



Lessons Learned

from 70 years of nuclear weapons
to help change and shape the policy agenda for the next generation



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November 2015

About the author

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The views expressed in this paper are those of the author and do not necessarily reflect those of BASIC, the EU Non-Proliferation Consortium or other members of the network.

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1. Introduction

Nuclear disarmament has been the most desirable objective of global arms control policies since nuclear weapons were invented, along with general and complete disarmament. But it is also one that has generated most contention and conflict. Scientists involved in developing military applications were quick to call for strict controls and the elimination of all nuclear weapons from states' military arsenals. This stemmed from the realisation of the destructiveness of their scientific achievement, and the unacceptable scale of the threat it posed to the entire humanity should such weapons ever be used in an actual, large-scale war.

However, seventy years since the use of nuclear weapons in conflict, there remain around 16,000 nuclear weapons, some on a high alert status or in facilities that employ unsatisfactory security and safety practices. The international community remains deeply divided on the ways in which to best advance the declared goal of a world without nuclear weapons and the single recognised forum for multilateral disarmament negotiations – the Conference on Disarmament remains deadlocked over political wrangling. The differences involve several factors ranging from national security objectives and related perceptions of threats, to strategic stability and regional partnerships and alliances. There are also a plethora of other, less tangible factors such as states' national identity, their ability to project soft-power and the way that the others' ability to do so influences nuclear policy planning. Over the past several decades, these factors have evolved, consequently altering states' views on arms control and disarmament, which would be reflected in their adopted nuclear policies. These same factors have also underpinned the fundamental differences in definitions of what disarmament means for various states, and how to achieve a world without nuclear weapons.

Arms control proposals dating back to the days of the Cold War era have varied in scope, ambition, and purpose - a patchwork that has achieved only partial results, leaving the modern international community with much work to do. Those engaged in developing those proposals did not lack ambition at a time when the politics was unfavourable, a nuclear arms race in full swing and nuclear weapons proliferation appearing inevitable. Whilst no-one had any clear idea of how the existential ideological conflict between East and West could end well, policy makers recognised that the strategic balance of terror was not safe or sustainable and that total conventional and unconventional disarmament was an imperative.

The failure to achieve significant progress through the step-by-step approach has triggered feelings of betrayal and resentment

The 1960s proposals for general and complete disarmament (GCD) demonstrate this conviction and efforts to avoid strategic war. US and Soviet leaders invested significant effort negotiating principles and texts of treaties throughout the decade. Their experience has lessons for current political leaders embarking on extensive nuclear arsenal modernisation and for the experts, activists and political elites from non-nuclear weapons states attempting new initiatives designed to speed up the disarmament process. By the time the 1968 Non-Proliferation Treaty (NPT) was negotiated, the GCD negotiations had given way to a more limited, focused set of measures on stopping further proliferation of nuclear weapons and reducing the risk of an accidental nuclear war. Disarmament, and specifically nuclear disarmament, were put aside as a distant goal to be attempted when the appropriate conditions were to emerge. Since then the objectives of general and complete disarmament have been included in annual General Assembly resolutions as a long-term aspiration of all UN-based arms control efforts, and a background to more limited arms control negotiations. The failure to achieve significant progress through the step-by-step approach has triggered feelings of betrayal and resentment towards nuclear weapons states, who appear to want to maintain a nuclear monopoly over other states while blocking full and unfettered access to nuclear technology applications for civilian purposes.

It could be expected that following the end of the Cold War, the international community would find global nuclear disarmament easier. Indeed, nuclear weapons arsenals were significantly reduced in number and variety, and withdrawn from front-line positions. On the other hand, there was uncertainty with regards to the types of threats that will challenge states' sovereignty in the coming decades. Such an uncertainty has played into the arguments of both those who have supported and those who have opposed nuclear weapons. The altered nature of the post-Cold War international environment, where new states are rising to the roles of regional players or states with truly global influence, signals the evolution of the international system from the bipolar orientation of the Cold War to a multipolar one, with new types of sources of state power and influence, and new non-state actors entering the international system as sources of influence to be reckoned with. Traditional far reaching aspirations to global zero have remained largely unchanged but the nature and substance of political decision-making of nuclear weapons states has demonstrated something completely different – that nuclear weapons are bound to stay with us for many decades to come and the technological developments in modern warfare require smarter, more accurate and reliable nuclear arsenals. Consequently, nuclear weapons states have been too slow in reducing their nuclear arsenals from the Cold War levels in comparison to the extensive character of restrictions and controls being imposed on access to advanced nuclear technology. This and a number of failed disarmament-related promises have disappointed the non-nuclear weapons states. Similarly non-nuclear weapons states as well as numerous experts have grown increasingly doubtful whether the NPT is the right mechanism through which to achieve global nuclear disarmament, even if it is preferred by the NPT NWS. The current political climate, rather accurately demonstrated through the unsuccessful outcome of the latest NPT Review Conference, suggests waning political will to institute further nuclear reductions and a general stalemate underpinned by a mixture of perceptions based on failed promises, frustration, resentment and the perceived misunderstanding of one another's legitimate security concerns.

The challenges facing current nuclear arms control processes are similar to those that occupied the attention of diplomats in the 1960s. Political will is certainly essential to overcoming them, but there are other factors involved.

This essay will discuss several features of the 1960s proposals, and the circumstances in which they were tabled, and compare them with modern efforts. It will suggest practices and approaches more likely to lead to consensus among nuclear powers propelling wider arms reduction efforts as well as those approaches and attitudes which should be avoided. The proposed treaties for general and complete disarmament evolved over the decade from 1958, and there were several drafts of those agreements submitted for negotiation by both the US and Soviet Union. Modern disarmament proposals involve initiatives, conventions and interstate partnerships and are treated in this essay as representative of trends of thinking rather than specific measures in their own right. They do not seek to achieve complete disarmament in the way that the 1960s GCD agreements would, but rather seek to nudge the international community closer towards the specific goal of a world without nuclear weapons. Among the mechanisms considered here are the 64-point Action Plan included in a final document from the 2010 NPT Review Conference, the objectives of the movement on the humanitarian consequences of nuclear weapons, and the idea of a ban on nuclear weapons that emerged from it.

This essay begins by providing an overview of the origins of thinking on disarmament as a policy objective and the approaches taken. It will describe discernible time frames in which trends in thinking on disarmament, arms control and non-proliferation have evolved. It will then assess the modern day relevance of the 1960s proposals. It will finish with a set of recommendations to address the stalemate in disarmament discussions.

2. Disarmament in the context of global arms control efforts

The objective of dismantling and destroying weapons dates back centuries. The appetite to scale back military capabilities and even to abolish all weapons and prevent war from happening again has been particularly strong after major and severe conflict.¹ Even before the advent of the nuclear age, it was very difficult for states to escape arms racing and to abandon their ultimate means for ensuring national security and asserting power. Total disarmament was treated with suspicion as an untested and probably unenforceable objective open to abuse.² Early efforts at the abolition of all arms failed, but did lead to the development of international humanitarian law and the law of war, a crucial legal framework for regulating modern armed conflict.³

With the onset of the nuclear era, the efforts aimed at controlling the spread and access to nuclear technology would proceed shortly after the scientific discovery. When nuclear weapons entered the sphere of international politics, whilst a game changer, they were perceived as simply a far more powerful weapon. Their dominant political role took a few years to emerge.⁴

In January 1946, the first session of the United Nations General Assembly approved the creation of an Atomic Energy Commission (UNAEC) to address problems associated with atomic energy and its uses.

Soon after, the US Acheson-Lilienthal Report of March 1946 proposed the creation of an international agency tasked with the control of nuclear weapons and materials. This agency would regulate all aspects of the nuclear fuel cycle and distribute fissile material to countries for the peaceful development of atomic energy.⁵ The Baruch plan proposed the International Atomic Development Authority to control all fissile material production with enforcement provided by international inspections. But this proved unacceptable to the Soviet Union, who preferred disarmament first before any control on nuclear technology could be imposed. In response, the Gromyko plan proposed total elimination of nuclear weapons which could then be followed by some framework for international inspections. As a result, the UNAEC proposal went nowhere.⁶

Soon after UN member states set up a special commission to deal with all aspects of conventional armaments reductions, later evolving into the UN Disarmament Commission in 1952, as part of the General and Complete Disarmament discussions.

Diplomats at the UN between 1945 and 1966 engaged in serious discussions around the elimination of all weapons. Their holistic approach included proposed bans on future technological developments, in the belief this was essential to the safety of the disarmament process and the stability of international relations.⁷

1 Jozef Goldblat, *Arms Control: The New Guide to Negotiations and Agreements*, p. 19.

2 *Ibid*, p. 20.

3 Yong Zhou, 'International Relations and Legal Cooperation in General Diplomacy and Consular Relations', *Encyclopedia of Public International Law*, Vol. 9, p. 102-103.

4 Jan Prawitz, 'From Nuclear Option to Non-Nuclear Promotion: The Sweden Case', *Research Report No. 20*, 1995.

5 A Report on the International Control of Atomic Energy, Prepared for the Secretary of State's Committee on Atomic Energy, Department Of State Publication 2498, Washington, March 16, 1946.

6 Randy Rydell, 'Nuclear Disarmament and General and Complete Disarmament', in David Krieger ed, *The Challenge of Abolishing Nuclear Weapons*, London: Transaction Publishers, 2009, p. 230.

7 Control and reduction of armaments: hearings before a subcommittee of the Committee on Foreign Relations, United States Senate, Eighty-fourth Congress, second session [Eighty-fifth Congress, second session], 1956, p. 2.

While diplomats realised that nuclear weapons could not be uninvented, they focused on controlling their spread. But as the Soviet Union, China and the UK dashed to develop their own nuclear arsenals and more nuclear armed states emerged, and the risk of an (accidental) nuclear war grew, the mood became pessimistic. Military planners came to realise that a nuclear war would sacrifice all of their state's population and territory, and a stalemate emerged.⁸ Controlling the levels, deployment and destructiveness of nuclear arsenals became the primary means of maintaining relative strategic stability and preventing any major international conflict that could escalate to the nuclear level. The discomfort of living under the risk of nuclear war focused attention within the UN diplomatic forums to considering the abolition of all weapons, including conventional ones, so as to minimise the potential for armed conflict in general.⁹ It was widely recognised that the elimination of nuclear weapons was the only guarantee that they would never again be used in war.¹⁰

In the proposed General and Complete Disarmament (GCD) plans nuclear and other weapons of mass destruction were included only in the later implementation stages. Specific treaty-based provisions for limiting unconventional weapons were much less elaborate than those for the elimination of conventional weapons.¹¹ This reflected the rather limited political role assigned to nuclear weapons at the time, and the very fresh memories of the devastation of the Second World War.

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Such disarmament aspirations may look rather cynical in light of the unabated development and continuous deployment of more advanced nuclear weapons and their delivery systems.¹² The 1962 Cuban missile crisis offered a chilling reminder of what was at stake and how close the world came to a nuclear catastrophe. It is thought to have started a reappraisal of the strategic relationship, both by the Soviet Union and the United States. They sought to develop mechanisms for preventing nuclear war (the so called 'first step measures') and for maintaining rapid and reliable communication channels in times of heightened tensions.¹³ They also returned to discussing GCD. Several years in it emerged that the task was unrealistic, and diplomats shifted their discussion towards restricting specific aspects of nuclear weapons such as testing, deployment or restriction of weapons-related nuclear technology and fissile materials in the hope of creating more favourable conditions for sustainable disarmament at some point in the future.

From the signing of the Non-Proliferation Treaty in 1968 and throughout the 1970s into the post-Cold War era a new trend in arms control negotiations would emerge where nuclear weapons issues would be considered separately from conventional weapons. GCD would wither away, but remain an ultimate goal of on-going arms control processes. The NPT became the cornerstone for negotiations of agreements addressing limited, specific issues related to the possession and deployment of nuclear weapons. In effect, these measures were vital to keeping the on-going nuclear arms race in check, while reducing the risk of an accidental nuclear conflict and financial devastation of the states involved.

8 Jervis, R., *The Meaning of the Nuclear Revolution*, New York: Cornell University Press, 1989.

9 Randy Rydell, 'Nuclear Disarmament and General and Complete Disarmament', in David Krieger ed, *The Challenge of Abolishing Nuclear Weapons*, London: Transaction Publishers, 2009, p. 222.

10 'A Policy for Disarmament', With a preface by Gen Sir Ronald Adam, 2nd edition, United Nations Association UK, 1960, p. 2.

11 World Law Fund Editors, *Disarmament Proposals as of March 1*, New York: World Law Fund, 1965.

12 Allan S Krass, *The United States Arms Control: the Challenge of Leadership*, Westport: Praeger, 1997, p. 2.

13 Arms Control and Disarmament, The transcript of a television programme 'State Department Briefing: Disarmament', 1963, p. 11.

The 1970s detente brought the Limited Test Ban Treaty, and the interim agreement of the Strategic Arms Limitation Talks I followed by the Strategic Arms Limitation Talks II Treaty. These agreements, both reflected the preference for partial approach and highlighted its weaknesses. The bipolar strategic competition had established a delicate balance between conventional and unconventional forces, types and places of their deployment as well as structure of those forces and readiness. Hence the SALT process would proceed in phases and ultimately addressed only strategic offensive forces.¹⁴

The discussions involved each side learning about each other's concerns and security needs. Progress was as much an expression of the improving relationship as it contributed to its improvement. Parties also pursued Confidence Building Measures and prohibited the placement of Nuclear Weapons on the seabed. The SALT process proceeded in phases addressing separate types of forces each at a time and often omitting more detailed aspects of their structure, which in the due course would work to undermine the overall effectiveness in stabilising the strategic competition between the United States and Soviet Union.

In the late 1970s relations between the superpowers rapidly deteriorated. The failure to agree controls on technological advancement in nuclear weapons meant the Soviet Union expanding its strategic ballistic missile forces with the Multiple Independently-targetable Re-entry Vehicles. Ronald Reagan was elected to the White House opposing arms control as irresponsible and instead placing faith in military superiority.

The Soviet invasion of Afghanistan in 1980 provided the pretext to pull out of arms control talks on the basis that the Soviets were looking to expand their sphere of control again. People were once again concerned about the risk of a nuclear war as the United States decided to embark upon a highly ambitious global missile defence programme that came to be dubbed 'Star Wars'. President Reagan was an enthusiastic advocate claiming that this promised to end the threat of mutually assured destruction.¹⁵ Towards the end of his presidency the Soviet Union entered into a period of profound social and political changes as President Gorbachev introduced the reforms of Perestroika and Glasnost. The

personal relationship between the two men led to President Reagan taking a 180 degree turn and a staunch advocate for nuclear disarmament. This led to the 1987 Intermediate Range Nuclear Forces Treaty, eliminating an entire class of nuclear systems.¹⁶

The focus on bilateral arms control negotiations continued after the Cold War, as the United States and Russia possessed the vast majority of the world's nuclear weapons. The highlight of that period was the START process, achieving major reductions in strategic offensive weapons. The START I treaty signed by Presidents Bush and Gorbachev, served to preserve predictability and stability of the strategic balance. The US and Russia continued to reduce their arsenals to the limits set by the treaty and beyond after the mandatory period of eight years.¹⁷

The highlight of that period was the START process, achieving major reductions in strategic offensive weapons.

14 Fundamentals of Nuclear Arms Control, Part 1: Nuclear Arms Control: A Brief Historical Survey, Report of the House of Representatives Foreign Affairs Committee, Subcommittee on Arms Control, International Security and Science, p. 45.

15 Dinesh D'Souza, Ronald Reagan: How an Ordinary Man Became an Extraordinary Leader, New York: Touchstone, 1997, p. 174.

16 Alan S. Krass, The United States Arms Control: the Challenge of Leadership, Westport: Praeger, 1997, p. 3.

17 'Treaty between the United States of America and the Union of Soviet Socialist Republics on Strategic Offensive Reductions (START I)', <http://www.nti.org/treaties-and-regimes/treaties-between-united-states-america-and-union-soviet-socialist-republics-strategic-offensive-reductions-start-i-start-ii/>.

Immediately after the breakup of the Soviet Union the international community also had to deal with numerous newly independent states who came into possession of nuclear weapons as a legacy of their membership of the Warsaw Pact. The success in handling this transition was extraordinary. This reflected improving relations between East and West, and these arms control agreements solidified the improvements.

Yet, despite these improvements parties were not able to agree to a second round of START, and START III never entered into force. Reductions continued, though at a slower pace in the final years of the 20th century, and then with President George W. Bush's election and the development of new generations of nuclear weapons, the early decision to leave the Anti-Ballistic Missile (ABM) treaty, and a clear attitude that arms control was no longer relevant, relations began a slow but inevitable decline. The 2002 Moscow Treaty provided for lower limits on strategic weapons, but lacked verification and transparency provisions nor any vision for going forward, and arms control atrophied in that decade.

Following the speech in Prague by recently elected President Obama there was a revival of the debate about desirability and viability of nuclear disarmament in the changed security environment in 2009, culminating in the New START treaty of 2010 and the 64-point action plan agreed at the 2010 NPT Review Conference aimed at developing conditions conducive to moves towards disarmament. This period was short-lived, running into the sand well before the crisis in Ukraine in early 2014 blocked any further serious bilateral discussion of arms control (let alone disarmament).

Over the 70 years of negotiations, the most ambitious plans for elimination of all weapons from global arsenals were considered in the first two decades after the Second World War. Since then political leaders have considered proposals for GCD to be hopelessly idealistic. In the final decades of the 20th century the prevailing view was that a state's power on the international arena would be reflected by the size of its nuclear capability, and security determined in reference to their membership of nuclear partnerships, alliances or other relationship. Paradoxically, the soft power of states, arguably the most relevant and accurate determinants of state's resilience against the numerous challenges in modern times - economic upheaval, migration, changing demographics, progressing climate change and emerging health issues - was undervalued in security terms. These challenges

threaten all states regardless of political affiliation or geographical location.

Efforts to contain talks to focus on nuclear arms alone have proven limited in value. As arsenals have reduced in size other capabilities have become more important, and the development of non-nuclear capabilities has leaked into the strategic nuclear dimension and contributed to worsening of relations.

This includes Russian objections to US missile defence deployments in Europe and their concerns over the development of prompt global strike capabilities. Yet addressing the underlying issues of conventional force imbalances against such a complex strategic background has proven even more difficult.

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3. Political realities and strategic stability

The political environment is critical to the success of arms control negotiations. While hot conflict or confrontation tends to present major obstacles, arms control also requires a certain awareness of the need. The elimination agenda arose out of the horrors of the Second World War and the realisation that industrial-scale war, with the addition of nuclear weapons, simply was not compatible with the continuation of civilisation. Yet this window of opportunity would close as memories faded. There was a wake-up call with the Cuban Missile crisis, leading directly to the Partial Test Ban Treaty and then the NPT. But then the momentum was lost. In the current situation, some have suggested that there would need to be local scare or even limited use of nuclear weapons (perhaps in South Asia) to wake everyone up.¹⁸ Humanitarian disaster has long been a strong motivating factor behind international responses to crises. Others suggest that to assume that there is no other way of resolving conflict than to sacrifice millions of people is a rather cynical view and it does not address the premise of the goal of global nuclear disarmament. They might say that it is possible, step-by-step, to establish confidence in agreements and structures that create stability within which states can arbitrate their disagreements with reference to international law. There is a belief embedded within this belief that we will be able to live in a less dangerous world in which the risk of conflict is significantly reduced, and that states will work on common challenges as a community of common concern, rather than as self-interested competitors in anarchy.

Even as globalisation brought states closer in economic terms, governments continued to plan for threats challenging their sovereignty.

The end of the Cold War brought major reductions in nuclear arsenals, but the logic behind their continued deployment did not go away. The new reality introduced a very new feature to the international political environment – turbulence and deep power uncertainties. The United States in particular saw opportunities to capitalise on what was seen as an unexpected victory in the Cold War, with the dissolution of the old enemy but the emergence of a set of secondary threats. President Bush Sr described the emergence of a ‘New World Order’. Nuclear weapon states were inclined to retain their instruments of power, their nuclear capabilities, as a form of guarantee and attempt to maintain stability, to retain the whole spectrum of possible policy responses. Even as globalisation brought states closer in economic terms, governments continued to plan for threats challenging their sovereignty. They were not yet prepared to embrace multipolarity in a way that would strengthen positive ties between all states - this they saw as a recipe for chaos. Adding nuclear weapons to the uncertain multipolar world, with far more complex and uncertain deterrence relationships, was not an outcome policy-makers welcomed.

Many of the Cold War era confidence building and tension-managing mechanisms, like those provided by the Nuclear Hotline Agreement of 1963, are no longer available and the options for continuing strategic dialogue, even in times of tensions have to be revisited, before a major military crisis erupts.

¹⁸ <http://reinventors.net/five-scenarios-of-giving-up-on-nuclear-weapons/>.

4. The scope of the 1960s proposals

The GCD proposals were very broad and comprehensive, built on the belief that the only lasting way of removing the prospect for near-global destruction from international competition was to eliminate all weapons. They provided for time-frames, scales, schedules and patterns in which specific forces would be dismantled or withdrawn, and they addressed all types of weapons. Such a wide scope stemmed from the understanding that states and nations are not going to relinquish their competitive nature and conflict will always be present.

The proposals reflected the understanding that general and complete disarmament is a robust and complex task and will require careful planning, ensuring the balance of forces remains unaffected even during disarmament and that implementation of each of the stages can be confidently verified during and after the process was completed. They also recognised that appropriate procedures for settlement of international disputes will have to be implemented, so that war is no longer available as an instrument of policy making and conflict resolution. General disarmament assumed disbanding of the armed forces, military establishments and military bases, cessation of the production of armaments as well as their liquidation or conversion to peaceful purposes. Similar requirements applied to unconventional weapons and any available delivery means. Any military expenditures would have to be abandoned and state institutions charged with organising military efforts of states disbanded. Any financial resources freed in the disarmament process would be reflected in the reduced military budget and surplus funds would be redirected to peaceful activities or strengthening the national economy.

The implementation of the treaty would be overseen by an International Disarmament Organization (IDO), which would continue its mandate following the complete successful implementation.

Since this treaty would cover all groups of states, including those with unconventional weapons, those aspiring to develop or acquire them and those only with conventional forces, representatives of the IDO would be based in each state. Their recruitment and employment should be impartial and truly international so that the integrity of their verification activities would not be compromised. The treaty verification provisions would cover the entire territories of the signatory states, hence the provisions for dividing territories into verification zones were included. Each zone and the details of forces present there would have to be reported to the IDO for monitoring and verification. The inspectors would have unrestricted access to every and all facilities, and an inspection could not be vetoed by the inspected state or any other state. To maintain

international peace and security, the UN would be supported with forces delegated by member states, solely for the purpose of preservation of international peace. States on the other hand would be able to maintain only very limited police forces designed specifically for the maintenance of internal order.

Elimination of all weapons and related facilities would proceed in stages so as to ensure that the strategic balance of forces was maintained and none of the participating states would feel disadvantaged. Soviet proposals prioritised the elimination and dismantlement of maintenance and production facilities for delivery vehicles for nuclear weapons¹⁹. It would allow for immediate reduction of the risk of a nuclear war, and would pave the way for the further reductions in all arms. Soon after, the dismantling of foreign military bases and withdrawal of foreign forces, and any support personnel working on such bases including civilians would follow.

To maintain international peace and security, the UN would be supported with forces delegated by member states, solely for the purpose of preservation of international peace.

¹⁹ Current Disarmament Proposals as of March 1, 1964, The World Law Fund, New York, 1964, pp. 5-7.

Citizens of signatory states would also be prohibited from serving in the military outside of their country's borders. Then the plan would proceed with reduction of the armed forces, conventional armaments and military expenditure - freed resources would be redirected to supporting the national economy and development assistance to poorer countries around the world. American proposals would not include such a hierarchy, but all of those activities were included in their proposed drafts of a GCD treaty as part of a gradual elimination process.

Space activities and missile related activities would not be prohibited as long as they would serve strictly peaceful purposes and the IDO would be informed about such activities in a timely manner. The proposals included also provisions for the prohibition of further spread of nuclear weapons and technology and nuclear testing of any kind. Any efforts at reconstituting nuclear weapons should be punishable by nationally-enacted law and rendered a criminal offence. The implementation and verification processes would have to be constantly adapted in order to accommodate future challenges to verification and compliance which could not have been predicted at the early stages of drafting a GCD treaty.

The 1960s GCD proposals envisaged that all militarily-relevant powers with a capacity to affect regional events would be encouraged to accede to the treaty equally – there was no specific emphasis put on those with bigger or smaller forces. Since then, little to no serious political attention is being paid to states' conventional capabilities and how they impact upon regional relations. The issues of US missile defence expansion plans and the developments in the Conventional Prompt Global Strike doctrine have been a main source of irritation in relations between the US and Russia and have directly contributed to the worsening of cooperation on arms control. Chinese and German steps towards development of boost glide technologies present an additional challenge to managing the relationships between conventional and unconventional arms imbalances.

There are very few legal provisions that control development and use of such new technologies, and the discussions of their implications for international arms control processes should not be avoided.

GCD proposals stand in a stark contrast to the discriminatory nature of the Non-Proliferation Treaty. They were equitable and all encompassing and they recognised the importance of preserving the balance of forces through appropriate technical means, which regulated the rate and type of dismantled weapons and facilities. If a similarly comprehensive treaty framework does not seem likely, the political leaders have a responsibility to tackle the underlying issues through an alternative framework or make a more creative use of available international forums.

The responsibility for the success of the disarmament effort rested on all signatories regardless of the composition of their military arsenals. NPT on the other hand identifies five particular states as possessing nuclear weapons and thus with different responsibilities. It has been interpreted by the dominant nuclear weapon states as freezing the situation in the status quo. Since it entered into force, they have emphasised that all disarmament activities should be based on the provisions of the NPT as the corner stone of international nuclear arms control regime. However, this view has been often contested by particularly the states of the Non-Aligned Movement who perceive the regime as fundamentally flawed, inequitable and as embedding some states' technological advantage over others. The perceived sluggishness of the major nuclear powers in abandoning their arsenals has served to reinforce this view. There is also little encouragement to those nuclear armed states outside the Treaty to join it.²⁰ The NPT seems to divide the international community as much as unite it, and there don't seem to be available inclusive and effective frameworks, through which these states could be actively engaged and supported in their implementation of their nonproliferation commitments.

²⁰ 'No Question of India Joining NPT as Non-nuclear Weapon State', The New India Express, 22 October 2014, <http://www.newindianexpress.com/nation/No-Question-of-India-Joining-NPT-as-Non-nuclear-Weapon-State/2014/10/22/article2489469.ece>.

5. Leadership

One of the frameworks for international equitable dialogue is the United Nations General Assembly and its First Committee. However, these organs suffer from the need for consensus and their majority votes hold little sway. The UN's Conference on Disarmament has been unable for many years to even agree on a programme of work. Existing regimes for controlling the spread of nuclear technology, equipment and delivery systems introduced by principles-based instruments like UN Resolution 1540, the Missile Technology Control Regime or the Nuclear Suppliers Group offer a useful framework for remedying some of the deficiencies of the non-proliferation regime. But they are used to back up the abilities of the status quo states to hold their dominance and their effectiveness depends on the extent of national implementation. Consequently, there remains to be a great amount of work to be done before the regime can be universal and effective in creating the conditions for disarmament. Its verification provisions tend to benefit those states already wielding the capabilities under control.

Top level political buy-in to the GCD discussions was critical, and the trust deficit was very large indeed. Some suggest that Soviet leaders engaged for tactical purposes and to appease the West over the expansion of communism, and that belief was shared in the other direction.²¹ But even in these circumstances, the two states would come to learn a great deal about each other's foreign policy objectives and security concerns, enabling some level of empathy, contributing to a partial reduction in tension and an awareness of their mutual dependence for survival.

Most proposals recasting the global debate on disarmament in the last decade come from either the expert communities or the political leaders of the non-nuclear weapon states (NNWS), with occasional calls by former statesmen from nuclear weapon states (NWS). For all the talk, NWS leadership on this issue has been clearly insufficient. Most of their elites seem largely ignorant of the widespread efforts to understand and explain various issues inherent in

disarmament.²² Clearly, the imperfect channels by which expert analysis and political decision-making interact are letting us down.

Such a disconnect has been particularly well demonstrated within the initiative on the humanitarian consequences of the use of nuclear weapons. The NNWS proposed it as a refreshed framework for discussing disarmament issues where NWS could contribute from their long-term experience with nuclear weapons.

The Chemical Weapons Convention (CWC) has been in force for over two decades and its compliance mechanisms have been well developed. It has been successful in reinforcing a norm on non-use of chemical weapons, yet it did not prevent the use of chemical weapons in Syria.

21 Walter C. Clemens and Franklyn Griffiths, *The Soviet Position on Arms Control and Disarmament: Negotiations and Propaganda, An Annex to Report on Soviet Interests in Arms Control and Disarmament, 1954 – 1964*, Center for International Studies, MIT, 1965, p. 15.

22 See, for example, Gregory Perkovich and James Acton eds., 'Abolishing Nuclear Weapons: A Debate', Adelphi Paper 396, 2009, http://carnegieendowment.org/files/abolishing_nuclear_weapons_debate.pdf.

However, the NWS showed a particularly strong resistance to engaging with the framework, which they regard as an unnecessary distraction from the long non-proliferation agenda. They have even said that it is a threat to the NPT. They claim that the risk analysis is already incorporated into nuclear weapons management practices.

Civil society and some of the states involved in the initiative have also been talking of the idea of a nuclear weapon convention, or a ban treaty, both anathema to the NWS. The so-called Austrian Pledge to close the legal loophole in the NPT, made after the conference in Vienna in December 2014 and joined by a majority of states party to the NPT, has further alienated the nuclear weapons states. Supporters of the ban say that it does not require NWS participation in the first instance, but could put significant pressure on NWS to speed up the disarmament process. They cite the success of the treaties banning land mines and cluster munitions. The Chemical Weapons Convention (CWC) has been in force for over two decades and its compliance mechanisms have been well developed. It has been successful in reinforcing a norm on non-use of chemical weapons, yet it did not prevent the use of chemical weapons in Syria. Such examples of imperfect weapons conventions detract from the confidence states have in arms control.

23 George Perkovich and Deepti Choubey, Nonproliferation's Contribution, 22 February 2010, <http://iipdigital.usembassy.gov/st/english/publication/2010/02/20100222190554ebyeessedo0.5424311.html#axz z3n2tJJKZa>.

24 'Is there a new nuclear arms race?', BBC News, 15 April 2015, <http://www.bbc.com/news/world-32305815>.

6. Policy approaches

When negotiations around GCD began in the 1960s, the Soviets expressed a strong preference for disarmament first, followed by inspections and international control of atomic energy, whilst the Americans wanted to constrain access to existing technology and contain its diffusion before proceeding with disarmament.

Given the US' technical superiority, this difference was perhaps not surprising. And it is reflected in the opposition today from NWS for NNWS-proposed disarmament initiatives approaching the challenge from an assumption of equality. The NWS prefer to establish confidence in the non-proliferation framework before they take the plunge, hence their preference for a step-by-step approach which assumes gradual building of conditions (and confidence) for a world without nuclear weapons.

Efforts to reduce Russian and American strategic nuclear weapons culminated in the New START treaty of 2009, in a process which began in the early 1980s. Other agreements that still remain to be negotiated or enter into force include the CTBT and FM(C)T. Modest achievements and stalled processes have created a certain fatalism. Political leaders and their nuclear policies make little reference to global nuclear disarmament beyond a symbolic confirmation of this being a future, far-off goal.

This step by step approach is currently blocked, and gives a majority of NNWS a strong sense that NWS lack any commitment to achieving disarmament. Their frustration damages the possibility of their cooperation in further developing non-proliferation mechanisms deemed essential to progress, but which they already see as unbalanced (current, costly, obligatory, backed by the threat of force) when compared to disarmament commitments (apparently voluntary, possible future actions, only when it suits the state involved).²³

Political leaders and their nuclear policies make little reference to global nuclear disarmament beyond a symbolic confirmation of this being a future, far-off goal.

The initiative on the humanitarian consequences of the use of nuclear weapons, and the idea of the ban, has attempted to by-pass this frozen disagreement by embracing the moral and humanitarian motivations for change. The movement has deliberately avoided the complexity that has characterised debates within NWS around the nature and voracity of nuclear deterrence. But if NWS are to develop the assurance they need to move beyond their attachment to nuclear weapons, then it is essential there be a dialogue on the role of nuclear weapons and deterrence in the 21st century, and new ways found to discuss strategically difficult issues. Without tackling the attachment head-on, NWS will continue to hold out. Similarly, elements of the humanitarian approach could also be incorporated into the step by step approach in order to redefine it and further motivate change.

It is inevitable that states have to manage dynamic imbalances in conventional military capabilities as technology progresses unevenly and diffuses. Defence establishments believe that modernising their nuclear capabilities can plug gaps and level the playing field, but such efforts also drive competition.²⁴ Arms control has capped the worst excesses arising from these dynamics, but has been quite modest when compared to the GCD proposals during the Cold War. Even with the end of the Cold War there has been no practical consideration given to comprehensive disarmament proposals on a scale similar to the 1960s proposals. Even with nuclear weapons in the background, conventional forces are the weapons of first resort when it comes to military interventions, and the international community needs to be more effective in developing mechanisms for resolving tensions caused by states behaviour.

If a solution to this dilemma is to be found, serious debate (involving all nuclear-armed states) about the future role of nuclear weapons and the shape of the international order will be inevitable.

The text of the Soviet proposals of 1960s prioritised the elimination of nuclear weapons delivery vehicles as availability of these would mean that states continued to be able to follow on issued nuclear threats. Their elimination would decimate that ability directly reducing the means through which the conduct of a nuclear war would be possible. To ensure that the risk of a nuclear war was completely eliminated the

GCD provided for a plan to gradually reduce all supporting nuclear facilities, military bases and conventional capabilities.

Policy proposals for de-alerting of nuclear weapons have been proposed as a rather easy step, which could have a low impact on the condition of existing nuclear arsenals but it would help reduce the risk of an accidental nuclear exchange and war.

De-alerting might help in reducing the potential for a nuclear conflict but it won't have the desired long-term stabilising effect if the major nuclear powers continue to clash in regional theatres over their regional policies or military troops deployments. Even after de-alerting, in times of crisis the status of nuclear forces could be restored back to a high alert. These continuing tensions are also unlikely to provide for a motivation that is strong enough to resist the concerns of nuclear powers over their perceived weakness, should they detract from their current nuclear policies. Therefore the international community needs to devise a mechanism that could ally concerns underpinning calls for de-alerting and which would provide the desired effect on a sustainable basis. If a solution to this dilemma is to be found, serious debate (involving all nuclear-armed states) about the future role of nuclear weapons and the shape of the international order will be inevitable.

7. Minimum permitted forces vs minimum deterrence in the 21st century

The 1960s GCD proposals even included provisions for attempting to control the capabilities of police forces considered necessary for the maintenance of domestic order. Negotiators attempting to define appropriate levels of military and police capabilities ran up against challenges in determining appropriate levels of such forces for any particular state, given the variety of regional political situations and internal challenges. Enabling one state to possess bigger forces than its neighbours was likely to prompt concerns about the order in their neighbourhood, and the possibility of feeling completely secure.

National defence and deterrence requirements remain fully in the control of national authorities, expressed in their national strategy documents, and as such the emphasis remains on maintaining national capabilities first and foremost. Where regional conflict persists this leads to instability, and stymies arms control processes. When traditional diplomatic fora are deadlocked or unsuitable given the unfavourable political climate, new avenues for discussion have to be pursued.

25 Hassan Elbahtimy and Matthew Moran, 'The enthusiasm for nuclear disarmament has waned in recent years – but progress is being made, even if it is out of the limelight', 29 April 2015, <http://www.telegraph.co.uk/news/worldnews/big-question-kcl/11568700/What-are-the-prospects-for-progress-in-nuclear-disarmament.html>.

8. Breakout and verification

The possibility of breakout, when full confidence in compliance verification mechanisms is impossible, puts another break on the trust necessary for parties to enter into a disarmament treaty. States will need strong and verifiable assurance that no other state could successfully challenge the established order by rapid rearmament. Trust, not a precondition to talks, can only build over time within an effective framework of monitoring and verification.

NWS have for a long time grappled with the competing challenges of credible verification in nuclear weapons dismantlement whilst retaining secrecy over the most sensitive aspects of nuclear weapon designs. The UK-Norway verification exercise started in 2007 focused on exactly this dilemma, seeking to develop new technologies, methods and procedures, and is ongoing. States will need to be prepared for verification procedures if they are to agree to nuclear disarmament proposals. But developing verification capabilities, though they can facilitate disarmament particularly when trust is lacking, are not the same thing.²⁵

Indeed, some would argue that an obsession with establishing and implementing verification, which can never be perfect, can even distract from the process of building confidence and assurance through political processes.

The latest diplomatic achievements in the nuclear dialogue between the E3+3 and Iran suggest the international community has confidence in its advanced monitoring and verification procedures preventing breakout. They regulate both activities and the related trade. The next decade will test the ultimate effectiveness of this mechanism, but in any case it will be a platform on which to build for the future verifiability of global nuclear non-proliferation and disarmament. The latter will have to address very big nuclear arsenals and numerous nuclear weapons facilities absent in the Iranian nuclear programme.

9. Conclusion

This report has assessed the relevance of efforts made in the 1960s to start negotiations on global disarmament of all weapons (GCD) for the challenges to modern arms control and disarmament practices.

The GCD discussions threw up numerous issues that remain highly relevant today, not least the unavoidable relationship between nuclear weapons and conventional imbalances. Whilst it seems cleaner and more manageable to address classes of nuclear weapons in isolation, the effectiveness of this approach is limited. If significant progress is to be realised on the road towards a world free of nuclear weapons, beyond the current achievements in control in strategic nuclear arsenals, then larger grand bargains are necessary involving concerns and challenges way beyond the scope of this paper. But this ambition sits alongside a very real contemporary danger that the achievements to date, a legacy of seven decades of negotiation and implementation, are under threat.

The questions of best approaches to realising the vision of a world without nuclear weapons, the sources of necessary leadership on particular policy issues, the uncertainty inherent in new enterprises and the definition of power and deterrence in the coming decades, will all feature in some form as arms control negotiations progress. Dialogue needs to include an explicit discussion around the qualities of international order and the nature of institutional reform necessary to realise it. Genuine engagement in such a process by NWS policy makers and their willingness to utilise the skills of expert communities working on those issues is vital in tackling ongoing disarmament challenges.

GCD talks never evolved into formal treaty negotiations. In a world perhaps less dangerous yet more cynical, it is hard to imagine diplomats even getting as far as talks on this issue. Some would say this only serves to prove that global disarmament is idealistic and unachievable and that we should focus instead on managing the situation, achieving a shared understanding of the responsibilities involved and preventing the situation spiralling out of control.

Whether this is an appropriate conclusion or not, it is undeniable that the challenges involved in negotiating disarmament are

considerable, and that attempting to achieve it in one sweeping treaty may have a certain logic to it but presents far too much complexity to be realistic.

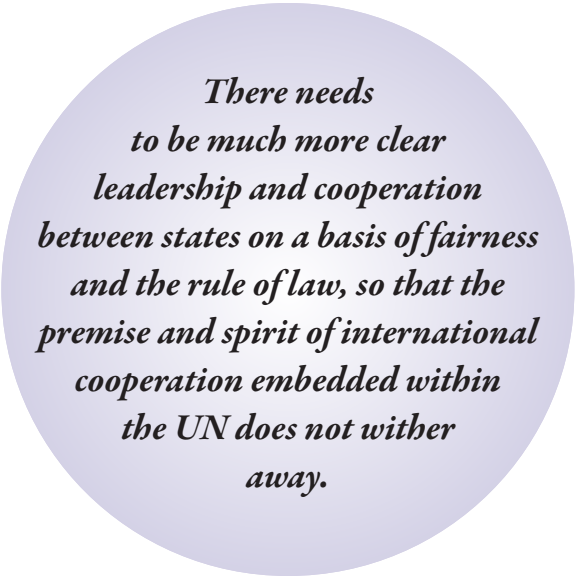
The recently negotiated deal with Iran has over 150 pages of detailed provisions negotiated over three years and it only addresses very specific activities in a single state, without nuclear weapons facilities. The principle that nothing is

agreed until everything is agreed was a critical feature of these talks. If a single proposal was to attempt to address all 191 states, including nine nuclear armed states and far more with a nuclear weapon capability, the size and scope of related provisions to deliver sufficient assurance would be truly awesome, and this would only address the technical aspects of disarmament. The political environment suitable to disarmament cannot be quantified, but is far more important. Proposals for progress on the long-term agenda have to reflect this complexity in a progressive manner, building confidence, establishing principles and common interests, understanding and developing the technical capabilities. But this complexity cannot be used as an excuse for tardiness - whether states choose cooperative measures or competitive strategies to manage the situation, the complexity is unavoidable.

Proposals for progress on the long-term agenda have to reflect this complexity in a progressive manner, building confidence, establishing principles and common interests, understanding and developing the technical capabilities.

Previous experience suggests that even when a treaty is negotiated there remain fearsome obstacles to its gaining all necessary ratification to enter into force. Even then, if it does not enjoy universal patronage, such a treaty is deeply flawed. This remains a burning issue of many vital arms control agreements like the CTBT and even the NPT. Then there is the issue of enforcement, which has always been a source of significant tension as states interpret partial application of force and national interests interfering with global governance. There needs to be much more clear leadership and cooperation between states on a basis of fairness and the rule of law, so that the premise and spirit of international cooperation embedded within the UN does not wither away.

Success in arms control and disarmament requires a stronger shared understanding of vision and objectives as a first step toward a shared agenda. Gaps and differences in understanding, objectives and approach are inevitable in any domestic or international negotiation. They need not be fatal to cooperation, but this is easier if these differences can be surfaced and addressed directly. The benefits of the international community joining forces in solving crises and obstacles to disarmament are obvious, and the responsibilities that state representatives have to current and future generations to generate progress in this area cannot be ignored.



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Bibliography

Address by President Dwight Eisenhower to the UN General Assembly, 22 September 1960

<http://www.state.gov/p/io/potusunga/207330.htm>.

Alan S. Krass, *The United States Arms Control: the Challenge of Leadership*, Westport: Praeger, 1997.

Arms Control and Disarmament, The transcript of a television programme 'State Department Briefing: Disarmament', 1963.

'A Policy for Disarmament', With a preface by Gen Sir Ronald Adam, 2nd edition, United Nations Association UK, 1960.

A Report on the International Control of Atomic Energy, Prepared for the Secretary of State's Committee on Atomic Energy, Department Of State Publication 2498, Washington, March 16, 1946,

<http://www.learnworld.com/ZNW/LWText.Acheson-Lilienthal.html#text>.

Andrew Boyd, 'Disarmament and World Government', *The Adelphi Papers*, Vol. 2, No. 2, pp. 11-19.

'Comprehensive Programme of Disarmament: Consideration of the Item by the CD', The CD Discussion Series, May 2011.

'Conditions towards Zero - 11 Benchmarks for Global Nuclear Disarmament', Statement by Mr. Hirofumi Nakasone Minister for Foreign Affairs of Japan Ministry of Foreign Affairs of Japan, 2009,

<http://www.mofa.go.jp/policy/un/disarmament/arms/state0904.html>.

Current Disarmament Proposals as of March 1, 1964, The World Law Fund, New York, 1964.

David Krieger ed., *The Challenge of Abolishing Nuclear Weapons*, New Brunswick, 2009.

Deborah Ozga, Getting to Omega: Structural Impediments to Nuclear Disarmament, *Comparative Strategy*, Vol. 21, No. 1, pp. 47-62.

Dinesh D'Souza, *Ronald Reagan: How an Ordinary Man Became an Extraordinary Leader*, New York: Touchstone, 1997.

Disarmament and Arms Control, *Strategic Survey*, Vol. 68, No. 1, 1967, pp. 44 - 47.

Dr. Jim Walsh, Russian and American Nonproliferation Policy: Success, Failure, and the Role of Cooperation, MTA Occasional Paper 1, Kennedy School of Government, Harvard University, 2004.

Eliza Gheorghe, 'Building de 'tente in Europe? East-West trade and the beginnings of Romania's nuclear programme 1964-70', *European Review of History*, Bol. 21, No. 2, 2014, pp. 235 - 253.

Evan Luard, 'Conventional Disarmament', *The Adelphi Papers*, Vol. 2, No. 2, 1962, pp. 40-54.

Final Document of the 2000 NPT Review Conference, No. NPT/CONF.2000/28 (Parts I and II),

<http://www.un.org/disarmament/WMD/Nuclear/2000-NPT/pdf/FD-Part1and2.pdf>.

General Assembly, Question of General and Complete Disarmament, UN document A/RES/2602(XXIV)E, 16 December 1969

Hassan Elbahtimy and Matthew Moran, 'The enthusiasm for nuclear disarmament has waned in recent years – but progress is being made, even if it is out of the limelight', 29 April 2015,

<http://www.telegraph.co.uk/news/worldnews/big-question-kcl/11568700/What-are-the-prospects-for-progress-in-nuclear-disarmament.html>.

Jan Prawitz, 'From Nuclear Option to Non-Nuclear Promotion: The Sweden Case', Research Report No. 20, 1995.

Is there a new nuclear arms race?', BBC News, 15 April 2015, <http://www.bbc.com/news/world-32305815>.

Jeffrey W. Knopf, Review of 'Knopf on Tal, 'The American Nuclear Disarmament Dilemma, 1945-1963' Syracuse Studies on Peace and Conflict Resolution Series. Syracuse: Syracuse University Press, 2008, <https://networks.h-net.org/node/28443/reviews/30380/knopf-tal-american-nuclear-disarmament-dilemma-1945-1963>.

Jerome H., Spingarn, 'The Humphrey Subcommittee: Was it Worth It?', *Bulletin of the Atomic Scientists*, 1957, pp. 224 - 227.

John J McCloy, Balance Sheet on Disarmament, *Foreign Affairs*, April 1962.

Lisa M. Schenck and Robert A. Youmans, 'From Start to Finish: A historical Review of Nuclear Arms Control Treaties and Starting Over with the New Start', Public Law and Legal Theory Paper No. 2012-86, 2012.

- Lord Chalfont, *The Politics of Disarmament*, *Survival: Global Politics and Strategy*, Vol. 8, No. 11, pp. 342 - 371.
- Marion H. McVitty, *A Comparison and Evaluation of Current Disarmament Proposals as of March 1, 1964*, *The World Law Fund*: New York, 1964.
- Mitchell Reiss, 'Reciprocal Independent Disarmament (RID): a New Approach to Arms Control', *Arms Control*, Vol. 6, No. 1, 1985, pp. 97 - 100.
- Nuclear Arms Control: Background and Issues*, Office of International Affairs, Policy and Global Affairs, National Academy of Sciences, Committee on International Security and Arms Control, 1985.
- Proceedings of the UK Parliament Disarmament Commission, House of Commons, Hansard, Vol. 619, CC 18-22, Debate 7 March 1960, <http://hansard.millbanksystems.com/commons/1960/mar/07/disarmament-commission>.
- Proceedings of a debate of the UK House of Commons Debate on 13 April 1960, Vol. 621, CC 1237-41 <http://hansard.millbanksystems.com/commons/1960/apr/13/disarmament>.
- Randy Rydell, 'Nuclear Disarmament and General and Complete Disarmament', in David Krieger ed, *The Challenge of Abolishing Nuclear Weapons*, London: Transaction Publishers, 2009.
- 'Reagan Says Nuclear War Won't Be Started by US', 14 May 1986, http://articles.philly.com/1986-05-14/news/26050260_1_nuclear-weapons-superpower-arsenals-nuclear-war.
- Resolution adopted by the General Assembly on 2 December 2014 on Prohibition of the development and manufacture of new types of weapons of mass destruction and new systems of such weapons: report of the Conference on Disarmament, A/RES/69/27.
- Resolution adopted by the General Assembly on General and Complete Disarmament, A/RES/14/1378, 20 November 1959, <http://www.un-documents.net/a14r1378.htm>.
- Security Council Resolution 1887 and the Quest for Nuclear Disarmament, *Michigan Journal of International Law*, Vol. 33, No. 3, 2012, pp. 587-626.
- Tad Daley, *Apocalypse Never: Forging the Path to a Nuclear Weapon-Free World*, Rutgers University Press, 2010.
- Thomas C. Shelling, 'Surprise Attack and Disarmament', *Survival*, Vol. 2, No. 1, pp. 5-11, 1960.
- 'The German Note on Disarmament', *Survival*, Vol. 8, No. 6, 1966.
- The Role of NGOs in Achieving Disarmament at the United Nations by the NGO Committee on Disarmament, Peace and Security, in cooperation with the UN Department for Disarmament Affairs, 18 November 2004, http://disarm.igc.org/index.php?view=article&catid=121%3Aevents&id=222%3Athe-role-of-ngos-in-achieving-disarmament&tmpl=component&print=1&page=&option=com_content&Itemid=30.
- 'The United States Proposals', *The Adelphi Papers*, Vol. 4, No. 10, 1964, pp. 4-10.
- Vasileios Savvidis and Jessica Seiler, *Nuclear Disarmament Proposals from 1995 – 2009: A Comparative Chart*, 23 April 2010, http://cns.miis.edu/stories/100423_disarmament_proposals.htm.
- Walter C. Clemens and Franklyn Griffiths, *The Soviet Position on Arms Control and Disarmament: Negotiations and Propaganda, An Annex to Report on Soviet Interests in Arms Control and Disarmament, 1954 – 1964*, Center for International Studies, MIT, 1965.
- Yuri Sheynin, 'Disarmament or Balance of Terror?', *Survival*, Vol. 3, No. 6, 1961, pp. 276 - 281.
- Yong Zhou, 'International Relations and Legal Cooperation in General Diplomacy and Consular Relations', *Encyclopedia of Public International Law*, Vol. 9, pp. 102-103.