**African Journal of Peace and Conflict Studies**
**ISSN (Print) 2634-3657 (Online) 2634-3665**

**Indexed by: IBSS, EBSCO, ProQuest, COPERNICUS, J-Gate and Sabinet**

**Volume 13, Number 1, April 2024**
**Pp 89-106**

# The Effectiveness of International Arms Control Measures Regarding Weapons of Mass Destruction: The Case of the Russia-Ukraine Conflict

DOI: https://doi.org/10.31920/2634-3665/2024/v13n1a5

**Makhura B. Rapanyane, Sandiso Mahlala, Faith L. Mkhatshwa**
*Afrocentric Governance of Public Affairs*
*North West University, South Africa*
*Emails: makhurabenjamin2@gmail.com; Sandiso.mahlala@gmail.com; ffaiithmkhatshwa@gmail.com*

## Abstract

It is without doubt that the Russian invasion of Ukraine has increased the global threat from the use of Weapons of Mass Destruction (WMD), including chemical munitions. Equally, there have been multiple claims from Ukraine in October 2022 that Russia was using WMD and chemical munitions in Ukraine after white phosphorus munitions were found during a fight between Ukrainian and Russian soldiers in Donetsk, Ukraine. The current paper seeks to interrogate the existing faculty of knowledge concerning the effectiveness of international control measures on WMD. Beyond the centralisation of the critical analysis of the effectiveness of control measures, the paper at hand argues that these measures in the form of multilateral treaties have not produced the required results, especially in disarming global superpowers (the United States and Russia) and alternative nuclear pariah states like North Korea. To some extent, the ineffectiveness of the control measures has now motivated Russia to utilise some of the WMD in Ukraine. Methodologically, the paper has employed a qualitative research approach that is dependent on secondary data materials and content analysis.

**Keywords:** *International Control Measures, Weapons of Mass Destruction, Effectiveness, Russia-Ukraine Conflict, Global Superpowers,*

## Introduction

Concerns over the use of Weapons of Mass Destruction (WMD) in the world have increased; however, the global community seems oblivious to the urgent need for arms control in Ukraine and Russia. Ignoring the potential catastrophic consequences, nations continue to turn a blind eye to the rampant proliferation of weapons of mass destruction, creating an environment ripe for conflict. Multiple studies, such as Teeple (2017), Pifer (2018), Tennis (2018), Wątor (2019), Wisotzki & Kühn (2021), Wachs (2022), Guchua (2023); and Russell (2023), have been conducted in a manner related to the present study yet vary in the variables considered. This study offers a distinctive perspective by providing a comprehensive analysis of international arms control agreements, such as the Treaty on the Non-Proliferation of Nuclear Weapons and the Chemical Weapons Convention (CWC), to assess their effectiveness in preventing the proliferation of WMDs in the context of the Ukraine and Russia conflict. Furthermore, the study has investigated the degree to which Ukraine and Russia adhere to global arms control measures, examining their compliance with specific treaty obligations and the intricacies of arms control and its role in limiting the use of WMD, particularly in the case of Russia and Ukraine.

To argue, the current study sought to revisit the subject of the effectiveness of international arms control within the context of the Russia-Ukraine conflict. Studies that address the issue of WMD destruction in situations such as Russia and Ukraine date back more than 20 years. In the context of this study, the first study that has been reviewed is that of Fuhrmann and Yonatan (2016) entitled *"Do Arms Control Treaties Work? Assessing the Effectiveness of the Nuclear Non-Proliferation Treaty,"* which focused on how global arms control treaties influence state policies. The paper has satisfactorily investigated the efficacy of the Nuclear Non-Proliferation Treaty (NPT). Both Fuhrmann and Yonatan have indicated that despite the ferocious debate over the last several decades, the academic community with expertise on the subject still lacked a full comprehension of the effectiveness of the NPT. This narrative still exists in part due to the ongoing studies, which suffer extensively from key limitations, meaning that they have not been able to design a causal interconnection between nuclear proliferation and NPT membership. The study of Fuhrmann and Yonatan (2016) reveal that studies have not been able to determine whether membership in the

treaty constrains states from developing their nuclear weapons or reflects the preferences that exist. To deal with this limitation, the study accounted for the selection effects by utilising a measure of countries' ex-ante treaty devotion preferences. Their analysis of nuclear proliferation between the years 1970 and 2000 gives evidence of the NPT playing a significant role in doing away with the spread of nuclear weapons. Even after being responsible for strategic selection into the NPT treaty, the ratification is associated robustly with a lower likelihood of trailing nuclear weapons. The results of their study do not consider only debates over NPT and non-proliferation but include the broader implications for the study of how global institutions impact international politics and scholarship.

The second study was that of Fatton (2016), which is entitled "*The impotence of conventional arms control: why do international regimes fail when they are most needed?"*. The study by Fatton (2016) has placed central attention on the tensions of the West over Ukraine with Russia, where the latter had pulled out of the Treaty on Conventional Armed Forces in Europe at the beginning of the year 2015. This is another important case study of a European country detaching from conventional arms control when relations with alternative member states worsen. This has raised a significant question of whether arms control measures aimed at doing away with conflict can survive periods of tension to preserve peace, which the current study has argued that they do not. This was done by demonstrating that the stability and prospect of conventional arms control measures depended on delicate international relations. During the tension period, governments rely on the institutions of the military for advice and the absorption of military biases that are not aligned with arms control. Thereby, these arms control measures fail stimulatingly when they are needed as a significant pattern of peace instruments. Despite conventional arms control, the study by Fatton (2016) has also touched on the fragility of nuclear agreements like the New Start of 2010 between Russia and the United States and the Iran Deal in 2015.

The last study is that of Larsen (2018), which is entitled *"Outer space arms control: Can the USA, Russia and China make this happen"*, which focused on describing the existing strategies of the outer space military of the three superpowers (the United States, Russia, and China). The USA appears to be the predominant military power in outer space, in line with the study, while also maintaining the posture. Irrespective of this posture, both Russia and China heavily challenged it. Larsen has argued that the USA has responded to this challenge by increasing its offensive and

defensive military capabilities; likewise, Russia and China are also escalating their capabilities. Larsen then further demonstrates the effects of the escalation of current arms as a disaster for involved parties and in nobody's best interest. Larsen means that limited engagements would have escalated the space debris beyond what it can tolerate and would eventually close access to outer space for all countries. Then, neither the UN Committee for Peaceful Utilisation of the Outer Space nor the UN Disarmament Conferences can agree on how to decrease the increasing weaponisation of the Outer Space. To this effect, and during the publication of the article, the US adopted a direct diplomatic engagement policy with China and Russia to place further constraints on the weaponisation of Outer Space. Based on the above comprehensive analysis of the current debates on the effectiveness of international arms control, it is without doubt that their studies did not pay special attention to the effectiveness of international arms control in relation to the Russia-Ukraine conflict. This nuanced knowledge is what motivated the undertaking of the current study. The discussion and/or analysis in the current study has followed this chronological order: an outline of the methodological techniques that assisted in data collection and analysis of the comprehensive paper. This was followed by a broader overview of the comprehensive WMD and historical development, international arms control measures, the effectiveness of international arms control measures and international arms control measures put to test in the Russia-Ukraine conflict. Policy recommendations have also been provided.

## Methodological Interpretation

This is secondary data-based research that has relied completely on the review of secondary data materials, including journals, books, periodical articles, popular and official literature, media, and policy documents. The study conducted a comprehensive analysis of effective measures of arms control for WMD. Given the complexity of the subject, a systematic review was employed to ensure a rigorous and unbiased analysis of the existing literature. A systematic review offers a structured and transparent approach to synthesising evidence, allowing for a thorough examination of the existing knowledge on international arms control measures for WMD. At last, inclusion and exclusion criteria were established. Inclusion criteria were specified by relevant study types, such as peer-reviewed articles, government reports, and international organisation

publications. Exclusion criteria will be defined to exclude information from unverified sources to ensure the reliability and credibility of the study. After all of the stages of analysis, the authors then provided a comprehensive overview and/or analysis of the subject under review in chronological order: historical developments of WMD; tracing the origins of the Russia-Ukraine conflict; international arms control measures put to test; and the effectiveness of international arms control measures and international control measures put to test in the Russia-Ukraine conflict.

## An Analysis of the Comprehensive WMD and Historical Development

Modern WMDs are nuclear, biological, or chemical weapons that have the potential to kill many people quickly and indiscriminately. Nuclear weapons can destroy a whole city and obliterate the environment, killing millions of civilians in an instant. The first-time nuclear weapons were used in organised conflict was in the bombardment of Hiroshima and Nagasaki, but international bodies have failed to deal with and disarm them (Selden & Selden, 2015). The United Nations has worked to limit and eliminate nuclear weapons since the creation of the WMDs (Ruff, 2020). The Cold War has ended, but the world is not post-nuclear (Mitreski, 2018). The WMDs are still present and are continuously upgraded (Kristensen, 2021), despite numerous attempts to completely reduce nuclear facilities to live in a world free of nuclear weapons shortly (Mitreski, 2018; Kienzle, 2018). The spread of the WMD is one of the biggest risks to the globe and international peace today. The United States, Russia, China, and United Kingdom, France, India, Pakistan, Israel, and North Korea are the top nine countries with nuclear weapons (Statista-Research-Department, 2023), but there are additional countries with the technological capacity to produce nuclear weapons. On the other hand, non-state actors like terrorists also seek out nuclear weapons to incite fear, panic, and catastrophe in the global arena (Mitreski, 2018; Kienzle, 2018).

According to Gorbachev (2007), several nuclear ban treaties were signed but not ratified by the states. This led to the failure of many of these treaties (Muller, 2017), such as the 1970 non-proliferation treaty and the 1972 Strategic Arms Limitation Talks treaty. Nations in possession of nuclear weapons signed the 1982 Intermediate-Range Nuclear Treaty, the 1991 and 1993 Strategic Arms Reduction Treaty, and

the 1972 SALT1 were signed but were never ratified. George W. Bush pulled the US out of most of these treaties (Neilan, 2001). The 1968 Non-Proliferation Treaty (NPT) was established to promote disarmament and stop further development of nuclear weapons. It was purported to reduce the nuclear arms race and/or competition between two states that possessed WMD, which were the United States and the Soviet Union (Kühn & Péczeli, 2017). Since the start of the manufacturing of WMDs, various bilateral, multilateral, and international treaties have been agreed upon to outlaw different types and classes of WMDs. The multilateral accords focus on the advancement of nuclear disarmament.

## Tracing the Origins of the Russia-Ukraine Conflict

Russia always had the capability to be the commanding military in nuclear weapons by overseeing the Euro-Asian geography with its territorial integrity and geopolitical structure (Karabayram, 2007). Russia, which is situated in a geographically significant location with the largest surface area in the world, has also been a significant energy and raw material exporter with its large abundance of natural gas, petroleum, copper, iron, and many more rich mine forest sources (Orhan 2022). In the 1990s, this largest country in the world entered a period of economic transformation led by its economic policies, Perestroika and Glasnost, which resulted in a heavy economic crisis, losing its former imperialist power status and superpower status in the global arena. This also resulted in Russia having to narrow its borders after the demand for independence from autonomous regions, including the federation (Yılmaz, 2006).

Concerning Russia, the countries of the former Soviet Union have always been significant and maintained close allies with Russia and international organisations and/or regional bodies such as the North Atlantic Treaty Organisation (NATO) and European Union (EU) have always made Russia concerned. As for its neighbouring independent former Soviet Union country, Ukraine, which is of special significance due to its role in the history of Russia and geopolitical significance (Girgin, 2015), Ukraine was a member of the former Soviet Union between 1922 and 1991. Left the Soviet Union in 1991 to be one of the founding countries of the Commonwealth of Independent Countries (Zasenko, et al., 2023).

Ukraine declared its independence from the Soviet Union in late 1991, even though it could not obtain an anchored political structure after getting caught between Western powers and Russia. Ukraine, though it followed a distant policy with Russia during the Yushchenko period and the Orange Revolution, encountered various issues with Russia during the sharing of the Black Sea fleet, its rapprochement with the West, and the energy crisis (Bolgün, 2022). The proclamation of Ukraine that the Association Agreement with the EU was suspended in November 2013 turned into a major crisis and was worsened further by Russia's annexation of Crimea, which turned the situation into an international crisis and worsened Russia's relations with Ukraine (Orhan 2022). For this reason, Russia and Ukraine have had worsened relations since 2013, and the fact that both countries have the same race exposed Ukraine to Russia's expansionist ideals immediately when NATO came too close to Ukraine. This is what prompted Russia to move towards preventing Western powers from advancing towards Ukraine. The rapprochement of NATO towards Ukraine supported by the EU, disturbed Russia.

Historically, the tensions began to be visible during the Euromaidan movement (2013-2014), when pro-Russian Ukrainian Viktor Yanukovych (the former Ukrainian President) and various parliamentary leaders signed and/or endorsed a compromise agreement that called for early elections in 2014 (Shevel, 2015). After this, Ukraine underwent pro-Russian unrest, a turmoil that was followed by the Donbass War, which prompted the annexation of Crimea by Russia in 2014, including the evolution of the two Russia-backed separatist quasi-states of Luhank's People's Republic and Donetsk People's Republic (Grant, 2015). In September 2020, Volodymyr Zelensky (the current President of Ukraine) acceded to the new National Security Strategy of Ukraine, which involved the emergence of a distinctive partnership with NATO relating to NATO membership (Getmanchuk, 2020). In March 2021, Zelenskyy formally approved a decree that approved the ultimate plan for the reintegration and de-occupation of the temporarily inhabited territory of the independent city of Sevastopol and the Republic of Crimea (Melanovski, 2021). In February 2022, Vladimir Putin (Current Russian President) made a public proclamation that Russia would be launching a special military operation in Ukraine. He declared that there was no plan of action to occupy Ukraine's territory, and he endorsed the right to self-determination of the people of Ukraine (Gill, 2022). He also indicated that the operation was intended to safeguard the people in the

predominantly Russian-speaking region of Donbas, who supposedly had been facing genocide and humiliation instigated by the regime in Kyiv (the capital city of Ukraine) for a decade (Orhan 2022). Since the special military operation announced by Putin took place, scholars and/or the academic community have witnessed multiple exchanges of heated words between the Russian and Ukrainian leaders.

Dmitry Medvedev (second in command to Putin) has indicated that Russia might be compelled to deploy nuclear weapons if Ukraine's counter-offensive succeeds (Osborn, 2023). This is one of the latest in a series of threats to the use of nuclear weapons including Moscow's decision to move tactical nuclear weapons to Belarus and plans to move the rest towards the end of 2023. This was a decision that Putin announced in March 2023 after alarming fears of the use of nuclear weapons in Ukraine. This has been Moscow's first transfer of such weaponry outside the borders of Russia since the disintegration of the Soviet Union. Putin has also been at the edge of leading the threats of deploying nuclear weapons in Ukraine, outlining that should Russia's territorial integrity and sovereignty be under threat, the country's powerful nuclear arsenal would be unleashed (BBC-News, 2023). The first step in attempting to unleash this would be to place them strategically in Belarus, where tactical nuclear weapons, including smaller nuclear warheads and delivery systems, have been delivered. All of these are intended for utilisation on the battlefield and/or limited air strikes. These types of weapons are manufactured to destroy targets of enemies in specified areas without causing large radioactive fallout. The smallest tactical nuclear weapon can be 1 kiloton or less, giving out an equivalent of 1000 tonnes of TNT explosives. The largest one can go as large as 100 kilotons. By comparison, the atomic bomb the United States dropped in the Japanese city of Hiroshima was 15 kilos in 1945 (BBC-News, 2023).

Such threats of Russia's plan to use tactical nuclear weapons in Ukraine were perpetuated by Ukraine's plan to deploy long-range weapons supplied by Western powers such as the United States to Ukraine. Which Sergei Shoigu (Russia's Minister of Defence) has interpreted as "*full involvement of the United States and Great Britain in the conflict and immediate strikes on decision-making centers on the territory of Ukraine.*" (Talmazan, 2023)

## International Control Measures Put to Test in the Russia-Ukraine Conflict

Several international treaties and agreements are aimed at preventing the proliferation of WMDs and ensuring the responsible use of military capabilities. The Treaty on the Non-Proliferation of Nuclear Weapons and the CWC are among the key instruments that establish norms and regulations to control the spread of WMDs. Therefore, these two organisations will be used as a point of reference in the context of measures put to the test in the Russia-Ukraine conflict.

### *Non-Proliferation of Nuclear Weapons (NPT)*

The NPT, in particular, plays a crucial role in preventing the further spread of nuclear weapons (NATO, 2023). Both Ukraine and Russia are parties to the NPT, committing themselves to disarmament and non-proliferation efforts. As one of the five recognised nuclear-armed states under the NPT, Russia plays a crucial role in upholding the treaty's principles. The NPT acknowledges these five states (the United States, Russia, China, France, and the United Kingdom) as possessing nuclear weapons but expects them to work towards disarmament in good faith (Arbatov, Acton, and Dvorkin, 2014). The regular review conferences serve as platforms for assessing progress and addressing challenges to the treaty's objectives.

In recent years, concerns about Russia's adherence to the NPT have intensified. The international community, including fellow NPT members, has raised questions about Russia's commitment to disarmament and its alleged violations of the treaty. Accusations of clandestine nuclear activities and a lack of transparency have fuelled scepticism regarding Russia's intentions, prompting the NPT to call for a reassessment of its compliance. Amid growing scrutiny, Russia made the unprecedented decision to terminate its participation in the NPT. This move, announced with a mixture of defiance and concern over the NPT's effectiveness, sent shockwaves through the international community. Russia argued that its withdrawal was a response to perceived bias and a failure of other nuclear-armed states to fulfil their disarmament commitments. However, this decision raised serious questions about Russia's dedication to maintaining international peace and security (Ministry of Foreign Affairs of Ukraine, 2020).

If a state that is a party to the NPT is found to be in violation of its obligations, consequences may vary, and actions are typically taken through diplomatic and international channels (US Department of State, 2004). The International Atomic Energy Agency (IAEA) plays a crucial role in verifying compliance with the NPT by reporting the unjust use of nuclear technology by any state to the Board of Governors (Amano, 2012). Similarly, the UN Security Council is responsible for addressing threats to international peace and security. If a state is found to be in non-compliance with its NPT obligations. As a result, states often engage in diplomatic efforts to resolve issues related to non-compliance. This may involve negotiations, dialogue, and diplomatic pressure to encourage the state in question to return to compliance with its NPT obligations (US Department of State, 2004). The UN Security Council has the authority to impose sanctions on a state found to be in violation of its NPT obligations. These sanctions can include economic measures, travel restrictions, and other penalties aimed at encouraging the state to comply with its treaty commitments (Joyner, 2016).

### *Chemical Weapons Convention*

The CWC, which was established in 1993 and entered into force in 1997, stands as a landmark international treaty aimed at preventing the development, production, stockpiling, and use of chemical weapons. The CWC has been a critical instrument in promoting global disarmament and non-proliferation efforts (Thakur & Haru, 2007). Ukraine acceded to the CWC on November 16, 1998, signalling its commitment to the international community's efforts to eliminate chemical weapons. As a member state, Ukraine pledged to destroy any existing chemical weapons stockpiles and refrain from further developing or using such weapons. The country's adherence to the CWC reflects its dedication to disarmament and the promotion of global security. Similarly, Russia became a party to the Chemical Weapons Convention on November 5, 1997, ratifying the treaty and committing to the elimination of its chemical weapons arsenals (US Department of State, 2023).

As members of the CWC, Ukraine and Russia are subject to routine inspections conducted by the Organisation for the Prohibition of Chemical Weapons (OPCW), the implementing body of the Convention. These inspections serve to verify member states compliance with the treaty and contribute to the overall goal of a world free from chemical weapons (Thakur& Haru, 2007). The CWC's contribution to the

Ukraine-Russia conflict extends beyond routine inspections. The Convention establishes clear guidelines for investigating allegations of chemical weapons use, providing a framework for addressing instances of non-compliance. The OPCW has the authority to investigate and attribute responsibility for chemical attacks, promoting accountability and discouraging the use of chemical weapons (Thakur& Haru, 2007).

In 2021, international pressure mounted for a negotiated settlement under the auspices of the CWC. Multilateral forums, including the UN General Assembly, addressed the chemical weapons issue, urging compliance with international norms. On the 27th session of the CWC in 2022 that was held in The Hague, Netherlands, a joint statement on Russian action in the OPCW with regard to Ukraine was released. The statement pointed out that Russia's actions were a brutal war of aggression and a serious breach of international law. It further points to Russia's violations of the UN Charter and questions its obligations as a state party to the CWC. Whereas Ukraine accused Russia of engaging in reckless military attacks near civilian chemical facilities, posing a direct threat to the population and the environment. Russia, in turn, has made unsubstantiated claims about Ukraine's alleged use or preparation for the use of chemical weapons. Ukraine asserts that these claims lack credible evidence and are part of a malicious disinformation campaign aimed at justifying Russia's war of aggression. The statement called on Russia to cease such behaviour immediately, emphasising that baseless accusations undermine trust among States Parties and compromise the global ban against chemical weapons (OPCW, 2022).

In the case of Russia, the UNSC has failed to enforce compliance with Russia because no sanctions were applied by the organisation. As a result, efforts to enforce compliance were made by individual states such as the United States, the United Kingdom, Canada, Poland, Switzerland, and many more, including the European Union. Sanctions were imposed through the freezing of assets at Bank Rossiya, Promsvyazbank, VEB.RF, and others. Some states targeted restrictive measures on high-profile individuals and entities, while others placed export controls on software, equipment, and technology (S&P Global Market Intelligence, 2023). However, the failure of the UNSC to oversee the NPT to punish Russia's actions in using WMDs has far-reaching consequences for global security. It sets a dangerous precedent that undermines the deterrence value of international agreements and weakens the resolve of the international community to address WMD proliferation.

## Effectiveness of International Control Measures

The NPT and CWC represent crucial pillars of the international arms control regime. Designed to prevent the spread of WMD and promote global security, these treaties have faced a significant test in the context of the Russia-Ukraine conflict. Despite their noble objectives, the CWC and NPT have proven ineffective in compelling Russia to adhere to the terms of these agreements, ultimately highlighting the shortcomings in the international community's ability to enforce collective decisions and sanctions. The use of chemical weapons during the Russia-Ukraine conflict has underscored the limitations of the Chemical Weapons Convention. The CWC, which aims to eliminate the development, production, and stockpiling of chemical weapons, has struggled to address allegations of Russia's involvement in chemical attacks. Despite documented instances of chemical weapon usage in the conflict, the international community has failed to take decisive action against Russia. The failure to hold those who violate the law on WMD accountable not only undermines the credibility of the CWC but also raises questions about the international community's commitment to enforcing the prohibition of chemical weapons.

Similarly, the NPT faces challenges in the context of the Russia-Ukraine conflict. The NPT seeks to prevent the spread of nuclear weapons and promote peaceful uses of nuclear energy. However, Russia's actions in the Ukraine conflict have strained the effectiveness of the NPT, raising concerns about the international community's ability to curb nuclear proliferation. Despite evidence of Russia's involvement in supporting separatist movements in Ukraine, there has been a notable absence of collective decision-making within the NPT framework. The lack of a united front among NPT member states has hindered the imposition of effective sanctions on Russia. This failure to act collectively has not only emboldened Russia but has also exposed the weakness in the enforcement mechanisms of the NPT.

One of the critical issues contributing to the ineffectiveness of the CWC and NPT in the Russia-Ukraine conflict is the inability of the international community to make collective decisions on imposing sanctions. The imposition of sanctions is a vital tool to deter non-compliance with arms control treaties. However, divergent national interests, geopolitical considerations, and a lack of consensus among key players have hindered the formation of a united front against Russia. The failure to collectively decide on sanctions reflects a broader challenge in

international relations: the prioritisation of individual state interests over the common good. The lack of a unified response weakens the deterrent effect of the CWC and NPT, allowing states like Russia to act with impunity.

The NPT has also not been effective in terms of several issues, including its inability to reach an agreement or compromise with countries like North Korea, which continuously refuse to disarm themselves. The number of nuclear weapons controlled by the United States and Russia has decreased by 30% between 2010 and 2016. The number of nuclear weapons has been steadily declining since the mid-1960s to the present, and this information gives readers and average people the impression that there are fewer and fewer nuclear weapons in use worldwide (Grand, 2010). However, the reality is very different. While we have seen a reduction in the development of nuclear weapons, we have also seen this development balanced by the creation of more potent, smart, and precise nuclear bombs with innovative delivery systems (Grand, 2010).

Some nations are building up their nuclear arsenals, while the United States and Russia are gradually reducing their nuclear arsenals. In 2016, China's nuclear arsenal expanded to 260 weapons from the 240 it had in 2010. Additionally, Pakistan and India adopted this approach. In 2016, India, which had between 60 and 80 nuclear weapons in 2010, had between 100 and 120, and Pakistan, which had between 70 and 90 nuclear weapons in 2010, had 130 nuclear weapons. The number of nuclear states has steadily increased since the introduction of the Nuclear Non-Proliferation Treaty. While it is thought that Russia and the United States have reduced their nuclear arsenals, the amount of nuclear is more accurate and powerful compared to the previous ones they owned. More countries have embarked on various nuclear programmes (Grand, 2010).

There are non-aligned countries that refuse to stop or relinquish their nuclear weapons projects and programmes and continue to advance their nuclear ambitions. To create arms control or disarmament measures and impose them on these countries will require actions in the following order of importance: Having the country subjected to the signing of a comprehensive test ban; stopping the production of fissionable materials intended for weapons; freezing and gradually reducing nuclear weapons and delivery systems; prohibiting the use of nuclear weapons; and ensuring the security of non-nuclear states (Anthony, 2005:20). The two global biggest countries in terms of the acquisition of nuclear weapons, which are the United States and Russia, have themselves agreed to

"pursue negotiations in good faith" to end the nuclear arms race as soon as possible and to seek a treaty on general and complete disarmament under strict and effective international control. As a result, the NPT was formed in mid-1968. The NPT has been the cornerstone of a meticulously designed system that emphasises the prohibition of nuclear testing and several elements, yet many countries have not adhered to this measure and continue to do so. Just like North Korea (Fidler, 2004:85). Another reason international control measures concerning WMDs are not effective is that countries are constantly in conflict and believe that they need to advance their nuclear capacity to protect their national security. This includes even preparing for a conflict that might arise with countries that have nuclear weapons. We have witnessed cases whereby superpowers like the United States and Russia threatened to deploy nuclear weapons to advance their economic interests worldwide, including in the case of Russia's invasion of Ukraine (Wirtz, 2009:160).

**Conclusion and Policy Recommendations**

The backdrop of the Cold War sets the stage for the evolution of arms control measures, with organisations like the NPT and CWC emerging as pillars of international efforts to curb the spread of WMD. The study delves into the motivations behind Russia's use of force in Ukraine, pinpointing NATO's increasing proximity to Ukraine as a key factor. The NPT and CWC, while representing commendable efforts, fall short in their ability to deter and penalise nations that violate the principles of international peace and security. The findings of this study underscore a critical gap in the current arms control architecture. Without robust mechanisms for enforcement and meaningful consequences for violations, the Russia-Ukraine conflict serves as a poignant case study, highlighting the urgent need for a reassessment of global arms control measures.

- Global superpowers like Russia should stop issuing stern warnings about the use of nuclear weapons in Ukraine because this would encourage non-nuclear power states to also want to develop their defence mechanisms by wanting to develop nuclear weapons because they do not want to be bossed around by nuclear states.

- The United States should desist from using Ukraine as a proxy country in its continued expansionist ideals through NATO
- NATO should re-assess its strategic mission of expanding into Ukraine as a threat to the national security of Russia and withdraw completely
- Countries in the international system should not take sides in the Russian invasion of Ukraine but rather encourage a peaceful resolution between both countries.

## References

Amano, Y., 2012. Introductory Statement to Board of Governors, 29 November 2012, Vienna, Austria.

Anthony, I., 2005. *Arms control and non-proliferation: the role of international organizations.* s.l.: SIPRI YEARBOOK, .

Arbatov, A., Acton, J.M. & Dvorkin, V., 2014. Prospects of engaging the United Kingdom and France in nuclear arms control. *Carnegie Moscow Center*.

BBC-News., 2023. *Ukraine war: Putin confirms first nuclear weapons moved to Belarus.* [Online] Available at: https://www.bbc.com/news/world-europe-65932700[Accessed 03 10 2023].

Fatton, L., 2016. The impotence of conventional arms control: why do international regimes fail when they are most needed?.. *Contemporary security policy,* 37(2), pp. 200-222.

Fidler, D., 2004. International law and weapons of mass destruction: end of the arms control approach. *Duke J. Comp. & Int'l L,* Volume 14, pp. 39-88.

Fuhrmann, M. & Yonatan, L., 2016. Do arms control treaties work? Assessing the effectiveness of the nuclear nonproliferation treaty. *International Studies Quarterly,* 60(3), pp. 530-539.

Getmanchuk, A., 2020. *Russia as aggressor, NATO as objective: Ukraine's new National Security Strategy.* [Online] Available at: https://www.atlanticcouncil.org/blogs/ukrainealert/russia-as-aggressor-nato-as-objective-ukraines-new-national-security-strategy/ [Accessed 03 10 2023].

Gill, T., 2022. The Jus ad Bellum and Russia's "Special Military Operation" in Ukraine. *Journal of International Peacekeeping,* 25(2), pp. 121-127.

Girgin, D., 2015. Geopolitical issues in the current crisis between Ukraine and Russia. *Journal of Social Sciences,* 4(1), pp. 21-4.

Gorbachev, M., 2007. The nuclear threat. *Wall street journal,* Volume 31.

Grand, C., 2010. The non-proliferation treaty in an era of proliferation crises.. In: *Nuclear Weapons After the 2010 NPT Review Conference.* Paris: European Union Institute for Security Studies, pp. 13-26.

Grant, T., 2015. Annexation of Crimea. *American Journal of International Law,* 109(1), pp. 68-95.

Guchua, A., 2023. NATO'S ROLE IN THE POLICY OF NON-PROLIFERATION OF WEAPONS OF MASS DESTRUCTION AND GLOBAL SECURITY: A SHORT OVERVIEW. *Journal of Liberty and International Affairs*, *9*(2), pp.495-506.

Joyner, D., 2016. United Nations Counter-Proliferation Sanctions and International Law. *Research Handbook on UN Sanctions and International Law, Larissa van den Herik, ed.(Edward Elgar Publishing, Forthcoming), U of Alabama Legal Studies Research Paper*, (2752623).

Karabayram, F., 2007. *Rusya Federasyonu'nun Güney Kafkasya Politikası,*. Lalezar Kitabevi: Ankara.

Kienzle, B., 2018. Non-proliferation and counter-proliferation.. In: *The Handbook of European Defence Policies and Armed Forces* . Oxford: Oxford University Press, pp. 626-641.

Kristensen, H., 2021. United States Nuclear weapons. *Bulletin of the Atomic Scientists ,* 2(77), pp. 43-63.

Kühn, U. & Péczeli, A., 2017. Russia, NATO, and the INF treaty. *Strategic Studies Quarterly,* 11(1), pp. 66-99.

Larsen, P., 2018. Outer space arms control: can the USA, Russia and China make this happen. *Journal of Conflict and Security Law,* 23(1), pp. 137-159.

Melanovski, J., 2021. *Ukraine approves strategy to "recover" Crimea, threatening all-out war with Russia.* [Online] Available at: https://www.wsws.org/en/articles/2021/03/20/ukra-m20.html [Accessed 03 10 2023].

Ministry of Foreign Affairs of Ukraine. 2020. Arms control and WMD non-proliferation. https://mfa.gov.ua/en/kontrol-nad-ozbroyennyami-ta-nerozpovsyudzhennnya-zmz[Accessed 04 12 2023].

Muller, H., 2017. The nuclear non-proliferation treaty in jeopardy? Internal divisions and the impact of world politics.. *The International Spectator ,* 2(52), pp. 12-27.

Neilan, 2001. Bush Pulls Out of ABM Treaty; Putin Calls Move a Mistake. *The New York Times.*

North Atlantic Treaty Organization. 2023. Arms control, disarmament and non-proliferation in NATO. https://www.nato.int/cps/en/natohq/topics_48895.htm[Accessed 03 12 2023].

Organisation for the Prohibition of Chemical Weapons. 2022. Joint Statement on Russian action in the OPCW with regard to Ukraine. https://www.opcw.org/sites/default/files/documents/2022/11/With%20 Co Sponsors_%20JointStatementonUKR_CSP-27.pdf[Accessed 0312 2023].

Orhan, E., 2022. THE EFFECTS OF THE RUSSIA - UKRAINE WAR ON GLOBAL TRADE. *Journal of International Trade, Logistics and Law,* 8(1), pp. 141-146.

Osborn, A., 2023. *Russia's Medvedev: We'd have to use a nuclear weapon if Ukrainian offensive was a success.* [Online] Available at: https://www.reuters.com/world/europe/russias-medvedev-wed-have-use-nuclear-weapon-if-ukrainian-offensive-was-success-2023-07-30/ [Accessed 03 10 2023].

Pifer, S., 2018. The future of strategic arms control. *Sicherheit und Frieden (S+ F)/Security and Peace*, *36*(2), pp.67-73.

Ruff, T., 2020. *Negotiating the UN treaty on the prohibition of nuclear weapons and the role of ICAN: InThe 2017 Nuclear Ban Treaty.* Routledge : 114-122.

Russell, S., 2023. AI weapons: Russia's war in Ukraine shows why the world must enact a ban. *Nature*, *614*(7949), pp.620-623.

Selden, K. & Selden, M., 2015. *The Atomic Bomb: Voices from Hiroshima and Nagasaki: Voices from Hiroshima and Nagasaki.*. Routledge : M. E Sharpe.

Shevel, O., 2015. The parliamentary elections in Ukraine. *Electoral Studies,* 39(3), pp. 153-177.

Statista-Research-Department, 2023. *Number of nuclear warheads worldwide 2023.* [Online] Available at: https://www.statista.com/statistics/264435/number-of-nuclear-warheads-worldwide/ [Accessed 03 10 2023].

S&P Global Market Intelligence., 2023. Sanctions against Russia – a timeline. https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/sanctions-against-russia-8211-a-timeline-69602559[Accessed 04 12 2023].

Talmazan, Y., 2023. *Biden warns the threat of Putin's using tactical nuclear weapons is 'real'.* [Online]Available at:

https://www.nbcnews.com/news/world/putin-nuclear-weapons-threat-real-biden-warns-rcna90114 [Accessed 03 10 2023].

Thakur, R. & Haru, E., 2007. The Chemical Weapons Convention: Implementation, Challenges, Opportunities.

Teeple, N.J., 2017. Arms Control on the Eve of Destruction? The Prospects for an Arctic Nuclear Weapons-Free Zone in an Age of Counterforce Dominance.

Tennis, M., 2018. US–Russian Arms Control At Risk: An Assessment and Path Forward. *Arms Control Association*, pp.2018-01.

US Department of State. 2023. 2023 Condition (10)(C) Annual Report on Compliance with the Chemical Weapons Convention (CWC). https://www.state.gov/2023-condition-10c-annual-report-on-compliance-with-the-chemical-weapons-convention-cwc/#:~:text=BACKGROUND,in%20accordance%20with%20the%20CWC.[Accessed 03 12 2023].

US Department of State. 2004. The NPT: A Crisis of Non-Compliance. https://2001-2009.state.gov/t/us/rm/31848.htm[Accessed 03 12 2023].

Wachs, L., 2022. The role of nuclear weapons in Russia's strategic deterrence: Implications for European security and nuclear arms control.

Wątor, W., 2019. The influence of weapons of mass destruction on international security in the second decade of the 21st century. *Studia Politicae Universitatis Silesiensis*, (26), pp.109-141.

Wirtz, J., 2009. Weapons of mass destruction and the proliferation challenge. In: *The Routledge Handbook of Security Studies*. Routledge : s.n., pp. 155-164.

Wisotzki, S. and Kühn, U., 2021. Crisis in arms control: an introduction. *Zeitschrift für Friedens-und Konfliktforschung*, *10*(2), pp.183-194.

Zasenko, O., Hajda, L. & Kryzhanivsky, S., 2023. *Ukraine*. [Online] Available at: https://www.britannica.com/place/Ukraine [Accessed 03 10 2023].