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Connecting the Pillars of the NPT: Multilateral Disarmament Verification and Non-Proliferation

SUMMARY

One of the three key pillars of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)—its commitment to disarmament—calls on all states, those with and without nuclear weapons, to contribute to the process. To support full implementation of the NPT, it is crucial to find a way for non-nuclear weapon states to fulfill their obligation to contribute to disarmament without accessing nuclear weapons or knowledge of their designs, specific materials, or applied technologies.

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Introduction

With 191 states parties, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) serves as the foundation for and embodiment of global efforts to curb the spread of nuclear weapons. Its ongoing role in preventing proliferation must not be understated, nor should the enormous challenges it faces more than 50 years after it entered into force. Among them: disagreement between and among states about how to proceed with the process of disarmament.

One of the three key pillars of the NPT—its commitment to disarmament—calls on all states to contribute to the process. Therefore, nuclear disarmament under the NPT requires the full support and cooperation of both nuclear-weapon states (NWS) and non-nuclear weapon states (NNWS). A second NPT pillar—its commitment to non-proliferation—prohibits NWS from helping NNWS develop nuclear weapons and prohibits NNWS from acquiring them at all. Because of perceived contradictions between these pillars, and varying interpretations of the relationship between them, it will require keen diplomacy and technical understanding for both NWS and NNWS countries to achieve these objectives. Using diplomacy and interpreting law in current contexts, countries can balance priorities to reach the fundamental objectives of the NPT.

Nuclear disarmament under the NPT requires the full support and cooperation of both NWS and NNWS.

At the same time, one major question must be answered: How can NNWS fulfill their obligation to contribute to disarmament if they are not permitted to have any access to nuclear weapons or possess knowledge of their design, specific materials, or applied technologies?

Little analysis has been published regarding how NWS and NNWS are expected to implement their legal obligations under NPT Articles I and II (see box on p. 2). The issue is immediately relevant to the international debate over the viability of and processes for nuclear disarmament. Specifically, what information can be shared to enable a process for disarmament verification involving NNWS, and what must be protected? Of course, proliferation-sensitive information must be protected throughout any verification process, regardless of whether a NNWS or an international verification body participates. However, interpretations of the respective NWS' and NNWS' legal obligations under the NPT vary widely among and between NWS and NNWS, as reflected in both political positions on the potential role of NNWS in verification and in the rules on classification of nuclear-weapons related information. Some NWS contend that Article I limits what they can show or share. Similarly, some NNWS argue that their obligations under Article II limit their potential contribution to verification efforts. As a consequence of these perceptions, disarmament becomes the sole responsibility of NWS, which are a small percentage of NPT states. This clearly contradicts Article VI of the treaty, which places a disarmament obligation on “each of the parties” to the NPT.

How can NNWS fulfill their obligation to contribute to disarmament if they are not permitted to have any access to nuclear weapons or possess knowledge of their design, specific materials, or applied technologies?

KEY NPT ARTICLES¹

Article I

Each nuclear-weapon State Party to the Treaty undertakes not to transfer to any recipient whatsoever nuclear weapons or other nuclear explosive devices or control over such weapons or explosive devices directly, or indirectly; and not in any way to assist, encourage, or induce any non-nuclear weapon State to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices, or control over such weapons or explosive devices.

Article II

Each non-nuclear weapon State Party to the Treaty undertakes not to receive the transfer from any transferor whatsoever of nuclear weapons or other nuclear explosive devices or of control over such weapons or explosive devices directly, or indirectly; not to manufacture or otherwise acquire nuclear weapons or other nuclear explosive devices; and not to seek or receive any assistance in the manufacture of nuclear weapons or other nuclear explosive devices.

Article VI

Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control.

Russia, among other countries, has publicly expressed concerns and uncertainty about the practical application of NNWS and NWS working together on disarmament verification. Historically, and through the implementation of the New START Treaty in recent years, the United States and the Soviet Union/Russia have primarily carried out arms reductions. Russia has not been interested in verification as an abstract concept, but rather believes in looking at context and application to evaluate verification concepts and approaches.

However, there are some exceptions. After the Soviet Union fell, tactical nuclear weapons stationed in Ukraine were transferred to Russian territory in 1992. Ukraine agreed to the removal of the weapons only with the provision that it would be allowed to verify the destruction of the nuclear weapons at facilities in Russia. This example demonstrates that even Russia has allowed for some NNWS to have a role in disarmament and arms control arrangements, under specific circumstances and with appropriate procedures.

Countries other than Russia express concerns about NNWS being involved in verification of disarmament, particularly around the potential exposure of proliferation-sensitive information through the verification and monitoring processes. Others flatly oppose the idea, asserting that any such verification and monitoring regime would, by its nature, violate Articles I and II of the NPT.

It is crucial for states to come to a common understanding of, and agreement about, the intent of the NPT articles, because confidence in any disarmament verification process—for both NNWS and NWS—will be a prerequisite for successfully negotiating and sustainably implementing multilateral disarmament efforts.

This paper explores these questions and posits that non-proliferation and disarmament efforts can be reinforcing and not contradictory, especially regarding verification.

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NPT Negotiating History

The story behind Articles I and II and their relationship with Article VI begins with a draft United Nations resolution that proposed prohibiting “further dissemination of nuclear weapons.” It was put forward by Ireland to the General Assembly in 1958, a decade before the NPT was opened for signature. The draft was in direct response to the United States’ and NATO’s nuclear sharing arrangements, and Ireland’s perception that the United States was wrongly allowing NATO NNWS control over nuclear weapons,² although the U.S. weapons committed to NATO always remained in the full possession and control of the United States, even those U.S. weapons based in Europe. Ireland’s draft resolution was the beginning of what would become today’s non-proliferation regime; it is notable because it was specifically concerned with the physical transfer, ownership, or control of nuclear weapons, not the sharing of potentially proliferative information that could assist a new state to develop nuclear weapons.

Concerns about NATO nuclear sharing have been raised repeatedly in the 50 years since the treaty entered into force, but criticisms have not stood up to attempted legal challenges.

The preoccupation with control over the physical weapons themselves continued and affected the shaping of Articles I and II in the 1960s. The first halves of both articles are about NWS not transferring and NNWS not receiving nuclear weapons. They contain the phrases “to any recipient whatsoever,” “from any transferor whatsoever,” and “directly, or indirectly.” The treaty negotiating record reveals that the first half of Article I and the obverse section in Article II are directly derived to close the loophole identified by opponents of nuclear weapon sharing among members of multilateral alliances, specifically NATO. This language regarding transfers was intended to clarify that if a NWS allowed a NNWS to obtain control or ownership of a nuclear weapon in any way, including within a military alliance, it would be a breach of the NPT.³

The second half of each article is ostensibly intended to close any loopholes missed in the first half. NWS are instructed “not in any way to assist, encourage, or induce” NNWS “to manufacture or otherwise acquire nuclear weapons.” Article I has been referred to as “intentionally vague,” and when taken in the context of the first half of Article I, the second half appears to be simply a guard against members of multinational defense alliances finding a way around the ban on direct transfers of nuclear weapons.⁴

By September 1966, the United States and the Soviet Union, the two main NWS, had reached an agreement that seemingly addressed remaining objections, and the Soviet Union declared that the loopholes were closed.

Because NATO’s nuclear arrangements predate the NPT, its nuclear consultation, planning, and training are by definition consistent with the NPT as the treaty was concluded and joined by NATO members.

Concerns about NATO nuclear sharing have been raised repeatedly in the 50 years since the NPT entered into force, but criticisms have not stood up to attempted legal challenges. The negotiating history of the NPT shows that not only did the Soviet Union accept that the NPT, as drafted, was consistent with NATO

nuclear sharing arrangements, but that the Soviets actively helped find a formulation for the NPT that they could defend. A then-classified U.S. report from 1968 said “[I]t seemed clear that the Soviets wanted the treaty and would probably retreat from their own formal position that also brought into question existing US-NATO nuclear arrangements in order to obtain agreement.”⁵ It was not until much later that Russia argued that NATO practices are in conflict with the NPT.

The second half of Article II involves fewer specific prohibited actions for the NNWS than Article I included for the NWS. The final draft of Article II simply reminds NNWS of their responsibility not to pursue nuclear weapons and restricts them from asking for or getting help “in the manufacture of nuclear weapons.” Interestingly, an initial Soviet draft had more restrictions, including that NNWS also not receive “relevant manufacturing, research, or other information or documentation...for purposes of the manufacture or use of nuclear weapons.”⁶ This language did not make it into the final draft but suggests that, like its counterpart, Article II in context appears to be ensuring there is no loophole for NNWS to exploit the ban on direct transfers either. It can be interpreted that by including this specific scope of what should not be shared, the Soviet Union recognized that other information could be conveyed to NNWS when not related to the manufacture and use of nuclear weapons.

The NPT and Multilateral Disarmament Verification

Little specific documentation exists indicating any contemporaneous discussion about possible NNWS involvement in disarmament verification as the NPT was developed. However, some sources suggest it may not be anathema to the NPT.

In the late 1960s, Sweden suggested forming a “detection club,” a multinational group for the purpose of detecting underground nuclear events.⁷ The idea had broad support in NATO, and even the Soviet Union did not object.⁸ At the time, however, the Soviet Union was firmly opposed to the concept of on-site inspections, let alone allowing NNWS to be involved on the ground at nuclear test sites, although it supported the idea of voluntary exchange of seismological information.⁹ Perhaps directly relevant, records of a conversation between the United Kingdom and the Soviets in 1966 reveal the position of the Soviet government was “that any form of international inspection was unacceptable to the Soviet Union.”¹⁰

Although it is about disarmament, Article VI of the NPT is more of a political objective than a technical direction—with the main objective of ending the arms race.

The lack of direct discussion about disarmament verification in negotiations about the NPT can be attributed partially to the fact that direct verification of any kind (including what would eventually become the International Atomic Energy Agency [IAEA] comprehensive safeguards system) as a concept was still being disputed when the NPT was being drafted.

Major elements of the treaty’s development process revealed in the negotiating history can be interpreted as allowing and even welcoming the prospect of multilateral verification involving the NNWS. However, the concept of NNWS being involved in disarmament verification does not appear to have been directly considered by the negotiating parties, and therefore has not been fully covered by the NPT. To this point, one of the most important documents may be the *Revised Summary of Interpretations of Non-Proliferation Treaty (NPT)*, a 1966 document circulated primarily by the U.S. delegation but not challenged by the USSR. In it, the first and most crucial statement reads: “The treaty deals only with what is prohibited, not with what is permitted.”¹¹ Because disarmament verification as carried out by NNWS is not mentioned, it is thus not excluded by the treaty.

Although it is about disarmament, Article VI of the NPT is more of a political objective than a technical direction—with the main objective of ending the arms race. Its intention was to make the NPT part of a broader disarmament regime.

Is Multilateral Disarmament Verification Proliferation-Sensitive?

For NWS, the lines on what can be shared and not shared are defined by their own national laws. In fact, the different countries' laws largely do not differentiate between what can be shared with another NWS and what can be shared with a NNWS, although the NPT does put some boundaries around sharing proliferation-related information with NNWS, as described above. There is one clear exception relating to military nuclear cooperation between the United States and the United Kingdom, based on a specific bilateral agreement. To engage in multilateral verification, the onus has to be on the NWS to define national laws that protect national security information but do not erect unnecessary barriers to cooperation.

Numerous initiatives have accepted the challenge to develop and assess nuclear disarmament verification concepts and to identify whether they can be implemented without compromising proliferation-sensitive information. These efforts demonstrate that technical and procedural methods exist to support nuclear disarmament, without increasing international security risks or violating legal obligations.

The Trilateral Initiative

Through the Trilateral Initiative, an effort that lasted from 1996 to 2002 to identify ways the IAEA could verify the fissile material in classified forms that came out of American and Russian nuclear weapons,¹² the United States, Russia, and the IAEA worked together to address the legal, technical, and financial issues within and around disarmament verification, as well as the definition of “proliferation-sensitive information” and what it means for the disarmament process. The model verification agreement that was developed by the initiative covered the fissile material from its transformation from classified form to non-classified form and its disposition for peaceful uses. Participants focused on the question of identifying areas of risk for the potential compromise of sensitive information through the verification process. This initiative was never brought to fruition, not because the verification was deemed impossible, but rather because the political dynamics between the United States and Russia were not favorable.

The UK–Norway Initiative

The UK–Norway Initiative (UKNI) was the first project that involved a NNWS in an exploration of arms control and disarmament verification.¹³ In 2007, the UKNI was developed specifically to demonstrate how all NPT states could meet their Article VI disarmament obligations while remaining consistent with

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Articles I and II. To do so, it conducts a series of consultations, practical exercises, and joint technology development.

The International Partnership for Nuclear Disarmament Verification

The International Partnership for Nuclear Disarmament Verification (IPNDV) was launched in 2014 as a public-private partnership between the U.S. State Department and Nuclear Threat Initiative to collectively develop technologies and procedures to enable multilateral nuclear disarmament verification.¹⁴ The IPNDV includes more than 25 countries with and without nuclear weapons. Together, the partners work to identify challenges associated with nuclear disarmament verification and to develop potential procedures and technologies to address those challenges. The partners engage in scenario-based discussions, practical exercises, technology demonstrations, and other hands-on activities to both innovate and communicate how their work can be implemented around the world. The IPNDV concluded in 2015:

While tough challenges remain, potentially applicable technologies, information barriers, and inspection procedures provide a path forward that should make possible multilaterally monitored nuclear warhead dismantlement while successfully managing safety, security, non-proliferation, and classification concerns in a future nuclear disarmament agreement.¹⁵

The Quad Nuclear Verification Partnership

Beginning in 2015, the Quad Nuclear Verification Partnership, comprising Norway, Sweden, the United Kingdom, and the United States, has built on UKNI to work together on three areas they identified as critical to developing verification approaches to nuclear disarmament: physical safety, national security, and non-proliferation.¹⁶ Regarding national security, the major concerns are related to the risk of information dissemination of physical and cyber vulnerabilities of the disarmament facilities while remaining transparent about the verification process. Evaluating equipment presents another challenge: the country that is disarming needs tools that work within the safety requirements of the facilities, but tools provided by the inspected country may not be trusted by inspectors.

Conclusion

Confidence in verification will be essential to future nuclear disarmament. Assuring confidence requires that the many dimensions of monitoring and inspecting nuclear disarmament be identified, understood, and addressed successfully. Today, the need for solutions to disarmament verification carried out by both NWS and NNWS is clear, and developing them is the only way for all NPT states to meet their treaty obligations. There is no evidence that the non-proliferation and disarmament pillars of the NPT cannot be harmonized while all parties maintain their legal obligations not to contribute to nuclear proliferation.

Discussions about the relationship between the non-proliferation obligations of Articles I and II and the disarmament obligations of Article VI historically have placed higher importance on Articles I and II and forced Article VI's disarmament commitments to a less important, dependent role. What could be accomplished, however, if that perspective were reversed? How much more could be achieved if the Article VI obligation were given preeminence and the burden were on those questioning the role of NNWS in verification to demonstrate that their participation was causing harm to the treaty's core non-proliferation objectives and constraints? This change in mindset could unlock progress and innovation that has prevented all parties from fulfilling the vision of the NPT that preoccupied a generation of diplomats in the 1960s and remains the goal today.

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Endnotes

- ¹ “Treaty on the Non-Proliferation of Nuclear Weapons,” *Treaty Series: Treaties and International Agreements Registered of Filed and Recorded with the Secretariat of the United Nations* 729, no. 10485 (1974), www.un.org/disarmament/wmd/nuclear/npt/text.
- ² Henry Sokolski (ed.), *Fighting Proliferation: New Concerns for the Nineties* (Washington, DC: The Non-proliferation Policy Education Center, 1996), fas.org/irp/threat/fp/.
- ³ NATO, *Negotiations of Articles I and II the NPT: Selected Documents, Volume 2 (1966–1968)*, (Brussels: NATO Archives, 2018): 88.
- ⁴ Hon. Brian Donnelly, 1999. *The Nuclear Weapons Non-Proliferation Articles I, II and VI*. Accessed February 2019. web.archive.org/web/20090105200406/http://www.opanal.org/Articles/cancun/can-Donnelly.htm.
- ⁵ NATO, *Negotiations Volume 2*, p. 254.
- ⁶ NATO, *Negotiations of Articles I and II the NPT: Selected Documents, Volume 1 (1961–1966)*, (Brussels: NATO Archives, 2018): 107.
- ⁷ Prospects for Comprehensive Nuclear Test Ban Treaty: Hearing Before the Senate Committee on Foreign Relations, Subcommittee on Arms Control, International Law and Organization, July 21 and 23, 1971.
- ⁸ NATO, *Negotiations Volume 1*, p. 191.
- ⁹ NATO, *Negotiations Volume 1*, p. 203.
- ¹⁰ NATO, *Negotiations Volume 1*, p. 193.
- ¹¹ NATO, *Revised Summary of Interpretations of Non-Proliferation Treaty (NPT)*, archives.nato.int/revised-summary-of-interpretations-of-non-proliferation-treaty-npt.
- ¹² Thomas E. Shea, The Trilateral Initiative: A Model for the Future?, Arms Control Association, www.armscontrol.org/act/2008-06/features/trilateral-initiative-model-future.
- ¹³ United Kingdom–Norway Initiative, ukni.info.
- ¹⁴ International Partnership for Nuclear Disarmament Verification, www.ipndv.org.
- ¹⁵ IPNDV, *Phase I Summary Report: Creating the Verification Building Blocks for Future Nuclear Disarmament*, 2017, www.ipndv.org/reports-analysis/phase-1-summary.
- ¹⁶ Quad Nuclear Verification Partnership, quad-nvp.info.

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