not necessarily achieve the desired military objectives or may be seen as entirely disproportionate to the initial attack. Moreover, aside from the immense consequences of nuclear response, there is also a risk of complicating the con-

flict by introducing weapons of this magnitude. Even if actual destruction of CBW stockpiles may be done, which is debatable in itself, the result could be a severe contamination, mass hysteria and casualties. More precisely, "if CW or BW assets can be located, a nuclear strike risks potentially high levels of civilian casualties by dispersing, rather than destroying, chemicals or pathogens, and by the prompt and long-term effects of a nuclear blast. For CW and BW assets stored in underground bunkers, a nuclear weapon would have to detonate in the same room as the agents to completely destroy them; otherwise, chemicals and pathogens will be vented and dispersed into the atmosphere. If weapons, stockpiles, or production laboratories are located in above-ground structures, a nuclear weapon detonated nearby could destroy them, but not without also causing collateral damage that in many instances would be disproportionate to the initial attack." (Gerson, 2010, 24). As it was noted, the topic of deterring CBW is highly controversial and it is unlikely to be reconciled in the near future. Nevertheless, on the basis of hypotheticals at least, first use of nuclear weapons in response to CBW attacks may result in more than wanted or hoped for with nuclear attack. NFU may not be the perfect solution to CBW nuclear deterrence and may cause initial concerns of finding the best way to respond to such threats/attacks, but NFU drawback in this case can hardly be equalized with the one caused by breaking the nuclear taboo.

Probably the most benefits (if we set the general risks of nuclear use aside for now) of NFU policy would fall on nuclear arms control, non-proliferation and disarmament regime. Not just that NFU declaration, be that unilateral or less likely multilateral, would add a much needed boost to the regime, it would also shift the perception of nuclear reputation that has been established by the Cold War front runners. Instead of constant arms race, nuclear weapons multitasking role and overall importance that is awarded to those weapons despite the change in security and world environment altogether, NFU may add new weight to devaluation and marginalization of these weapons. Moreover, the commitments assumed by NWS through NPT regime would finally get some straightforward improvement and formalization. Advocating the nuclear weapons control, non-proliferation and disarmament and at the same time relying on and enabling nuclear first use is both outdated and incompatible with the 21st century circumstances. The more actors and threats change, the more old fashioned Cold War deterrence avoids adjustments to those changes and nuclear weapons are still considered to have an integral and most important role in combating old and new challenges, the harder it's going to be to achieve both credibility of such approach and its actual effectiveness. NFU may not be perfect solution or even only solution, but it adds more to the downsizing of risks and threats and to emphasizing of the responsibility and cautiousness in dealing with nuclear weapons.

Finally, special attention in assessing both attractiveness and vulnerability of NFU should be awarded to the issue of extended deterrence. As it was noted, it is an important and long-running Cold War relic and both the US and NATO's military plans and doctrines are deeply integrated with the responsibility of providing nuclear protection to allies. Putting NFU in the same equation with extended deterrence at first signals their incompatibility. If a country, say the US, renounce the nuclear first option that may result in lowering the commitment to defend its allies in case of an attack. One of the clearest examples of how fearful allies could be of NFU is the so called German response to McBundy, Kennan, McNamara and Smith's proposal for renunciation of the first use of nuclear weapons (see Kaiser, Leber, Mertes, & Schulze, 1982). Although, it seems reasonable that any big change to military posture and doctrine should be done in consultation with allies to avoid misunderstanding or other issues, there is a seemingly unreasonable belief that NFU cannot be reconciled with extended deterrence. On the contrary, some scholars argue that "extended nuclear deterrence can be made compatible with a no-first-use doctrine if changes in US nuclear security guarantees were made to fit current conditions of US conventional military superiority." (Sagan, 2009, 168). In other words, there may be space for more tailored protection guarantee that would emphasize the use of nuclear weapons as a response to nuclear attack exclusively. Such guarantee does not exclude assistance in conventional attacks or any other attack for that matter, but this formulation is much more consistent with NFU pledge and deprives allies from the same option from which the country which provides protection is deprived - it excludes the nuclear response from non-nuclear attacks. In addition, NFU approach and extended deterrence adjusted in accordance with such policy may add to the credibility of alliance and protection strategy. From that, various alternative options and considerations may result but the discrepancy between NFU and extended deterrence does not need to be insurmountable.

It is important to note that adopting NFU policy and overcoming obstacles of long and established military doctrines and strategies is neither easy nor without costs. Investing into conventional forces could come as significant result of the NFU policy, while nuclear industry may take some hits. Reconciling the security concerns and international trust into the non-proliferation regime is also not an easy task. Sending a firm message to both allies and adversaries in an environment which changes constantly is more complex and even risky than it was before. It would be overly optimistic to state that NFU would solve all those issues or that would even be the easiest

way to do so, but relying on nuclear weapons to deal with everything might be a multitasking that could come at a much greater cost then most NWS may be ready to pay.

'Brothers in Arms' - Challenging the declaratory ambiguity: costs and benefits of putting NSAs and/or NFU into action

"Vice is a monster of so frightful mien, as to be hated needs but to be seen; Yet seen too oft, familiar with her face, we first endure, then pity, then embrace"

- (Pope, 1881, 44)

"But the distinguishing feature of a revolutionary power is not that it feels threatened—such feeling is inherent in the nature of international relations based on sovereign states—but that nothing can reassure it. Only absolute security—the neutralization of the opponent—is considered a sufficient guarantee, and thus the desire of one power for absolute security means absolute insecurity for others."

- (Kissinger, 1957, 2)

So far both NSAs and NFU were presented in their own light, mostly in isolation from each other. An attempt was made to highlight their most important theoretical and practical features, benefits they bring and obstacles they need to overcome. All that serves as a basis for a final task of this thesis, which is to provide a face to face showdown for these two concepts. In other words, the main goal of this chapter is to summarize their individual score and achieve from their comparison borader and more comprehensive results of their reaches and boundaries. Such results will be complemented with summary and assessment of their relationship with deterrence as well as with the final argument highlighting the case of both NFU and NSAs as one worth making.

5.1 Sometimes you win, sometimes you lose - comparative approach to NSAs and NFU

Before outlining the results of comparison between NFU and NSAs, it is important to note that the purpose of this approach is not led by better or worse kind of outcome. Neither of these concepts is good or bad in itself as they both serve the same purpose - the reduced role of nuclear weapons. However, they do have significant differences in the way and in the capabilities they employ to fulfill that service.

Starting from the basics and as with their individual cases, both NSAs and NFU could be compared with regard to forums, actors and forms which are attached to them. When it comes to forums, although they are both understudied and highly underrepresented in the overall military doctrines and strategies, NFU seems to be doing a bit worse on that aspect. Notwithstanding its place in scholarly debates and its advocacy by states who adhere to this policy, such as China or India, in the overall non-proliferation regime, particularly the NPT sphere of that regime, NFU hasn't managed to raise as much interest as NSAs have. As noted, the indefinite extension of the NPT regime was predicated on the NSAs provided by nuclear powers and ever since both NPT framework and Conference on Disarmament have been more inclined (although not even remotely enough or efficient) to deal with NSAs than NFU. Similar goes for the actors, NWS or NNWS, both have been more inclined towards NSAs, aside from the mentioned countries who already have NFU as part of their nuclear policies. It goes without saying that at least for NWS, both NFU and NSAs have been welcomed with a lot of animosity and doubtfulness, but on the practical side, NSAs as imperfect and conditioned as they are, have been provided by all NWS, while the majority of these states have retained the first use option in certain circumstances. Furthermore, the form of these concepts in theory is quite similar as they can be declared unilaterally, bilaterally or multilaterally. However, practical record for both of these concepts reveals predominantly unilateral pledges, although with regard to the NSAs they have, more often than not, been attached to specific multilateral fora, such as the NPT regime or NWFZ. As noted, NSAs have not been made part of any multilateral legally binding treaty or instrument, and that is a significant obstacle in their efficiency and credibility. But, and without intention to overestimate their possibilities, it is a fact that NSAs have been advocated and provided under the internationally recognized and accepted frameworks of NPT regime and even UN Security Council or Conference on Disarmament. That particular distinction could be relevant for the overall enforcement and verification system necessary for any policy instrument. In other words, NFU seems to be less verifiable than NSAs as it only has unilateral declaratory nature provided by certain nuclear power, dependent exclusively on that state and its good will, without the possibility of international or multilateral meddling, enforcement and/or verification system to be attached to such declarations. That doesn't mean that verification of NSAs as such has achieved an ideal form or that certain 'sanctions' for violations are effective just because NSAs are attached to the NPT or any other non-proliferation framework. But, due to that very attachment to specific Treaty (or Treaties as is the case with NWFZ) and through that to the overall authority of the international nuclear non-proliferation regime, it could be concluded that level of trustworthiness of NSAs as well as their enforcement and verification may be rightfully increased. It's subtle, but it could prove to be an important difference between these two concepts, especially if a particular nuclear state has to make a choice between them in the future. In that sense, it could be argued that a choice in which there is an international and multilateral for acovering and obliging everyone who takes part in it will remain more attractive than assuming the burden of making profound changes in military doctrine and strategy separately. That doesn't mean that NFU cannot be a part of multilateral obligation, but as the historical and practical record has shown, there are much greater difficulties with negotiating the multilateral NFU pledge which would be acceptable to all nuclear states since their reservation towards this particular policy measure has proven to be much greater than with NSAs.

To tackle the reasoning behind different levels of animosity towards these two concepts it is necessary to compare them also with regard to their *substance*. In other words, they have different *meanings, scope and target list*. As it was noted, the central element of both of these concepts is that they aim at reducing the role of nuclear weapons. But, NFU policy for any nuclear power would mean unconditional commitment not to initiate the use of nuclear weapons against *any* other state in any circumstance, while NSAs were provided as an assurance to NNWS that they won't be attacked with weapons they have agreed to renounce once they joined the NPT regime. Therefore, in their simplest definitions, it could be seen that they demand different things from nuclear powers or in other words, they restrict NWS in different manner. Both NSAs and NFU are declarative policies of particular nuclear state, but the substance and depth of these declarations are not the same for these concepts. The NSAs are, at least in practice, purely declarative measures, hardly demanding anything more from the state who provides them except to make the pledge and stick to it. The NSAs do not affect the nuclear arsenals of particular state nor their possibility to retaliate in case of an attack, they simply distinguish between the threat which does and the one which does

not have nuclear weapons. NSAs are clearly and unequivocally aimed at those non-nuclear weapon states who joined the NPT regime as such. This particular distinction was in practice corroborated with even more conditions which clearly delineate those who can and those who cannot be the recipients of NSAs. Of course, that is how NSAs have been addressed by the NWS and it is far from satisfactory and effective in the eyes of those who depend on such assurances. The NSAs have been met with conditions and exceptions from their onset and throughout their history in the NPT regime and non-proliferation regime in general, which predetermined their form and the extent of their success. They have been reiterated in such conditioned state throughout the years, but they have constantly been challenged with calls for improved efficiency of those assurances through the downsizing of conditions and shift towards legally binding nature. It goes without saying that legally binding commitment to refrain from nuclear use against those who do not possess nuclear weapons is quite a reasonable request from NNWS but there is still a long way to go before such change gains stronger momentum and overcomes real and perceived obstacles. In the meantime, the NSAs could be regarded as less extensive in meaning, less demanding and less restrictive towards NWS. They are pledges indicating a commitment not to use nuclear weapons against those who cannot match them in any way. In this most simplistic sense, NSAs do not directly deal with the quality, quantity or other doctrinal or operational role these weapons may have. On the other hand, the NFU even with its definition signals much broader commitment and demand on behalf of NWS. As it was noted many times so far, NFU affects an entire military thinking and operationalization with regard to nuclear weapons and requires a strong and meaningful shift in doctrine, policy and practical qualities of these weapons. It challenges the long-established reasoning behind first use, calculated ambiguity, and overall dependency on uncertainty among military planners and decision-makers. From the standpoint of NWS, NFU would be a huge leap of faith, a significant step towards complete restructuring of nuclear military arsenals, their level of alertness, deployment, and it would exclude preemption and prevention strategies from military planning. Although both NSAs and NFU are a form of 'doing' for NWS, NFU would mean doing more. NFU is profound and complex doctrinal and practical change assumed and maintained by particular nuclear power. In that sense, NFU goes slightly beyond pure declarative policy and deals with operational and physical measures and qualities of nuclear arsenals and strategic thinking. NFU goes beyond differentiating between those who do and those who do not have nuclear weapons, as it applies to all. Therefore, as NWS are the only one who could provide either NSAs or NFU, from their standpoint, it could be argued, that NFU is more demanding in its meaning, more extensive in its scope and it would be targeted at both NNWS and other NWS. NSAs are variously preconditioned, but they are a clear bridge between NWS and NNWS, and would remove from the target list only those NNWS who satisfy all the conditions. On the other hand, NFU removes all weapons from the target list - nuclear, biological and chemical or even conventional, and it would apply to both nuclear and non-nuclear weapon states. In other words, the NSAs are usually articulations of particular declaratory policy while "no first use cannot be a formulation of policy, it has to be a consequence of policy" (Hopmann & Barnaby, 1988, xv). This is part of the strength and weakness for both of these concepts. What you say in politics matters, but so does what you do, which is why declarations without proper practical follow-up may be easily understood as no more than window-dressing.

Does this mean that NSAs, even in more 'unconditional' form, would be 'easier' to carry out than NFU? Probably. NFU is more time-consuming, lacks international/multilateral framework, demands more trust with less verification and it could be much 'costlier', security-wise, for NWS to make such pledge. On the other hand, using the cover of NPT regime, NSAs could emphasize its significance, motivate current 'outsiders' to join, use that framework to pave the road for their strengthening and credibility boost and deal with issues and obstacles for their enforcement and verification on the international stage. NSAs could be a way around (or in between) the Ban Treaty, as an 'easier' step towards trust building. It goes without saying, that none of these advantages is a safe bet, or a guarantee for success and NSAs do carry a lot of credibility issues and inefficiency problems as was seen in their rather extensive historical and practical records. Almost all assumed NSAs advantages come with certain costs. NSAs in their current form are perceived as insufficient, almost unfinished from the standpoint of its recipients. Their legally 'loose' character and lack of any substantive progress undermines their purpose to the extent that they appear as no more than a political softball being pitched around at NPT meetings. Their imprecise wording, undefined national interest and extreme circumstances are also part of the problem as they signal loopholes which may be easily exploited. In addition, with their strong attachment to the NPT regime, they leave those outside NPT unaddressed, possibly even motivating them to acquire nuclear weapons to elevate that status; they are scattered across various international bodies without any efficient procedural and substantive progress and they lack universal approach, much like the NFU. Moreover, one of the reasons why they are 'easier' to provide is their current intention-based nature. The perceived simplicity behind expressed NSA pledge is the basis for their limited success. With no substantive practical follow-ups, the intentions can easily change. For its part, NFU would be a costlier step, but it could probably be more rewarding if done properly. It would lower the risk of accidental or unauthorized use, it would exclude preemptive or preventive strikes which could be extremely destabilizing and escalatory and it would mean more practical steps towards actual downsizing of the arsenals and the role of nuclear weapons. NFU is also stated intention, but one that needs to be corroborated with changed and restricted capabilities which is why when intentions change, capabilities stay, at least for some time. That makes NFU policy harder to assume and implement, but also harder to change.

Another criteria for comparison is the *non-proliferation regime*. As it was noted, both of these concepts go hand in hand with nuclear arms control and they could be valuable steps on the road to complete disarmament. However, the actual contribution of NSAs or NFU may differ significantly and in relation to their already inherent differences. For example, the choice between these pledges could come down to the choice of preventing proliferation or dealing with its consequences. Although assuming the obligation not to initiate the use of nuclear weapons may be more extensive and overarching commitment, with possibly greater impact on the overall non-proliferation regime, such policy step demands severe confidence and resilience in the security environment and defence capabilities of the state in question. As it was shown in the overview of first use scenarios and rationales, NFU is often predicated on conventional superiority in the neighbourhood or in relation to particular adversary. China is conventionally superior to India, while India is conventionally superior to Pakistan. At the time of its declaration, Soviet Union exercised conventional dominance against Europe/the West. In that sense, unilateral NFU has proven to be somewhat of a status symbol for NWS. In regions where the security landscape is particularly turbulent, such circumstances could do more to incentivize proliferation than to restrain it. For example, pressuring states in the Middle East to assume NFU obligation could end up encouraging some of them (e.g. Israel) to change their positions on nuclear weapons and actually proliferate. It goes without saying that such 'relationship' need not to be strictly causal, but there could be significant correlation between NFU and proliferation in unstable regions which should be taken into account. Forcing states to delineate in such a strong manner conventional and nuclear weapons may backfire if conventional discrepancies and instability of the region is addressed first. On the other hand, NSAs may be a valuable signal of political transformation and a modest arms control step necessary to begin the trust-building process and to pave the road to more wide-ranging and cooperative security arrangements. For example, ratification of previous and creation of new NWFZ could be particularly useful to address regional issues and imbalance as they would be suited for the needs of specific environments and they should be legally binding for all involved which could raise their credibility and attractiveness. In addition, the sole process and negotiating of NWFZ could be a valuable framework to address broad regional issues in ways which include more diplomacy, measures which could be both verifiable and enforceable in a more rigid manner, and stronger stigmatization of nuclear weapons and their possessors. It goes without saying, that such NWFZ and with them NSAs are not an easy endeavour, as we see through the stalemate in ratification of 'old' NWFZ and lost momentum in creation of the new ones, such as Middle East NWFZ. But in the end effect, investing an effort to negotiate such steps may be more probable and more effective in the short term and could help create a healthier security environment when more far-reaching and long-term policy measures, like NFU, could gain relevance.

Relationship between non-proliferation regime and NSAs/NFU is a very codependent one and it's hard to separate either of these concepts from a broader efforts and goals of the regime. Along those lines it is hard to make clear and certain which of these concepts does more or less for non-proliferation, devaluation and downsizing of nuclear arsenals. Neither is entirely easy to implement nor provides enough guarantees for success and each has something to give and something to take from the overall non-proliferation efforts. Multipolarity of security environment characterized by multiplicity of threats makes it particularly difficult to address and adapt to new changes and challenges. Building and maintaining trust in such circumstances is already complex, which only intensifies if there are no substantive changes in traditional security thinking, planning and operationalization. Calls for multilateral treaties on both NFU and NSAs are seemingly reasonable but highly improbable so it is necessary to focus on step by step approach while debunking myths and perceptions form the past and properly addressing issues of the present. In that sense, both NSAa and NFU are important tools, as they provoke discussion and call for solution and abandonment of old and outdated practices. They are far from ideal, far from definitive, but also far from mutually exclusive. While acknowledging their advantages and their limitations for service to the non-proliferation regime, it should be taken into account that although they may be a mismatch for certain moments in time or geographical area, they are not a mismatch for the overall non-proliferation agenda. Non-proliferation is a process and its survival and adaptability is of existential relevance, which is why must be noted that any tool contributing to such goals should be advocated and pursued.

5.2 Eyes on the prize - NSAs and NFU relationship with deterrence

Final comparative aspect of these two concepts and attempt at answering the second research question regards the role and relationship with nuclear deterrence. As was noted many times so far, a lot is and can be said about deterrence and its roots, rationales and limitations as well as the role it plays or could play in the 21st century. Depending on the standpoint and experience, it is either praised for the best thing that didn't happen or it's the main cause for what is happening and what could end ap happening. Again. Assessing any other instruments or measures for the role of nuclear weapons can hardly go without addressing or being influenced by deterrence, as both NSAs (and security assurances in general) and NFU have experienced.

As was noted, deterrence means disincentivizing someone's undesirable action by imposing unbearable costs. It is a status quo theory which aims at preventing any action that may disrupt the established state. Such deterring is, as it was made clear, predicated upon real physical capability and actual will to impose those costs as well as 'faith' of the target of those deterrence efforts. Once nuclear weapons took the world stage, nuclear deterrence assumed prominent and dominant position which it holds to this day in the strategic and security realm. Their role flourished in the Cold War stage and the perceived (albeit not necessarily warranted success) during that period, established nuclear deterrence as dominant and integral part of war prevention and limitation. It is assumed that at that time it was communicated in a way that worked for adversaries and for allies and it fueled the rationale that deterrence itself works. Notwithstanding the actual difficulty in proving such a conclusion regarding something that didn't happen, even more problems arose once the Cold War context and circumstances changed. Debates involved questions of relevance and usefulness of deterrence in the new nuclear age and especially the utility of nuclear weapons in under new conditions. New nuclear age seemed to have brought more work and responsibility for nuclear deterrence or in words of Keith Payne "compared to the Cold War era, the list of provocations and opponents we now hope to deter has expanded, the contexts within which we hope to deter are far more variable, as are the stakes involved and the priority we may attach to deterrence" (Payne, 2004, 411). In other words, there are no longer one or two adversaries and a rather symmetric balance of forces so one-size-fits-all approach may be unfit to address the new state of play. Way around such limitation was, for many NWS, to increase the 'size' of nuclear deterrence. In other words, the utility and reach of nuclear deterrence was expanded to include new threats, acand non-nuclear attacks, to both rational and irrational actors. In spite of the dangers of such expansion, NWS have been so attached to the old-fashioned deterrence logic that they made nuclear weapons an integral part of their military arsenals and defense system and adjusted policy measures, doctrines and strategic thinking in a way to match the newly increased role of these weapons.

Along those lines, any alternative policy attempting to limit the role of nuclear weapons and regulate the possibility of their accidental, unauthorized and simply disproportional use is perceived as a threat to the working of deterrence and could lead to its failure. For that reason, concepts like NSAs and NFU in particular may appear as shooting yourself in the foot from the standpoint of NWS. Both of these concepts reveal a profound fear of military planners and strategic thinkers of limited options to respond to any threat. For decades after the Cold War they have responded to multiplicity of threats and actors and overall uncertainties of the ne (nuclear) age with the ambiguity and uncertainty of action. NSAs and NFU would demand the renunciation of such practices and would call for more clarity in communicating intentions, especially in the use of most destructive weapons. Such fear, although at first reasonable, could be highly destabilizing in the new international security environment. As was shown with the discussion on NFU, many first use options, and thereby deterrence rationales, have no grounds once confronted with irrational actors, such as terrorist or rogue states. For states like the US conventional superiority is so established that it appears irresponsible to degrade conventional deterrence to such an extent with over-reliance on nuclear weapons. Moreover, threatening the use of nuclear weapons indiscriminately (NFU) or with heavy conditions (NSAs) reduces its credibility and increases the attractiveness of nuclear weapons for 'smaller players'. Nuclear deterrence as it was understood and practiced after the Cold War influenced the nuclear arms race on a large scale and increased the value of nuclear weapons not just for the NWS but for NNWS as well. The cases of North Korea and India-Pakistan could serve as good examples. Both NFU and NSAs face deterrence with the questions of how much is enough to achieve the desired deterrence effect and finding the proper balance between new threats and actors and risks of over-reliance on nuclear weapons can be hard to achieve. But, neither of these concepts affects the possibility and capability of any NWS to defend itself from nuclear attack. With both NSAs and NFU, to the extent that they are credible, nuclear retaliation is guaranteed. On the other hand, both of these concepts signal the unfitness of nuclear deterrence, as it was envisioned during and after the Cold War, for the threats of new age, such as terrorist groups or cyber-attacks. In fact, both NSAs and NFU could add to the credibility and effectiveness of nuclear deterrence by clearly and unequivocally stateng the intent and purpose behind nuclear weapons. Moreover, one of the fundamentals of deterrence theory is that the limited options may actually be beneficial for deterrence (e.g. Schelling, 2008). Clarity enshrined in NFU or NSAs would prevent miscalculation, misunderstandings or simply lack of belief in one's intentions. So in a sense, both NFU and NSAs if done properly and with credibility, are not at all incompatible with deterrence, they can boost it instead. Which of those concepts does more for deterrence, or takes more from its established version depends on the overall scope and form of both NSAs and NFU. As it was noted, NFU would clearly remove more threats/actors from the target list and therefore would demand larger confidence and reliance on other instruments for accomplishing deterrence. It would demand the downsizing of nuclear arsenals and doctrinal guidance of minimal deterrence. NFU would be a more universal approach to the overall delineation between nuclear and non-nuclear deterrence and would demand larger efforts to deal with issues of conventional discrepancies. As it demands a lot of practical follow-ups it could be regarded as more credible and much closer to the assumed obligation under NPT and overall non-proliferation and disarmament efforts. In addition, it could also signal a more credible intention to use and improve other measures and instruments to deal with new threats and adversaries. On the other hand, providing NSAs has less to do with the actual downsizing of the arsenals, and they can be provided without actually neutralising the effects and reach of nuclear deterrence. That makes them less effective and less credible, but also more attractive and realistic to the NWS. Even with a legally binding nature, NSAs are more limited declaratory steps towards trust-building between NWS and NNWS and they enable the established nuclear deterrence practices through heavy conditionalities and imprecise language.

These differences in the effects NFU or NSAs may have on nuclear deterrence may change once the process and progress on these two concepts intensifies and improves. Nevertheless, once again it is important to note that all risks acknowledged and included, deterrence will not be riskier with these two instruments, than it is on itself in the form it has for decades. That could even be corroborated with the changed thinking on extended deterrence which also originated from the Cold War and the need to place all allies under the same defense system. NFU raises much more concerns for the extended deterrence than NSAs, since NFU removes both nuclear and non-nuclear states from the target list. But as the individual analysis of these two instruments have shown, relations and defense of allies need not to be jeopardized by the change in doctrine/policy with regard to nuclear weapons. NSAs have been and can be followed with the mentioned positive

security assurances which serve to reiterate the assistance commitment to allies in case of nuclear attack. Also as noted, some scholars have even recommended amending extended deterrence with extended and legally binding NSAs which would assure non-nuclear states against nuclear use by NWS (e.g. Gärtner, 2018). For its part, NFU may a bit harder to reconcile with the obligations under extended deterrence, but again, with regard to the changed security environment, risks of nuclear use and inefficiency of established deterrence practices, it could be argued that new forms of extended deterrence may be envisioned that would include better approach to new challenges. Such workings would include close deliberations with allies, maybe even specific bilateral and/or multilateral arrangements that would include assistance with nuclear weapons only in case of nuclear attacks while reserving other non-nuclear assistance for non-nuclear threats or attacks on allies. It goes without saying that such linking of NFU and extended deterrence may be far-fetched and unsuitable for alliance relations, but they should serve as hypothetical options which may be exploited in the future.

In the end, the problem facing both NSAs and NFU is the fact that they are stuck in the past, much like deterrence. They are attached to traditional approaches to nuclear weapons where those who have them are seen as both the main threat and main providers of assistance. The Cold War experience and its aftermath made it even harder to realize when such reasoning became outdated and unfit for present circumstances. The world hasn't just moved on, it changed profoundly. Neither of these changes is taken lightly, but they cannot and should not be avoided forever. Deterrence is a huge and important part of the problem and risks behind nuclear weapons and its reputation stands on a weak case which can hardly be actually proven. Therefore, believing that it was deterrence skill that saved the world of another nuclear use or it was sheer luck is a vicious cycle which is why both NSAs and NFU could assist in leaving out the second-guessing by making a more realistic determination of what deterrence is and can be in the 21st century.

6

Conclusion

In a political world of tweet diplomacy and globalized insecurity, we seem to need norms and international regulations more than ever. In times when political accountability of individual leaders, especially those with nuclear codes is doubtful, it is even more important to keep those norms up to date and up to needs of present issues and challenges. In that sense, the main goal of this thesis was to make a case for alternative approaches to ambiguity, uncertainty and stalemate which came to characterize the nuclear non-proliferation and disarmament efforts in the new nuclear age. Building on the weakened state of NPT regime, animosity towards the Ban Treaty and overall inclination of (some) world leaders towards destruction of non-proliferation pillars along with theoretical support from the deterrence theory an attempt was made to shed some more light and expand academic pockets of interest for these two concepts.

First, the research and analysis of NFU and NSAs revealed their multi-layered nature and impact they could have on the overall understanding and utility of nuclear weapons and nuclear deterrence. On the other side, their limited practical records revealed lack of interest from practitioners and overall pessimism in their possibilities. Nevertheless, both NSAs and NFU are important and could be highly efficient tools for curbing nuclear proliferation and enabling disarmament. They bring clarity and restrictions to nuclear doctrines and planning by declaring unambiguous role of nuclear weapons, they build trust and decrease hostility resulting from arms race and constant modernization of nuclear arsenals which is fueled by the post-Cold War nuclear deterrence. To a different extent, both of these concepts represent a form of 'doing' on behalf of nuclear weapons state which should remind them as nuclear possessors, not just of prestige and power stemming from these weapons, but of the responsibility and restrain with which they must be used. In other words, being a superpower, with the strongest military in the world as is the case in the US for

example, must come with higher liability to address and lead the efforts to devalue and delegitimize nuclear weapons and their role. Without intention to downsize the real security concerns and issues which inevitably demand significant work and careful management, they should not be a constant cover for escaping responsibility enshrined not just in the superpower (or nuclear) status, but also in the obligations assumed through nuclear arms control, non-proliferation and disarmament regime. Without such leadership and shift in established but outdated practices, it will be progressively hard to 'police' others, especially states in problematic regions, on their need and rationale for enabling security for themselves through nuclear weapons, just like the 'big guys'. The world has moved far away from bilateral showcase and two superpowers no longer have exclusive rights to wave nuclear weapons whenever they want or believe it is necessary. That makes regulation and control of nuclear use much more complex while expanding its risks and possible consequences.

It goes without saying that for as long nuclear weapons exist there could be incentives for their use and there won't be remedies that would provide absolute security from these weapons. These insecurities will be further fueled by those who believe that nuclear weapons should have wider utility, especially since as some argue, "they help set ceilings on conflict" (Lyon, 2014). The problem with such reasoning, among other things shown by the analysis of NFU and NSAs, is that it overlooks that with wider role come wider risks. Using nuclear weapons to put a ceiling on a conflict, conventional or any other non-nuclear conflict, means playing the multitasking game with weapons which could wipe out cities. In reality, multitasking often ends up doing more things at the same time and none of them good enough. Along those lines, multitasking with weapons of mass destruction, such as nuclear weapons, is a case of multitasking where not-good-enough could be measured in megatons.

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