# Fighting the Nuclear Bomb

How has the View and Position of Russia and the US on Nuclear Disarmament Changed Since the Cold War?

Nevena Obradovic | 11052929 | ES4-4. a Supervisor: Ms. Grebner Second reader: Ms. Gabrovska

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The Hague University of Applied Sciences Faculty of Management and Organisation European Studies



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## **Executive Summary**

This thesis investigates how the view and position of Russia and the US on nuclear disarmament has changed since the Cold War. Many theories have been found during this research. However, two particular theories regarding why Russia and the US are committed to nuclear weapons are distinctive; (i) it is in the interest of these states to maintain national security through deterrence, and (ii) nuclear weapons remain important elements of power. At the commencement of this research, it appeared that the view and position of Russia and the US on nuclear disarmament had changed drastically since the Cold War. However, by the end of the research it became clear that many policies that were maintained during the Cold War continue to remain in place today.

Nuclear disarmament can be described as an act of reducing, limiting, and abolishing nuclear weapons. Many treaties have been signed and ratified to reach nuclear disarmament. This research addresses three treaties, each dealing with a different element of disarmament. The New Strategic Arms Reduction Treaty is aimed at reducing nuclear weapons, the Comprehensive Test Ban Treaty limits states to perform nuclear tests and therefore to develop nuclear weapons, and the Non-Proliferation Treaty abolishes proliferation of nuclear weapons.

The aim of this research is to examine how the view and position of Russia and the US on nuclear disarmament has changed, and what factors have contributed to this change. The position of Russia and the US has transformed several times depending on the geopolitical situation. The view, however, seems to remain unchanged since the Cold War. This has to do with human nature and the meaning humans attach to nuclear weapons. It is argued by critics that views on nuclear disarmament have changed due to proliferation. This research, however, concludes that the proliferation argument hampers efforts towards disarmament.

# Abbreviations

US - United States

- MAD Mutually Assured Destruction
- NATO North Atlantic Treaty Organization
- NPT Non-Proliferation treaty
- SALT Strategic Arms Limitation Talks
- ABM Anti Ballistic Missile Treaty
- START Strategic Arms Reductions Treaty
- CTBT Comprehensive Test Ban Treaty
- LTBT Limited Test Ban Treaty
- NWS Nuclear Weapons States
- NNWS Non-Nuclear Weapon States

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# Introduction

When Robert Oppenheimer, the creator of the nuclear bomb, saw the extraordinary mushroom cloud of the trinity explosion, he said: "I have come, Kali, destroyer of worlds, brighter than a thousand suns" (Williams, 2012, p. 334). These are the exact words from a scripture of the Hindu religion. Back then, no one would have thought that human hands could actually design something brighter than a thousand suns, able to destroy the world. This is precisely the point, humans have created the nuclear bomb, and still believe that they are unable to disarm.

Nuclear weapons are explosive devices that derive their destructive force from nuclear reactions (Nuclear Weapons Primer, n.d.). They are the most powerful weapons on earth and it is argued that they serve as a deterrent to deter attacks of chemical, biological, conventional, or nuclear nature (Nuclear Weapons Primer, n.d.). Many consider nuclear weapons to be symbols of a powerful nation. The more advanced a nuclear weapons program is, the more powerful its owner. Currently there are over 15,000 nuclear weapons in the world, of which 6,970 warheads belong to the US and 7,300 to Russia (Nuclear Arsenals, 2016).

Since its creation, humanity has done the utmost to abolish these weapons, and this fight is going on until the present day. Treaties on non-proliferation, arms reductions, and the abolishment of testing were central to the disarmament efforts. However, nuclear weapon states have hindered these treaties, circumventing the treaty rules. Modernization of nuclear arsenals, for example, happens to be one of the biggest barriers to nuclear disarmament. Russia and the US, who are considered to be the most important parties on the road to nuclear disarmament, have engaged in a new conflict, resulting in changed nuclear policies and nuclear arms development.

It is very important to understand why the disarmament process is so hard and so prolonged. It is the only way to finding a better solution. One must examine human nature, and seek unusual events. This research, therefore, provides an answer to the following research question and sub questions:

**Research Question:** 

How has the View and Position of Russia and the US on Nuclear Disarmament Changed Since the Cold War?

Sub Questions:

- What is the difference in the negotiations during the 1960s until the 1980s and the negotiations during the 1990s until 2015?
- 2) What were the most important treaties within this timeframe and how have the actors acted upon them?
- 3) How has the view on nuclear disarmament changed?
- 4) Has nuclear disarmament lost its importance?

# **Methodology and Outline**

In order to research how the view and position of Russia and the US on nuclear disarmament has changed since the Cold War, mostly qualitative research has been conducted.

In Chapter One, most information has been collected through the reading of various books and articles, either bought or consulted through the internet. The internet was mainly used to locate academic reports or scientific studies on the negotiations on nuclear disarmament throughout the Cold War and beyond. Articles have been mainly obtained through Google Scholar and Routledge Security Studies. In this chapter, much attention is given to dates and names to provide an accurate answer.

The second chapter researches various treaties and their compliance. Many treaty articles were consulted, however, they were only able to provide general information about the treaties. In order to get deeper insight into how Russia and the US have complied with those treaties, many research articles were consulted. Also reports on Russian and US nuclear forces from 2014 until 2016 have been researched. These reports were obtained from Kristensen and Norris, through the website of the Bulletin of the Atomic Scientists.

For Chapter Three it was necessary to gain more deep insights. This chapter answers whether the view on nuclear disarmament has changed, and how it has or has not changed. The book *Abolishing Nuclear Weapons: A Debate* (Perkovich and Acton, 2009) was consulted a lot for this chapter. This book provides views from various writers, leaving a good impression of how this debate could have contributed to a changed view. Moreover, another book, *Russia and the United States* (Blechman, Bollfrass, Valliere and Trenin, 2009), has been consulted and focuses more on Russia and the US, also written by various critics. This book was obtained from the Stimson: Pragmatic Steps for Global Security website. In order to understand how the views are in the current situation, recent articles have been consulted.

In chapter four, most information has been gathered on the current

developments in nuclear disarmament. For this chapter a comparison has been made of how the situation was during the Cold War, in the early 1990s, in the early years of 2000, and the latest period from 2010 until 2016. Developments have been analyzed to provide an answer to whether nuclear disarmament remains important to Russia and the US. Furthermore, in order to understand the power of human nature, articles about scientists such as Freud have been consulted.

Desk research remains the central method of this report and online journals, articles, and books form the foundation of this dissertation. It was first intended to also carry out interviews to gain deeper insight in the subject. This ultimately proved to be irrelevant for this research. It would not add any value to this report because many articles and books that were consulted provided sufficient information. Most of the books and articles were written by experts in the field of this topic.

# **Chapter One: Negotiating Nuclear Disarmament**

Nuclear proliferation has proceeded quickly. The US, being the first state to create a nuclear weapon has devised many strategies in order to ensure nuclear deterrence. After the Second World War, the Soviet Union felt inferior to the US which caused them to invest in the development of nuclear weapons, causing an overkill. To reduce nuclear arms, changes had to be made. Gorbachev and Reagen took the first step during the Reykjavik summit, however ended with no deal. Nevertheless, an agreement was reached on the Comprehensive Test Ban Treaty, and after the Cold War further reductions were realized. Yet, also new problems came into existence.

# **1.1 Beginning of the Nuclear Age**

# 1.1.1 A Rapid Escalation

The United States was the first to develop nuclear weapons under the Manhattan Project in 1942. The project was developed under the leadership of a U.S. physicist, Robert Oppenheimer, and an engineering officer of the US army, Leslie Groves, (Mian, 2015). The fear that Nazi Germany would use a nuclear weapon during the Second World War contributed to the development of such a project (Gosling, 2010). However, the US was also driven to develop nuclear weapons because of its desire to end the war with Japan without many American casualties (Blechman, Bollfrass, and Valliere, 2009). A very first nuclear test was conducted in July of 1945 in New-Mexico under the codename Trinity (Richards, n.d.). This day marks the beginning of the nuclear age.

Already then, technological developments were extremely rapid. The bombing of Hiroshima and Nagasaki came a mere two months after the US had tested its first nuclear weapon. After the most devastating bombings in history, the United Nations immediately called for the elimination of nuclear weapons in 1946. However, this did not stop the Soviet Union from conducting a nuclear test under the codename 'Pervaya Molniya', which means the first lightning, in August 1949 in Kazakhstan (Richards, n.d.).

Until 1949, the US was the only nation in possession of Nuclear weapons. However, the Soviet Union now becomes the second nation to successfully develop a nuclear device. This event caused the US and the Soviet Union to come to an understanding, that if a nuclear exchange would occur, it would result in the destruction of a major part of the world. Throughout the Cold War this understanding was known as MAD – mutually assured destruction (Blechman, Bollfrass, and Valliere, 2009). Deterrence had occupied the center stage in US' military and political strategy. Not just to defend the country from the attack by another nation, but to defend the nation from its own absurdity of possibly starting a nuclear war, with or without the intention to do so.

Williams (2012), describes nuclear deterrence to be similar to a "scorpion's tail" (P. 337). There is no other weapon with the capacity to destroy the very thing that it intends to defend. The scorpion defends itself with its tail, but when the tail is used, the scorpion can become self-destructive.

#### **1.2 Negotiating methods**

# 1.2.1 US Devising Strategies

The Eisenhower administration had adopted a so called 'new look' policy in 1954 to deter potential threats, conventional and nuclear, coming from the Soviet Union (Blechman, Bollfrass, and Valliere, 2009). The idea behind this policy was to rely on strategic nuclear weapons to respond to any Soviet aggression. The Kennedy administration, however, wanted more flexibility, forcing the Secretary of Defense, Robert McNamara, to spend more money on national defense, meaning on new weapon systems. A more flexible strategy was adopted, called 'Counter-Force'. This meant to attack the enemy's military infrastructure with the use of nuclear weapons (Gavin, n.d.). It was seen as an advantage to first destroy the Soviet nuclear weapons before these could be used to launch on the US. However, with the Cuban missile crisis in 1962, the new strategy had proven to be inefficient. McGeorge Bundy, who became one of Kennedy's key advisors on foreign policy, argued that "military planners who calculate that we will win only if we can kill 100 million Russians while they are killing 30 million Americans are living in a total dreamland" (Preston, 2010, p.56). It did not take long for McNamara to realize that also the Soviet Union had the capacity to destroy the US military infrastructure and population. McNamara argued, "it is not meaningful to me when each side has the capacity to destroy the others civilization" (Gavin, n.d., p.8). In other words, the counterforce strategy does not work when the enemy has the capacity to destroy the very thing that the US intends to defend.

# 1.2.2 A Shift to Assured Destruction

Instead of focusing on counterforce, McNamara moved to an emphasis on assured destruction. The idea behind this tool, was to ensure enough nuclear forces to deter a possible nuclear attack upon the US. One could ask what exactly the word 'enough' in such a situation means. In their book, *How Much is Enough*, Enthoven and Smith (2005) explain that, in this case, McNamara was supported by President Kennedy, President Johnson, and Congress on the fact that the ability to destroy 20 to 25 percent of the Soviet population and 50 percent of their industry, would be enough nuclear forces. This delivery capacity was also known as 'Second Strike', and required the production of more nuclear weapons. McNamara argued, "because since no force can be completely invulnerable (...) we must buy more than we otherwise would buy" (Blechman, Bollfrass, and Valliere, 2009, p. 34).

# **1.3 First Wave of Proliferation**

#### 1.3.1 The UK, France, and China

By 1964, three additional states had successfully developed nuclear weapons. Britain was the first to develop a nuclear weapon after Russia, becoming the third nuclear weapon state in 1952. The British Prime Minister Churchill had authorized a nuclear weapons program already in 1941. He was invited by Roosevelt to join the US in the Manhattan project. But when the first bomb was produced, the US broke nuclear cooperation with Britain, fearing further proliferation (Charnysh, 2013). However, nuclear tests of the hydrogen bomb that were conducted by Russia and the US caused Britain to develop a thermonuclear weapon. The weapon was successfully tested in 1957. France, on the other hand, had successfully tested a nuclear weapon in 1960, becoming the fourth nuclear weapon state. After France had suffered a loss of status at the end of the Second World War, it had decided to introduce its own independent nuclear deterrent to reinforce its global status (Garwin, 2002). China, however, had made a deal with the Soviet Union. Uranium ore was supplied in return for the Soviet

assistance in developing a nuclear program (Charnysh, 2013). China officially became the fifth nuclear weapon state in 1964, after it conducted its first nuclear tests.

#### **1.4 Non-Proliferation Treaty**

#### 1.4.1 Prohibiting the Transfer of Nuclear Weapons

A limited test ban treaty was signed in the autumn of 1963, by the United States, the Soviet Union and the United Kingdom. The treaty prohibits the testing of nuclear weapons in the atmosphere, underwater, and outer space. One of the main purposes of the treaty is to inhibit the spread of nuclear weapons. In order to follow this main goal, discussion followed on the prohibition of the transfer of nuclear weapons.

An Irish resolution called on all states, in particular the nuclear powers, to agree in an international agreement on the prohibition of the transfer and the purchase of nuclear weapons or materials (Lodgaard, 2010). However, for the next three years, one of the most important disagreements between the Soviet Union and the US was the proposed multilateral nuclear force. Both Johnson, Kennedy, and Eisenhower were in favour of a cooperation with its North Atlantic Treaty Organization allies on building a joint nuclear force. According to Russia, such a cooperation would give non-nuclear states the right to have nuclear weapons, which in the first instance they did not have. The Soviet Union argued that such arrangements constitute proliferation. The US, however, stated that with this cooperation, other countries would not have the wish to acquire nuclear weapons of their own. They would be able to share them with the NATO allies (Graham and LaVera, 2011).

#### 1.4.2 Reaching agreement

A draft version of the Non Proliferation Treaty was proposed by the US in August of 1965, prohibiting the transfer of nuclear weapons by nuclear weapon states to non-nuclear weapon states. The Soviet Union had made a small adjustment to the proposal, prohibiting the transfer of nuclear weapons "or control over them, or their emplacement or use" to militaries or non-nuclear states (Graham and LaVera, 2011, p. 100). The US, however, tried to argue how the collective defense program with NATO would not violate any principle of nonproliferation. The Soviets did not believe in the prevention of the transfer of nuclear weapons through such alliances.

Despite the fact that the Soviet Union and the US could not agree, there was desire to reach an agreement on non-proliferation. The Soviet Union and the US began private talks and by the end of 1966, both parties had reached provisional agreements on the basic requirements of the non-transfer, and non-acquisition of the treaty. By August 1967, both parties were able to submit almost identical new drafts. Members of the Eighteen Nation Committee on Disarmament raised questions on some concerns of the non-nuclear weapon states. Therefore, the drafts underwent several revisions, and a joint draft was finished in March of 1968. The treaty was opened for signature on the first of July of that same year, and was signed by the United States, the Soviet Union, the United Kingdom, and 59 other countries.

# **1.5 Second Wave of Proliferation**

#### 1.5.1 India, Israel, Pakistan, and North Korea

Exploitation of peaceful nuclear technology was the foundation for the Indian nuclear program. India had the desire to boost its position in the Indo-Pakistani war of 1971, motivating India to conduct its first nuclear test in 1974. India took part in the NPT negotiations, however, refused to become a member, considering the NPT to be discriminatory (Charnysh, 2013). While Israel never conducted a nuclear test publically, its nuclear arsenal is believed to consist of 75 to 200 weapons (Charnysh, 2013). Because Israel remains the closest US ally in the Middle East, the US is playing along with Israel's policy of neither denying nor confirming the existence of a nuclear weapons program in the country (Schofield, 2014). However, the speculation is that Israel conducted its first nuclear test in 1979 (Charnysh, 2013). Moreover, India's development of nuclear weapons caused Pakistan to create its own independent nuclear deterrent. Pakistan had significantly weaker conventional forces than India, and therefore chose to rely on nuclear weapons. Because Pakistan was a frontline state in the fight against Islamic Fundamentalism, the US had delivered military support to them, ignoring Pakistan's desire to develop nuclear weapons (Schofield, 2014). Pakistan became the eighth nuclear weapon state after conducting a first nuclear test in 1998. Finally, North Korea, who was member of the NPT until 2003, detonated a nuclear weapon in 2006, followed by several more nuclear tests in 2009, 2013, and in 2016 (Nonproliferation Treaty - Fact Sheet, 2010).

#### **1.6 Continuing Arms Race**

#### 1.6.1 Overkill

Stalin had put the human loss at 15 million after the Second World War to hide the Soviet weakness. In reality those losses were much higher (Lodgaard, 2010). At the beginning of the nuclear age, the Soviets found themselves inferior to the US. This inferiority haunted Soviet leaders through many years of the Cold War (Lodgaard, 2011). The Soviet interest in the military sector grew, and became almost half of its gross national product. Nuclear parity with the US became a priority, and by 1971 the Soviet missile inventory had surpassed that of the US (Blechman, Bollfrass, and Valliere, 2009).

To regulate the new arms race, the first Strategic Arms Limitation Talks were set in place. SALT I, however, ended two and a half years later, with the first Nixon-Brezhnev talks in Moscow. Instead, the Anti-Ballistic Missile treaty and an interim agreement on the strategic offensive arms race was signed on May 26, in 1972 (Biden, 2015). The Anti-Ballistic Missile treaty was signed to limit the anti-ballistic missiles that were put in use to defend territories. Both the US and the Soviet Union had agreed upon a maximum of two ABM deployment areas. Soon negotiations on SALT II started, and proceeded laborious. The SALT II treaty was never ratified by the US due to a change in the political climate. Not only had the Soviet red army decided to invade Afghanistan, it had also decided to support the Islamic revolution in Iran (Lodgaard, 2011). Those two decisions had weakened the relationship between the Soviet Union and the US.

The revived anti-communism in the US helped Reagan to an electoral victory. The US military budget increased quickly. In 1979 the budget was US\$175 billion, while in 1981 this had increased up to US\$230 billion (Walker and Hunt, 2011). The Reagan administration had successfully exacerbated the nuclear crisis diplomacy by releasing some disturbing statements. The Soviet Union, being aware of the U.S. plan to deploy nuclear missiles in Europe, started to worry deeply. The worries only became greater when the Soviet State Security alarmed Moscow about NATO's nuclear release exercise, called Able Archer 83, and about which was simulated that it could lead to a real first nuclear strike (Dibb, 2013).

The decisions made by both Reagan and Gorbachev had created an environment of mistrust, and suspicion. According to Dibb (2013), "the world stood on the edge of the nuclear abyss" (p. 5). Also Fischer (2007) could not agree more, stating that never before was the situation that explosive, as it was in the 1980s.

### **1.7 Taking Serious Steps**

#### 1.7.1 Reykjavik Legacy

After two long days in Reykjavik, Iceland, the negotiations between the U.S. President Ronald Reagen and the Soviet General Secretary Mikhail Gorbachev had stalled. It were the words 'space' and 'laboratory' over which they quibbled, and which caused an agreement for nuclear disarmament to come in jeopardy (Walker and Hunt, 2011). The Reykjavik Summit, however, showed that simply talks on nuclear disarmament could generate progress which meant that disarmament was no imagination. In fact, nuclear disarmament is achievable given the right conditions (Walker and Hunt, 2011). An agreement on nuclear disarmament was never reached. Nevertheless, the Reykjavik talks have proven to be important, and have been central to negotiations on the Intermediate Nuclear Forces Treaty of 1987, and the Strategic Arms Reductions Treaty of 1991. James Matlock (2004) even called the summit in Reykjavik "a psychological turning point" (p. 239). The Chernobyl nuclear disaster of 1986 was merely an additional reason to support nuclear disarmament.

After the Chernobyl accident, the Soviet Defense Minister, Dimitri Yakov, said that one could simply choose to target Soviet nuclear plants to cause a disaster, nuclear weapons would not even be necessary (Walker and Hunt, 2011). It was the fear of nuclear weapons that brought Gorbachev and Reagan together. During the Geneva summit in 1985, it was concluded that there is no such thing as winning a nuclear war. It should, therefore, never be fought. The first meetings between Reagan and Gorbachev caused their relationship and mutual trust to grow, and further deals were made possible.

#### 1.7.2 Negotiating the Comprehensive Test Ban Treaty

The Soviet Union collapsed in 1991 and the US remained as world's sole superpower. For the US it meant that the enemy was brought to its knees and that there was no longer a concrete enemy to the West. Now that communism had fallen, the Soviet Union was no longer a worldwide threat, there existed no serious reason for any country to fear a nuclear attack (Biden, 2015). However, years after the Cold War, the relationship between Russia and the US remains in a curious and dangerous condition. Each country maintains enough nuclear forces to cause worldwide destruction.

Gorbachev announced a unilateral, one-year moratorium on Soviet nuclear testing and invited the US to join (Collina and Kimball, 2010). Boris Yeltsin, who was Gorbachev's successor, became the head of the Russian Federation at the end of 1991. This changed Russia's position on the CTBT. Johnson (2009), argues that it was in Yeltsin's interest to resume nuclear tests at Novaya Zemlya. NGO's called on Yeltsin to honor Gorbachev's wish of suspending nuclear tests and Yeltsin decided to support the completion of the CTBT by September 1996.

An appropriations bill was signed into law by George H.W. Bush in October 1992 that mandated a moratorium on U.S. nuclear testing, and which required the government to work towards a CTBT by September 1996. The US, being a hegemon, started to down-grade its reliance on nuclear weapons. Since there was no more threat coming from the Soviet Union, the US had decided to serve its security interest with a multilateral comprehensive nuclear test ban. According to Johnson (2009), this initiative by Bush seemed to be the outcome of "a rational decision-making process" (p. 31) but in reality it was not. In fact, the moratorium was opposed by Bush, the Secretary of Defense, Dick Cheney, and the National Security Advisor, Brent Scowcroft. Bush signed the appropriations bill but argued that nuclear tests were necessary for a safe and reliable nuclear deterrent (Johnson, 2009). The goal was to put pressure on nuclear-testing states to start negotiations, and so there was priority to increase public and political interest in the CTBT. The LTBT Amendment Conference gave the President a mandate to resume cooperation towards the CTBT at a later stage.

In 1994, the negotiations on the CTBT were put in place, at the Conference Disarmament in Geneva. The CTBT was first signed by the US in 1996. The treaty was also signed and ratified by Russia, however, still awaits ratification of the US.

# **1.8 Post-Cold War Efforts**

#### 1.8.1 Bush and Putin

New political life was given to defensive weapons during the Gulf War in Iraq in 1991. A U.S. patriot missile, stationed in Dhahran, Saudi Arabia, failed to track and intercept an Iraqi Scud missile. The Scud destroyed a U.S. army barracks, resulting in 28 dead American soldiers (Lodgaard, 2010). This event caused the importance for defensive weapons to grow. President Bush increased the emphasis on defensive weapons in the year of 2000 which caused the US to withdraw from the ABM treaty (Hafemeister, 2016). Consequently, the budget on ballistic defense missiles was considerably raised by the US. Russia, on the other hand, was very much against these ballistic missile defense systems, mainly because it was not capable of succeeding in the defensive race. In general, offensive weapons were much cheaper to build (Lodgaard, 2010). Russia, however, had no fiscal capacity to build significant offensive or defensive nuclear weapons. This is why the Russians kept agreeing in favour of treaties constraining the deployment of defensive systems.

President Bush and President Putin agreed on limiting operational and strategic warheads in 2002, also known as the Strategic Offensive Reductions Treaty. It was based on a compromise that accepted the US to withdraw from the AMB treaty. In return, Russia was able to retain specific nuclear warheads, named 138 ss-18s, which under the START II would have to be destroyed (Hafemeister, 2016). Nevertheless, this agreement caused Bush to backtrack from the ABM treaty of President Nixon, the START II of George H. Bush, and the agreement on the START III by President Bill Clinton.

#### 1.8.2 Towards Great Reductions

Obama promised to negotiate a New Strategic Arms Reductions Treaty to reduce the number of nuclear weapons in the U.S. arsenal. Where Bush widened the option for nuclear weapon use, Obama decided to limit the function of nuclear weapons (Lodgaard, 2011). Moreover, where Bush had put an emphasis on U.S. unilateralism, Obama decided to focus on international law. Different from Bush, Obama recognizes that nuclear disarmament depends on international cooperation between the big nuclear powers (Thakur, 2011). Obama was willing to improve the US-Russia relations, therefore he approached President Medvedev to seek for a new agreement (Woolf, 2014). Negotiations on the New STAT began in 2009. The main goal of these negotiations was to negotiate further reduction of deployed strategic warheads to improve the relationship between Russia and the US, and to extend the monitoring and verification system.

However, years after, it seems that the US-Russia plan on nuclear disarmament is heading in the opposite direction. Schlosser (2015), argues that countries who possess nuclear weapons are modernizing their nuclear arsenals. The US is introducing modernized land based missiles, ballistic missiles, and new long range bombers. Russia, on the other hand, is developing new land based and submarine based missiles. Meanwhile, China, France, UK, Israel, India, Pakistan, and North Korea are doing more or less the same thing. Military cuts seem to be characterized by weak leadership.

# **Chapter Two: Reviewing Treaty Compliance**

Treaties on non-proliferation, the ban on nuclear tests, and arms reductions remain important on the road to nuclear disarmament. However, mainly the US and Russia have contributed to the failures of many treaties. These failures include the increase of nuclear arms, modernization, as well as the contribution of these states to a discriminatory NPT, and the failure to ratify the CTBT.

# 2.1 Non Proliferation Treaty

# 2.1.1 Role of Russia and the US

The NPT was first signed in 1970, and forms the backbone of the international regime to stop the proliferation of nuclear weapons. In total, 189 countries have signed the NPT. These countries can be divided into two groups: nuclear weapon states (NWS) and non-nuclear weapon states (NNWS). Russia, the US, the UK, France and China are the only five recognized NWS. Three countries who are in possession of nuclear weapons and have never signed the NPT are India, Pakistan and Israel. North Korea, however, was party to the NPT but withdrew in 2003.

Nuclear proliferation has been a global phenomenon since 1945. It is one of the main reasons that Russia and the US have committed to cooperation (Kamath, 2013). The road to nuclear disarmament has been marked by the US and Russia signing several treaties, among which is the NPT. As Russia and the US hold 90% of world's nuclear weapons, they are expected to demonstrate that they are meeting the goals of disarmament. Kamath (2013) argues that this would strengthen the NPT.

Non-proliferation and nuclear disarmament are often seen as two separate and rather different cases. However, without disarmament there will be proliferation and with proliferation there will be no disarmament. The most important element of reaching nuclear disarmament is preventing proliferation of nuclear weapons to NNWS (Nuclear Disarmament the Road Ahead, 2015). This is logical because it is difficult for one to disarm when the other is proliferating.

# 2.1.2 The US and Russia Contribute to a Discriminatory NPT

The NPT has a clear direction: to work towards a world without nuclear weapons. This implies that parties of the NPT are required to decrease the role of nuclear weapons. They need to do this through unilateral and multilateral measures, disarmament, and arms control (Meier, 2015). For the NPT to be an effective treaty, countries that play an important role, such as Russia and the US, need to abide by its rules. This, however, is currently not the case. According to Meier (2015), the NPT is a "bargain" (p. 3). Specific obligations and rights are granted to certain parties but they are mainly distributed unevenly.

The US conducted a nuclear test in 2015. However, the test was justified because the new weapon type did not carry any nuclear warheads during the test itself (Broad and Sanger, 2016). Nevertheless, the test was carried out in favor of a new nuclear device. One cannot ignore that nuclear tests contribute to proliferation. North Korea, which is no longer member to the NPT conducts nuclear tests and is criticized by the US and has sanctions imposed upon it by the US (Charbonneau and Nichols, 2016). The US decides to simultaneously conduct its own nuclear tests and attempts to argue its justification by claiming that there were no nuclear warheads included. The US, being a permanent member of the NPT security council, has acted discriminately to those states that are not allowed to acquire nuclear weapons. It is discriminatory because the US claims to oppose proliferation on the one hand while on the other it is free to decide whether it will develop new nuclear weapons through the modernization process.

The US and Russia retain their position as two nuclear superpowers. Both change their policies when it benefits them. Russia saw benefit in cooperating with China, causing China to develop nuclear weapons. The US, however, still sees benefit in remaining quiet about Israel's nuclear arsenal. For many states, Russia and the US are the reason they have not become signatories to the NPT. India, for example, refused to sign the NPT due to its discriminatory factor (Charnysh, 2013). The US and Russia, nevertheless, continue to produce nuclear weapons and have, in the past, chosen who to help in nuclear proliferation.

# 2.2 Comprehensive Test Ban Treaty

#### 2.2.1 Importance to Disarmament

The CTBT was first opened for signature in 1996 at the United Nations in New York. It was designed to take further measures against nuclear proliferation and towards nuclear disarmament. The CTBT recognizes the need for further systematic and progressive efforts with the global reduction of nuclear weapons with the ultimate goal of the elimination of such weapons. The CTBT admits that the elimination of nuclear weapon test explosions contributes to the abolition of the development of new types of advanced nuclear weapons, and therefore results in nuclear disarmament and non-proliferation (Collina and Kimball, 2010).

In art. 14 of the CTBT, it is laid down that the treaty will not enter into force until it has been signed and ratified by a two third majority (Collina and Kimball, 2010). The ratification of the CTBT is necessary in order to assure the global reduction of nuclear weapons and to complete the goal of nuclear disarmament. The US, Russia, France, and China had all promised to sign the CTBT in exchange for a permanent NPT in 1995. So far the treaty has been signed by 182 nations. However, those nations cannot benefit from the full security of the CTBT, because the treaty has just been ratified by 151 members and still awaits the ratification of nine other states including Indonesia, India, China, and the US. Russia ratified the CTBT in 1999. The US was first to sign the treaty in 1996 but twenty years later still has not been able to ratify it. The treaty, therefore, never came into force.

#### 2.2.2 Why the US had not Ratified the CTBT

The US saw some problems with the CTBT that caused it to reject ratification in 1999. According to Spring (2011), those problems that led to the rejection still remain.

Spring (2011) argues that the CTBT does not clearly describe what nuclear tests are to be banned. According to him, some states believe that low-yield tests are permitted while others think that the treaty is zero-yield. However, art. 1 of the CTBT clearly bans "any nuclear weapon test explosion or any other nuclear explosion" (Dahlman and Israelson, 2013, p. 368). Therefore, it is clear that low-yield tests are not permitted at any time. The treaty is thus zero-yield.

During the U.S. senate debate in 1999, it was claimed that a zeroyield ban is unverifiable. The International Monetary System could only detect underground explosions above or at one kiloton. Nevertheless, the monitoring system of nuclear tests has very much improved since 1999. The International Monitoring System was capable of detecting North Korean nuclear tests from 2006 to 2016. However, Ellen Tauscher (2011), Under Secretary of State for Arms Control and International Security, has remarked that one could try to conduct a nuclear tests so low in yield that it might not be detected. Therefore, effective verification by the CTBT is possible. No verification system is completely infallible but if one could uncover any attempt to cheat on the CTBT it is an effective measure.

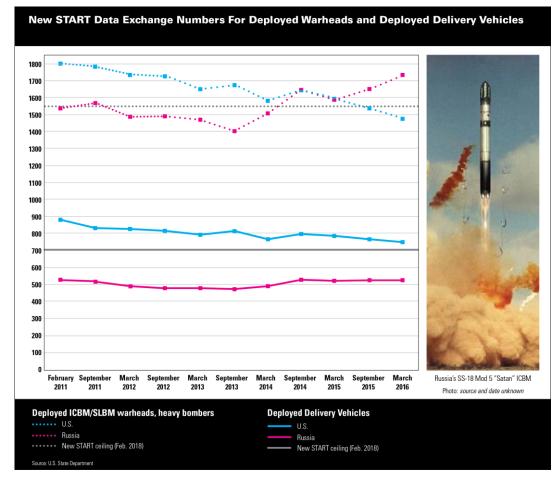
Finally, a more political issue is that countries such as Iran and North Korea look at the US's moral standing in disarmament and nonproliferation as a sign of weakness. Obama sees ratification of the CTBT as part of nuclear disarmament. Spring (2011) believes that countries that look at this matter as a weakness might want to exploit it.

# 2.3 New Strategic Arms Reduction Treaty

#### 2.3.1 Progress on Arms Reductions

The New START was first singed by Russia and the US in 2010. The treaty came into force in 2011 after its ratification and will last until at least 2021. The main goal of the New START is to limit deployed strategic warheads to 1,550 in both Russia and the US. In addition, it limits both states to 700 deployed and non-deployed strategic delivery vehicles. The treaty is considered important for the strategic relationship between the US and Russia, and a necessary step towards future negotiations.

Russia promised to cut all ground launched non-strategic warheads in 1991 and 1992. So far it has not done so. A few years ago it seemed as if Russia was about to reduce its nuclear forces but now there are many uncertainties about the future of its nuclear stockpile. Russia has increased, rather than reduced its nuclear arsenals (Kristensen and Norris, 2014, 2015, 2016). However, Russia has been able to stay below the limit of 700 deployed delivery vehicles. The US, in comparison, increased its nuclear arsenals in 2013 and in September 2014. After that it started to slightly reduce its nuclear stockpile. Until now, the US has not been able to come below the limit of 700 deployed delivery vehicles. According to Kristensen and Norris (2015), except for eliminating a few bombers, the US has yet to begin reducing deployed nuclear forces to meet the standards of the New START.



*Figure 1: Deployed Warheads and Delivery Vehicles from 2011 – 2016. Source: G. Thielmann, 2016.* 

# 2.3.2 Transparency Issues

There is a transparency issue with the New START. Both Russia and the US no longer give specific information about how many nonstrategic nuclear weapons they have in stock. This is very important. According to Kristensen and Norris (2014), there is a possibility that other types of fighter bombers have nuclear capability, but there is no information about that either. From 2015, the New START discontinued the release of detailed accumulated numbers, and Russia still does not offer comprehensive information on its nuclear forces. Mian (2009) argues that, since 1945, nuclear-armed states have sought to protect their critical information to conceal their military capabilities from their adversaries. With a new threat, such as nuclear terrorism, the US and Russia have justified the secrecy. For Russia, transparency becomes even more important because of the direct threat of NATO.

#### 2.3.3 Modernization Issues

The modernization of nuclear arsenals by the two nuclear powers has created many challenges for the international arms control community. According to a record by Kristensen and Norris (2015), "unless a new arms control reduction is reached in the near future, the shrinking of Russia's strategic nuclear arsenal might come to a deadend" (p.3). There is also concern that the redesign and development of new nuclear weapon production and simulation facilities by the US might challenge the pledge made in 2010. Back then, the US stated that it would not develop new nuclear warheads. While Russia is in the midst of the modernization of its strategic and non-strategic nuclear forces, the US has increased its budget for modernization from US\$200 billion for a three-decade plan to US\$350 billion for the upcoming decade. The broad modernization by Russia has two important reasons: parity with the US, and that nuclear strategic forces remain important for Russia's security and status as a great power.

# **Chapter Three: Views on Nuclear Disarmament**

Nuclear weapons remain important for national security through Nuclear deterrence. Modernization of nuclear weapons is seen as a necessity in order to assure a proper nuclear deterrent.

# 3.1 A common view

#### 3.1.1 The 'National Security' argument

Many critics claim that there is one simple reason why the view of nuclear disarmament has changed. During the Cold War, there were only two nuclear weapon states: the US and Russia. Today, nine countries are in possession of nuclear weapons, five countries are hosting nuclear weapons, and 21 countries are part of a nuclear alliance. According to Perkovich and Acton (2009), states will only commit to full abolishment of nuclear weapons if they are no longer endangered by other states in possession of nuclear weapons.

Because of proliferation, there is increasing danger of an accidental or non-accidental nuclear attack. Russia and the US, being well aware of this fact, seek to maintain national security through the development of nuclear weapons. This argument, however, is not valid. In fact, this argument hampers efforts towards nuclear disarmament. Nuclear weapons simply cannot provide any security, because they are instruments of violence. In 1945, U.S. scientists argued that nuclear weapons would protect the US from other countries developing nuclear weapons (Mian, 2009). This argument has clearly facilitated the creation of nuclear weapons and has led to proliferation. Therefore, the problem of nuclear proliferation and the slowed disarmament process lies not within nuclear weapons themselves, but in the nature of humankind. Nuclear weapons exist because nuclear weapons states, mainly Russia and the US, preserve the option to use military force in global affairs (Miller, 2009). Within ten years from now, an additional seven countries might be in possession of nuclear weapons. This argument, therefore, contributes to the endangerment of national and international security.

# 3.1.2 The 'Deterrence' Argument

To the US and Russia, deterrence has always been a key motive for the existence of nuclear weapons. They claim that the primary goal of such weapons is to deter an attack by an enemy (Miller, 2009). True, nuclear weapons have not destroyed a city in 70 years and they were able to serve as a deterrent. However, it is well worth remembering the way in which many reacted to the attacks of Hiroshima and Nagasaki – "we face a choice between one world or none" (Schlosser, 2015, p. 15).

Perhaps the argument that nuclear weapons are necessary for national security because they deter attacks by enemies is motivated by the hypothesis that nuclear deterrence cannot fail. To assume such a thing is simply wrong. Today, the nuclear landscape has drastically changed. According to Schlosser (2015), there is no direct threat in the public consciousness, as there was during the Cold War. Deterrence does not provide any security, because it has become more dangerous and less effective. Perry, Schultz, Kissinger and Nunn (2011) argue that nuclear weapons no longer provide security benefits in the current and evolving international security environment. In fact, deterrence has become more unstable than it was during the Cold War. Nuclear deterrence is increasingly dangerous because many weapons by countries such as Pakistan, India, Israel and North Korea are developed without the International Atomic Energy Agency safeguards, and are left unprotected. Nuclear deterrence is decreasingly effective because the circumstances that enabled mutual deterrence during the Cold War have changed. To terrorist groups who seek to kill masses of infidels and who are ready to give their own lives, deterrence is meaningless.

Nevertheless, if everyone were to share the same view, there would probably be more than nine countries in possession of nuclear weapons. Doyle (2009) argues that nuclear disarmament has been a goal for 60 years because most states and most people look at nuclear weapons as a problem rather than a solution.

# 3.2 Russian Perspectives on Nuclear Disarmament

#### 3.2.1 Reliance On Nuclear Weapons

Russia sees nuclear weapons as the backbone of both its national security and status among the great powers of the present century. Russia believes that nuclear weapons can protect national security and can contribute to its regional and global political goals (Trenin, 2009). Moreover, nuclear deterrence provides Russia with more confidence that its vital interests will be respected by other great nuclear powers (Freedman, 2013). This view explains why Russia is more a proponent of arms control than nuclear disarmament. For Russia it does not seem logical to abandon nuclear deterrence. The US, NATO and China, for example, have a much greater conventional arsenal (Colby, 2016). It is, therefore, considered that Russia's only way out is to rely on nuclear weapons. In addition, Russia's military leaders have continuously argued that the post-Cold War attempts to cooperate with the West have not contributed to a stronger Russian military security (Trenin, 2009). In fact, Russia's national security has only suffered from new US military deployments and NATO's enlargement in Eastern Europe. Nevertheless, already in the 1990s, did not only Russia's security but also its image and status rely on the possession of nuclear weapons (Trenin, 2009).

#### 3.2.2 Battle Against United States Dominance

Another concern of Russia's is U.S. dominance in world politics. Its omnipresence and powerful foreign policy seems to directly affect Russian interests. Four major developments have contributed to this view: (i) the involvement of the US in Ukraine, Crimea, since 2014; (ii) the expansion of NATO to include countries from Central and Eastern Europe, and the Baltic region; (iii) NATO's bombing of Yugoslavia over Kosovo in 1999; and (iv) US support for the color revolutions in Ukraine, Georgia, and Kyrgyzstan, resulting in the worst relations between the US and Russia since the Cold War.

Above that all, Russia expressed great concern about the growth and development of the US military power. The Obama administration budget to invest in nuclear modernization is significantly higher than the Bush administration budget, and much higher than Russia's military budget (Kristensen and Norris, 2016). While the US is far ahead in military technology, Russia is in a race with itself, and struggling with financial difficulties. The Russian response to further develop its nuclear arsenal is therefore predictable.

Finally, Russia feels threatened by NATO's armed forces, which are deployed within easy reach from Russia's border. For Russia to deter potential threats by NATO seems impossible without the reliance on nuclear deterrence (Arkhipov and Strzelecki, 2016). In 2008, Russia said that it might use nuclear weapons against NATO missile defense facilities. In 2013, during the 'Zapad' exercise, Russia practiced an alleged nuclear attack upon NATO missile defense facilities (Blank, 2013). Russia's reason was the missile defense system deployed in Europe and especially in Eastern Europe by NATO.

#### 3.2.3 Arms Control Over Abolition

While the vision of a nuclear-free world seemed realistic in 1986, today it is considered utopian. Unlike the US, Russia has not been able to develop an alternative non-nuclear military strategy. Therefore, its security strategy continues to rely on nuclear deterrence. Nuclear weapons, however, remain cheaper options in ensuring deterrence. Moreover, Trenin (2009) argues that, for Russia, nuclear weapons remain a great equalizer in US world dominance.

Russia mainly reacted to the policies of George W. Bush in 2002 when the US decided to abandon the ABM treaty. A non-binding resolution was signed by Russia, describing the withdrawal by the US as "mistaken and destabilizing" (Cirincione, 2013, p. 108). Russia argued that the US had started a new round of the arms race. President Bush's decision had caused Russia to declare the START II as dead and to develop new nuclear missiles.

Former Russian President Medvedev expressed his appreciation towards the efforts to achieve a nuclear-free world during a conference on disarmament in Geneva in 2009. It was stated that Russia was more than willing to solve global security issues on the basis of multilateral cooperation. However, Russia argued that complete disarmament of nuclear weapons can only be achieved through strengthened strategic stability and equal security for all (Diakov and Miasnikov, 2010). Like Obama, Medvedev decided to change the nuclear strategy a few months after his speech. A new Russian military doctrine was established in 2010, in which the right to use nuclear weapons as a response to attacks of nuclear or other weapons of mass destruction against Russia or its allies was reserved. With this decision, Russia acknowledged the importance of nuclear weapons in Russian national security.

Both Medvedev and Putin have so far been supporting efforts towards nuclear disarmament, however, rather within safe limits. This means that disarmament is supported unless it endangers national security (Meier, 2015). Nuclear disarmament, therefore, is supported as a principle and a process, but it does not directly constitute the nuclear abolition Gorbachev envisioned.

# 3.3 United States Perspectives on Nuclear Disarmament

#### 3.3.1 Motivations for the Modernization of Nuclear weapons

Leaders of the US believe that the maintenance of strategic nuclear forces contributes to a fundamental national security. Nuclear weapons played a leading role in U.S. national security throughout the Cold War. During this period, the US continually modernized its nuclear arsenals to deter Russia and China. Today, many fear that a new arms race has begun (Goodman, 2016). While Russia is developing more strategic nuclear forces, the US is building arsenals of smaller nuclear weapons, however, modernized and much stronger.

The US mainly argues that modernization is necessary to improve obsolete weapons that have become increasingly dangerous because of their poor performance (Broad and Sanger, 2016). However, one has to realize that the first atomic bomb was of great destructive power. It was more destructive than any weapon that had ever existed. Today, the destructive power of hydrogen bombs has increased one thousand times more (Unprecedented Technological Risks, 2014). Furthermore, it is not only the US and the Russia that are modernizing their nuclear arsenals. The other seven countries in possession of those weapons are also doing the same. This is precisely the danger. During the Cold War, U.S. leaders believed that the Soviet Union would destroy the US if it had the chance. This led to the intensification of military build-up and military budgets (Schlosser, 2015). Today, the US military budget to invest in nuclear weapons has increased. The Russian military budget is also increasing. It is in their interest to invest in heavy modernization and cuts are seen as a sign of weakness.

## 3.3.2 Counterproductive Decisions

The Obama administration committed to work towards a world free of nuclear weapons. During a speech in Prague in 2009, Obama argued: "First, the US will take concrete steps toward a world without nuclear weapons. To put an end to Cold War thinking, we will reduce the role of nuclear weapons in our national security strategy and urge others to do the same" (Feiveson, 2010, p. 93). However, the idea that nuclear weapons remain fundamental elements of US national security, was kept alive in US politics. It is strongly emphasized that nuclear weapons are crucial to deterring weapons of mass destruction, and to assuring continuing security of US allies. Only nine months after his speech in Prague, President Obama proposed a modernization plan of nuclear weapons for which the budget was significantly higher than the Bush administration budget for nuclear weapons (Feiveson, 2010). According to findings by Kristensen and Norris (2016) the US has reserved US\$350 billion for the modernization of its entire nuclear stockpile for the next decade. This is inconsistent with Obama's previous statement: "we should put an end to the dedicated production of weapons-grade materials that create them" (Feiveson, 2010, p. 99). Thus, while Obama argued to end the production of such materials, he has now decided to create much more through the modernization program.

According to Broad and Sanger (2016), the US military is improving the B61 bomb by adding steerable fins and other advanced technologies. This ensures that the bomb can make a more accurate nuclear strike. Furthermore, the destructive power of the warhead can be adjusted to minimize collateral damage and radioactive fallout. With such modernizations, the US can easily reduce their strategic nuclear stockpile because a smaller range of nuclear weapons is more advanced and can cause the same damage. This means that there is a reduction in numbers but not in danger. The US may therefore comply with New START, but this does not necessarily contribute to a safer world. As Lodgaard (2009) argues, small amounts of nuclear weapons could create serious havoc just as well. Considering nuclear modernization, there is no such thing as a safer world with less nuclear weapons. Some even argue that because of the smaller yields and better targeting, made possible by modernization, it is more tempting to actually use these weapons (Broad and Sanger, 2016). The B61 bomb was tested in Nevada in 2015, and provoked much commentary from various states. Russia viewed the tests as irresponsible and provocative. China expressed their concern about the US plans to modernize their nuclear arsenals. North Korea described the US to be an "ever-growing nuclear threat" (Broad and Sanger, 2016, para.10).

# **Chapter Four: Importance of Nuclear Disarmament**

The position on nuclear disarmament has changed, caused by many conflicts between Russia and the US. Nuclear weapons have become more advanced due to the modernization efforts by both Russia and the US, and therefore more dangerous. Modernization is conducted because the US and Russia maintain a Cold War mentality. No state wants to be inferior to another, and no state wishes to give up their position as a nuclear superpower. Nuclear disarmament, therefore, seems to lose its importance to a power position.

## 4.1 Ordinary Commitments

## 4.1.1 A Changing Position

The importance of nuclear disarmament seems to be characterized by reductions of arms. In 1967, the US' arsenal consisted of 31,255 nuclear warheads (Kroenig, 2013). Under the New START the US promises to have less than 1,550 nuclear warheads. The Obama administration produced many positive results so far, including a Nuclear Security Summit, a nuclear deal with Iran, and a New START with Russia. All these efforts are contributing to the disarmament. However, while the situation with Iran seems resolved, the relationship between the US and Russia has only worsened (Eden et al, 2016). Tension strongly increased between the two nuclear-weapon states. This started with the conflicts in Ukraine and Syria, and was followed by a Russian warplane being shot down in Syria by Turkey, a NATO member.

Both Russia and the US continue to adhere to the nuclear arms control agreements. They are, however, engaged in programs to modernize their nuclear arsenals, in order to maintain their nuclear weapons in good condition for the next few decades. While both Russia and the US claim to achieve their goals on the arms reductions by 2018, recent statistics on the New START show otherwise (Kristensen and Norris, 2016). Furthermore, with such modernization one could argue whether reductions in nuclear weapons still make a difference. Both countries might have fewer launchers, but their force will only be more mobile, with more flexibly targeted warheads (Eden et al, 2016). Therefore, a smaller nuclear stockpile may be just as dangerous. Despite the agreement to work towards a world free of nuclear weapons, these modernization programs are scheduled for the next ten years. It is illogical for the US and Russia to spend billions of dollars on nuclear modernization, while under the illusion that it is possible to keep other states from acquiring nuclear weapons.

#### 4.1.2 A Cold War Mentality

Nuclear disarmament seemed to be of great importance for both the US and Russia since the early 1990s until recently. Although nuclear disarmament is considered important, the role of nuclear weapons in the geopolitical competition is more significant. According to Kroenig (2013), nuclear weapons have been relatively unimportant in the last two decades. This is not due to states' increased pacifism, but because the world was fortunate with a temporary respite from Russia.

Research conducted in the past 70 years shows that political leaders pay close attention to the nuclear balance of power, believing that superiority in this balance of power enhances their position in the world (Kroenig, 2013). The main point is that most states with nuclear weapons, especially the US and Russia, seek military superiority. Deutsch (1983) argues that military inferiority, meanwhile, is just as dangerous as military superiority: "It is dangerous for either side to feel tempted or frightened into military action" (p. 10). Its antecedent is consistent with today's developments. Those who feel inferior are expected do anything to achieve parity. Therefore, both the US and Russia are oblivious to how their own behavior and decisions contribute to the creation of the other's hostility. As long as Russia and the US continue to rely on nuclear weapons, in order to ensure national security through deterrence and modernization, others will decide to act similarly.

The US and Russia continue to operate out of mistrust and suspicion, as was already the case during the Cold War. Both still assume that the other could authorize a nuclear attack (Starr, n.d.). They are still guided by the ideology that it is best to be prepared and, therefore, it is necessary to maintain a strong and functional nuclear arsenal. Consequently, both are correct in thinking that the other is dangerous and provocative. As Deutsch argued in 1983, their relationship is "pathological" (p.8). Both Russia and the US feel insecure, vulnerable, and burdened. The only reason for this is the fact that they prefer to maintain a power ratio.

# 4.2 Enslaved by the Nuclear Bomb

### 4.2.1 A Further Distanced Goal

The importance of nuclear disarmament was clearly explained to the rest of the world. Disarmament should; stop fears of an accidental nuclear war, nuclear terrorism, and irrational decisions taken by politicians. Russia and the US have claimed to fight for a nuclear free world, and treaties have been created to realize this goal. Obama, nevertheless, confessed during his speech in Prague: "I am not naïve. This goal will not be reached quickly – perhaps not in my lifetime" (Kroenig, 2013, p. 46). However, nuclear disarmament seems even more distanced now than it seemed during the 1980s. The world came closest to achieving nuclear disarmament when Gorbachev, while addressing the UN assembly in 1988, called for the elimination of nuclear weapons (Lodgaard, 2011).

#### 4.2.2 Power over Disarmament

The core reason for the existence of nuclear weapons is the yearning for power. It is part of human nature to want something that makes one look more powerful. According to De Santana (n.d.), "money is the physical embodiment of a form of social value, namely, wealth" (p. 327). Similarly, nuclear weapons are the embodiment of power. In this sense, nuclear weapons not only contain their literal power, being destructive weapons, but as well the powerful meaning that humans assign to them. In addition, nuclear weapons are socially accepted because politicians provide reasons for their existence. As Freud explained, "what men know or pretend to know and say about the motives for their behavior – is often merely a socially acceptable rationalization of their unrecognized or latent motives" (Deutsch, 1983, p. 12). Therefore, the US and Russia, might argue that nuclear weapons are necessary, because they serve as a deterrent, and because other countries have acquired them. However, the true reason behind the existence of those weapons is simpler. It is power that drives the US and

Russia to continue to develop and modernize these weapons.

It becomes even harder for states to let go of something that they have grown accustomed to. Nuclear weapons are of great importance to these countries, because they desire to maintain the sense of power these weapons provide. On the contrary, countries that never had nuclear weapons are less inclined to express the same desire. Tony Blair stated that "it is of great risk to give up something that has been one of the mainstays of our security" (Perkovich and Acton, 2009, p.22). In other words, it is of great risk to give up something that has been important to the power position for all those years. Nuclear weapons were not only important for national security, but they have been even more important for the positions of the US and Russia as great powers.

# Conclusion

The position of Russia and the US on nuclear disarmament has changed on several occasions since the Cold War. The view on nuclear disarmament, on the other hand, has virtually remained unchanged.

When the first nuclear bomb was detonated, many saw how dangerously powerful it was. The US, who was the first creator of the nuclear bomb, therefore, felt powerful. However, when the Soviet Union conducted its first nuclear test, the West started to fear the nuclear bomb. The US was not the only powerful nation; the Soviet Union was soon to become just as powerful. Therefore, many strategies were invented. However, only one survived until today which is 'deterrence'. In order to maintain an effective nuclear deterrent, policies on nuclear weapons were altered. Nuclear weapons became important to national security.

Many treaties were realized, but none of the treaties have been fully respected by the nuclear weapon states. Russia and the US wanted to discourage nuclear proliferation. Nevertheless, they did not want to renounce their own nuclear weapon programs. Russia and the US have promised to cooperate in order to achieve nuclear disarmament. However, both are modernizing their nuclear weapons, in order to maintain an effective nuclear arsenal for the next few decades. Again, their position changes. Both states consider nuclear weapons vital for national security, which is a view that has never changed.

Nuclear disarmament, therefore, seems impossible. Russia and the US would probably not be as powerful as they are, without their nuclear weapons. They will never lose their desire for power, because it is the nature of humanity. Their view on nuclear disarmament, therefore, will remain unchanged for many more years. The problem is not in the nuclear weapons; it is in the human being. It is man who must change, in order to reach nuclear disarmament, not just the policies. At the end, it is man who has created the nuclear bomb.

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